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WHAT'S INSIDE

Chapter 1: Current Cutting Techniques _____ **1** [2 CE Hours]

This course explores the popular, shorter hair styles of the 21st century; focusing on the specific haircutting techniques required to establish precision cutting for designing and shaping the hair.

Chapter 2: Dealing With Difficult People and Situations in the Salon _____ **14** [2 CE Hours]

Every day we encounter difficulties and negative responses in others. What should we do when confronted by difficult people who are pains to deal or work with? This course is designed to aid salon professionals that will inevitably encounter difficult people and situations and provide insights in how best to handle these encounters.

Chapter 3: Hair Coloring at a Glance _____ **21** [3 CE Hours]

This course is designed for licensed cosmetologists who desire to reinforce or expand their knowledge regarding the hair coloring process. In this course, we will learn how the pre-service client consultation lives up to its reputation of being the most important step in the service. Additionally, we will unravel the truth about what you see and apply it to what we know for the most impressive color service results.

Final Examination Answer Sheet _____ **34**



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License Expires	CE Hours Required	Mandatory Subjects
Licenses expire on September 30 of each odd year	14 (7-hours are allowed through home-study)	1 hour Sexual Assault Awareness 1 hour Domestic Violence (available on the Board's website)

How much will it cost?

COURSE TITLE	HOURS	PRICE	COURSE CODE
Chapter 1: Current Cutting Techniques	2	\$10.00	CIL02CT
Chapter 2: Dealing With Difficult People and Situations in the Salon	2	\$10.00	CIL02DP
Chapter 3: Hair Coloring at a Glance	3	\$15.00	CIL03HC
Best Value - Save \$10.05 - All 7 Hours	7	\$24.95	CIL0723

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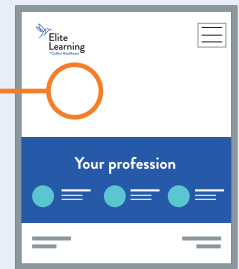
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Chapter 1: Current Cutting Techniques

2 CE Hours

Learning objectives

After completing this course, the learner will be able to:

- Identify and demonstrate the techniques needed for cutting today's most popular men's hair styles.
- Demonstrate the basic skills for providing the foundation of a good hairstyle.

Course overview

This course explores the popular, shorter hair styles of the 21st century; focusing on the specific haircutting techniques required to establish precision cutting for designing and shaping the hair. The most fashionable short hair styles worn by men within today's society are the High Fade Pompadour, the Slicked Back Undercut, the Crew Cut High Fade, and the Burst Fade Fohawk. To assist Master Barbers Stylist and Master Cosmetology

- Demonstrate and explain the techniques necessary for establishing balance and proportion in haircutting.
- Improve on meeting the demands for cutting the most popular men's hairstyles.
- Improve on customer satisfaction.
- Build confidence in mastering the 'art of manliness.'

Stylists in how to successfully create these stylish designs, this course provides comprehensive instructions of current cutting techniques. Being able to identify and demonstrate current cutting techniques gives professional stylists that extra professional edge for mastering the skills needed to establish today's most popular men's hairstyles.

A BRIEF HISTORY OF MEN'S HAIRCUTTING AND STYLING

The history of men's haircutting and styling is rich within the 'art of barbering' and men's grooming. Traced back into the most primitive Egyptian and African cultures, barbers played highly esteemed and influential roles as an important part of civilization. Even during the earliest documented times of barbering, the profession is credited for assisting in shaping men's popular hairstyles and adorning men for roles of royalty, spiritual and religious beliefs, professional practices, political influences, positions of war, social and cultural influences, and individual representation (Harris, 2012; Scali-Sheahan, 2017).

Throughout the history of mankind, numerous documentations have described the various hairstyles worn by men of the past. Many of the reported hairstyles are commonly known and, in many cases, similar features of the historical styles are found in current popular men's hairstyles. From around 2200 BC, historians have noted wealthy Egyptian men wearing wigs or extensions, elaborate hairpieces, wearing short cuts or cutting their heads completely bald. As we examine men's hairstyling of today, it becomes obvious that similar trends of the past are returning into men fashion and grooming.

For example, the hairstyle worn by the Roman emperor, Julius Caesar of 50 BC, is still popular today, known as the Caesar cut. As then, now, the style is still worn short, flat against the head, with a little more length on top of the head, brushed forward from the crown, to frame the face. After the fall of the Roman Empire (AD 390-450), due to the German influence, German styles grew in popularity. This time in history brought forth long hair as an esteemed fashion statement, as a sign of high social status; while lower classes in society wore shorter hair or shaved their heads. Social status representation is not the reason for hairstyle selections within the 21st century. Fashions of today represent the acceptable expressions of diversity among society. Long hair, locks, man buns, natural hairstyles, bald heads, and short cuts are worn by men based on culture, profession, community, and individual preference (Chertsey Museum, 2019; Harris, 2012; Men's Hairstyling Now, 2019; Scali-Sheahan, 2017).

As noted earlier, in the past, trends of men's hairstyles were often established by drastic times in history, such as war and rebellion, and from people of power, such as kings, presidents, and famous personalities. In the 17th century, King Louis XIV made long wigs popular, wearing long, loose waves among a dark brown wig. The political alliances of this era dominated the fashionable appearances of men. Daily hair grooming looks, and fashion statements worn by men, came from hairstyles such

as the Royalist Cavalier, the hair grooming habits of the English monarchy (Chertsey Museum, 2019; Harris, 2012).

The Royalist Cavalier style consisted of long shoulder length hair, with a small lock of hair, longer at the center of the nape area, adorned with ribbons and bows. When the English monarchy regained power, men continued to wear long and curly hair, often wearing wigs, known as periwigs, to assist in enhancing the fashion and style. Also, during the 17th century, men took advantage of the ponytail; utilizing a wig to develop the tie back look. President George Washington started his own trend by not wearing a wig, instead powdered his hair, and pulled his own hair back to establish a ponytail.

Charles Dickens of the 1800's is well-known for the comb-over. Dickens combed his hair to one side to hide his natural thinning, to create the illusion of hair on top of his head. The comb-over revealed his natural curls, established from the extra length of hair on top of his head. Presently, the comb over is highly utilized in men styling techniques. In the later years of the 1800's, the Yale rowing and football team started wearing the crew cut. The crew cut is the hair cut very short on the sides, up to the crown of the head. On the top of the head the hair graduates slightly longer to form a short bang along the forehead. The crew cut was later adopted by soldiers of World War II to prevent the spread of head lice among military quarters. The crew cut is one of the most demanded styles of the 21st century. It has been modified by a few changes, but the overall specific design of the top of the head remains fashionable.

In the early 1900's the long hair of Albert Einstein established a sense of freedom in men hairstyling, and a legendary personal persona for Albert Einstein, as well as many other men of men of that period. Due to the discovery and benefits of electricity, such as the big screen and television, the remainder of the 1900's is complete with famous actors and entertainers contributing their personal styles of choice to the growing "fashion world" of the times. For example, actor Rudolph Valentino of the 1920's, is credited for introducing the defined side-part to men popular hairstyles. In the 1950's, Elvis Presley and James Dean created the look of the "bad boys," by wearing their hair short on the sides and longer on top, then combing the longer top forward and flipped over to establish volume along the front hairline, known as the pompadour hairstyle (Harris, 2012).

The Beatles of the 1960's wore their hair long in a uniformed length with long bangs, cut just above their eyes; making famous the hairstyle called the "mop top." Afro styles gained popularity by famous people within the 60's and 70's. The afro

style was established by either teasing the hair, a permanent wave or from naturally curly hair; combed or placed to stand straight out on the head. Bob Marley brought out mystical and religious symbolisms of Africa, India, and other cultures with the “dreadlocks.”

The “slicked-back” look of the 1980’s is accredited to Michael Douglas; while the radical mohawk styles worn throughout the remaining of the 20th century was made popular by the Rockers. The mohawk originally was the style of the Native American Mohawk tribe, of which eventually transitioned into the faux hawk. The style featured long hair at the top and mid- section

Current most popular men’s hairstyles

Some of the most fashionable short hair styles worn by men today are the High Fade Pompadour, the Slicked Back Medium Fade, the Crew Cut High Fade, and the Burst Fade Fohawk. The names of the current styles give evidence that these popular hairstyles derived from hairstyles of the past. The 21st century men hairstyles are mostly all comebacks from the 20s and 50s of the 20th century. The men’s hairstyles of today exemplify fashion, confidence, and a sense of diversity in men’s hairstyling.

Current men hairstyles include a variation of contributing features to establish one complete look. These features include undercuts, slicked back mid-level lengths of hair, and extremes

of the head. The hair in these sections are raised and gathered to slightly spike or stick out around the faux hawk design of the head.

The turn of the 20th century introduced more popular short hairstyles for men and women. Throughout the following years and into the 21st century, men’s hairstyles grew in popularity. The times brought forth such styles as the crew cut, the flat top, the Princeton, and the butch cut. For those familiar with these styles, it is easy to see that the hairstyles all derived from styles of the past.

of long hair styles on top of the head, graduating or fading down to nothing or almost nothing along the lower part of the head or back hairline. Stylish hairstyles for men of today, are combinations of short and shaggy spiked looks, smooth examples of longer styled crew cuts, pompadoured tops, and a mixture of short cut styles with different variations of locks, braids, and messy styles cleverly designed into fashionable manly looks. All the styles are tailored to fit and represent individual character and flare. Current men’s hairstyles are appropriate for many hair textures and for any occasion, whether formal, informal, or daily fashion.

THE BASIC THEORY OF HAIRCUTTING

The skill of barbering is an art. Professional stylist cleverly describe the techniques and mastered abilities of barbering as the ‘art of manliness.’ The ‘art of manliness’ involves understanding how to perform the techniques to establish a good haircut and comprehending all of the components necessary for creating good hairstyles. Mature and successful stylist understand that a hairstyle should accentuate the client’s features by minimizing weak features and enhancing their natural strong attributes.

A haircut is the foundation of a good hairstyle. Establishing a good hairstyle includes knowing how to tailor and individualize the clients’ haircut. To master the art of barbering, it is detrimental to be able to understand the basic principles of haircutting, elements of designing a haircut, properly demonstrate the use of all implements, and perform the application of professional techniques within the barbering industry. It is also important to have consideration for clients’ lifestyles, preferences, and personality when envisioning and designing a good hairstyle.

Basic principles of haircutting

As emphasized by Scali-Sheahan (2017) within the Milady Standard Barbering textbook, it is detrimental to have a good understanding of the basic principles of haircutting and styling. The basic principles include understanding how the hairstyle is influenced by the client’s anatomical features, techniques required to establish the haircut and style, and the terminology necessary for assisting in haircutting and styling skills and comprehension. Professional stylist pays close attention to details within the client’s anatomical features and the desired hairstyle, such as facial features, head shapes, sideburns, and the proportion of the hairstyle and its balance.

haircut to client’s facial features. Identifying facial features assist stylists in suggestions for hairstyles.

Head shapes

Even though all heads are some form of round, all head shapes will not conform to all haircuts and styles. Some head shapes fit some styles more appropriately and other head shapes may conform more to different hairstyles. In either case, hairstyles should complement clients’ individual head shape. For example, some head shapes require longer lengths or fuller hairstyles to camouflage pointedness in the apex area of the head, squareness at the parietal ridge or bulging at the occipital area of the head. Head shapes highly influence how the style will fit the clients’ natural features and what cutting techniques to utilize in creating the best look for the client.

Facial features

Clients chose hairstyles according to fashion, trends, personal preference, and often due to professional lifestyles. Stylists must ensure that the choice of hairstyle fits or works well with the client’s facial shape, profile, position, and size of the ears, neck length, and head shape. During consultations professional stylists consider the above factors, in how they may influence how the desired hairstyle will look on the client.

Sideburns

Sideburns require consideration when designing hairstyles to the client’s natural features and the details that accentuate the hairstyle. Deciding upon short or long lengths and wide or narrow widths sideburns are determined according to how the specific aspects of the hairstyle and how the hairstyle should be designed to fit the clients’ natural features and personal preferences. The size of the ears, hair growth patterns, and facial shapes are contributing factors to designing sideburns. The sideburns are a part of the client’s natural hairline. Therefore, the sideburn design affects and contributes to the complete look and proportion of the hairstyle.

Facial shape is determined by the size and position of the bones of the face. Different facial shapes require stylist to establish more height in top areas, closeness to the temples and crowns, a variation of bangs along the fringe area of the face, fullness along the parietal ridge, and partings to broaden or lessen natural appearances of the face. The profile is a side view of the face, which distinguishes the prominence of the nose; the size of the ear, and neck length are also major factors in tailoring a

Elements of designing in haircutting

Demonstrating the skills necessary to perform the current popular short hair styles for men demands the ability to fade and blend. When studying and training for certification in barbering, it is common to find information teaching the philosophy of

tapering and blending areas. This theory describes lengths of hair in accordance to where the tapering ends or begins within the areas of the head. For example, the tapering areas for longer, medium, semi short, and short hairstyles.

Even though the information is valuable in today's hair cutting techniques, the more appropriate theoretical concept necessary for establishing the most popular men's short hairstyles of the 21st century is the blending theory of fading. Tapering and fading are not the same in practical application and in hair lengths. Tapering is the process of blending longer hair lengths into shorter hair lengths or vice versa. Tapering involves changing hair lengths within a style, without revealing any weight

Basic haircutting terminology

As in any community, professional haircutting has its own language or terminology, of which is utilized in understanding, performing, and explaining the artistic applications of cutting hair. Haircutting and styling terminology include the professional comprehension of lines; and what each type of line establishes. The type of lines used in haircutting are curved lines, diagonal lines, vertical lines, and horizontal lines.

Curved are used to create designs, soften designs, or to create different styles along the nape and side areas of the head. Examples of the usage of curved lines are fade outs among the nape and neck area and temple fading along the temporal and side areas of the head. Other examples of utilizing curved lines include designing short haircuts, such as crown and levels for drop fades and the Fohawk style.

Vertical lines are used for removing weight and creating layers. Horizontal lines establish weight-ish and one length looks, such as Bob styles. Diagonal lines create sloped lines, such as those needed to build the boundaries of pompadours and leveled flat tops. Diagonal lines also create layered effects, stacked styles, and blends from shorter lengths to longer lengths.

Within the understanding of cutting and establishing good hairstyles, professional stylist must also have a comprehensive understanding of hair textures, form, proportion and color. Other terminology detrimental for men short hair cutting consist of terms, such as against the grain, with the grain, weight line, crowns, notching, thinning, shear cutting, clipper over comb, and outlining. Definitions of the terms are as follows:

- **Hair textures:** May differ between clients, client's hair may be extremely curly, wavy with large curls or straight.
- **Form:** The dimensions of a hairstyle, include the style's volume, balance, proportion, balance, length, and shape.
- **Color:** Create illusions of density and volume. Like hair texture, color may differ among clients.
- **Against the grain:** A shorter hair version of cutting at a 90% angle. Combing and cutting the hair with clipper, comb, and guard, the opposite direction of which it grows; cutting against the grain ensures quality cutting and precision in hair lengths.

CLIPPER-CUTTING (FADING) AREAS AND CLIPPER-CUTTING TECHNIQUES

Because of the short lengths of hair that the current men's popular hairstyles require, faded haircuts are mostly cut by using clippers as the primary major implement. Even though stylists advanced in haircutting techniques can establish the faded look utilizing the shears. Because of the skinned or balled areas of the popular cuts, the clippers are the most proficient tool for establishing the faded look. As noted by Scali-Sheahan (2017), clippers are very resourceful tools. They can be used for cutting many different styles on any texture of hair. The clipper cutting techniques being used are determined by the type of hair and the hair style being established.

When using clippers to create faded effects, clipper guards and combs or used to cut the required short hair lengths for the hairstyle. The clipper techniques performed when guards or combs are freehand clipper cutting and clipper-over-comb. Freehand clipper techniques are performed in two different ways. One is with a guard attached to the clippers and the other is without a guard.

The freehand clipper cutting technique with a guard is known as basic clipper cutting. Basic clipper cutting is perfect for

lines, stair steps of hair lengths or areas of balding within a style. Fading is a type of tapering technique. Fading is the process of cutting short versions of hair lengths from nothing or almost nothing into longer lengths of hair on top of the head. In current fading styles, obvious elements of weight lines, stair steps of lengths of hair, and areas of balding may be present within the styles.

- **With the grain:** Combing and cutting the hair with clippers, comb, and guard the same direction the hair grows. Cutting with the grain cleans up and lose or uncut hairs. The technique of cutting with the grain or across the grain is often used to cut wavy hairstyles in men haircutting.
- **Weight line:** Established to give a one length look, often established as a guide in fading when cutting several levels of lengths within a style.
- **Crowns:** The different levels established in fade cuts, also called levels. Crowns may begin with no hair within lower areas of a head, graduating to longer lengths as the desired style is cut up toward the top of the head.
- **Cross-checking:** The process of checking the hair after it is cut. Cross-checking is achieved by checking the hair for imperfections within the cut and to correct the imperfections, comb, part and cut the hair the opposite direction of the first cut. For example, if the hair was first cut in the vertical direction, for the cross-check, comb, part and cut the hair in the horizontal direction.
- **Notching:** A form of texturizing the hair to enhance a style. The technique used for notching takes out large sections of hair to establish a chunky spikey effect when spiking the hair. Notching is also a technique used to remove weight when blending crowns within a fade. The notching technique is established by holding the clippers slightly to one side and only allowing two or three teeth from the clipper blade to touch the weight line; notching out the weighted area of hair to make the weight line appear less obvious.
- **Thinning:** Removing any unwanted weight or bulk within a hairstyle.
- **Shear cutting:** Cutting a hairstyle with shears.
- **Clipper cutting:** Cutting a hairstyle with clippers.
- **Clipper over comb:** Cutting with clippers over a comb to blend, fine tune blended areas or to establish texture in the hair.
- **Outlining:** The same as an edge up. Cutting the hair along the outer perimeter of the hairline to establish a clean line of cut along the edges of the hairstyle.

lengths of short hair that can be more easily cut by utilizing the appropriate guard size attached to clippers. Clipper guards range in sizes to accommodate leaving centimeters of hair lengths on the head after cutting, up to over 3 inches of hair left on the head.

In basic clipper cutting, after choosing the correct clipper guard to achieve the desired hair length and faded effect, the hair is cut by performing two different methods of cutting with clippers: against-the-grain and with-the-grain. Against-the-grain is equivalent to the effects of a 90-degree cut. In 90-degree cutting techniques, the hair is combed and held straight out from the head to ensure precision when cutting. The method guarantees precision in hair cutting. In basic clipper cutting, cutting against the grain allows the hair to be lifted straight up from the scalp before it is cut by the clipper, causing the hair to be cut precisely as the length of the attached guard size. As with the fingers and comb in shear cutting, the guards attached to the clippers guide and protect the lengths of the cut.

The cutting with-the-grain method is used only when cutting wavy or extremely curly hair. This method is utilized after

cutting against-the-grain, to comb the hair into the direction of hairs' growth pattern, while cutting any loose curly hair that may be sticking out above the previous against-the-grain cut. Even though many advanced barbers can establish a good look of precision within some styles by utilizing the with-the-grain method instead of the against-the-grain technique, it is not advised for stylists who have not mastered this technique. To ensure quality, the desired look, and the satisfaction of the customer the against-the-grain technique, using the appropriate guard size for the hairstyle, is the best technique to perform in basic clipper cutting.

Basic clipper cutting techniques are also performed by using trimmers and balders. Trimmers and balders are used to cut skinned, bare, or hairless areas of a haircut. Trimmers are the perfect tool for detailing and cleaning up the natural hairline and the neck. In today's men popular hairstyles, trimmers are also used to create hard lined edged-ups and for edge-ups that are more subtle and soft to coincide with different cultures, styles, and preferences.

Basic clipper cutting, including when using trimmers and balders, is performed in the lower parts of the head, such as the nape area, over the ears, and the temple areas. The basic clipper method is used to fade the hairline areas of the nape, the back section, and the sides of the head. In basic clipper cutting, the

Fading techniques

The most popular haircutting designs for men of the 21st century are tapered haircuts falling into the guidelines of fades. Fade styles are cut the shortest along the lower sides and nape areas of the head; increasing into longer lengths as the style flows into its highest point on top of the head. In today's fading styles, weight lines are major contributions to the style. The style is defined by levels of fading, designing of crowns with curved lines, and weight lines to accentuate the hairstyle.

Clients tend to describe their desired hair lengths using terms, such as skinned, bald or very close on the sides, medium length, short, and long on the top. Professional stylists must be able to determine how to cut and create different stylish looks, desired lengths, and tailor the cut to the client's preference and the shape of their heads.

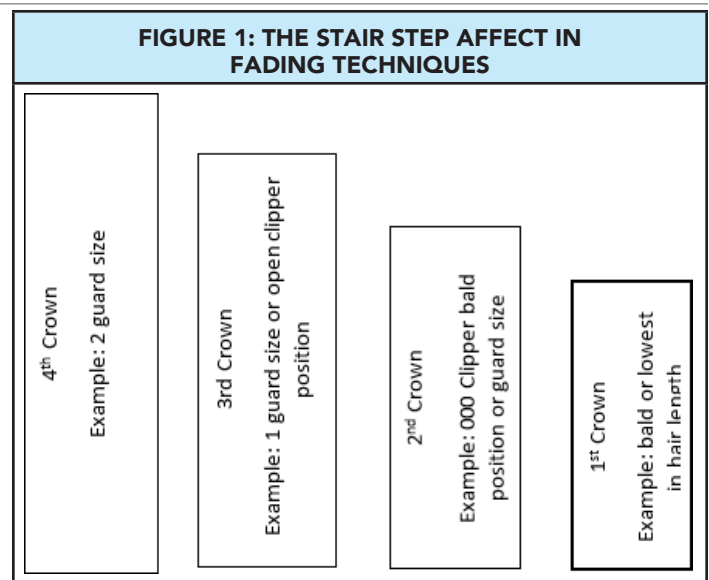
The present most fashionable fades are bi-level and bald fades, such as the high fade, the mid/low fade, and the temp fade. These fade designs are established by blending the shortest lengths of hair along the lower hairline and nape areas of the head. Higher lengths of hair are cut into individual levels or crowns as the style is formed upward along the head. The highest point of hair is shaped into the clients' desired style on top of the head. The size and placement of the progression of lengths in fading determines the look of high fades, med/low fades, and temp and nape fades.

The crowns should stair-step into the longer top length of the hairstyle to establish a nice smoothly blended fade. The stair step affect is the establishment of hair length levels, crowns, and weight lines within a haircut. The hair is cut in different lengths in designated areas of the head. The lowest hair length is cut on the lower perimeters of the head, the next larger length area is cut above the lowest length section of hair and the hair length areas increase as the hair is cut unto the top sections of the head. One length is cut within a specific design and area among different sections of the head, ranging from one side of the head all the way around to the opposite of the head within the designated sections.

following guidelines are necessary to establish the faded look of current men popular styles:

- After choosing the correct tool (clippers or trimmers) and guard size to create the desired look, begin cutting at the center of the nape area.
- Cut the hair, starting from the center nape area, in the internal parts of the head, up the area of the head meant to create the wanted style. For example, cut the first length of hair up to the bottom of the occipital bone or just above the occipital bone. Continue establishing the design of the hairstyle by cutting the first crown or level of the cut, with the chosen guard size and area of the head around the head to cut the sides and temple area of the head. Make sure that the height of the cutting area does not exceed the pattern or design you are establishing to create the specific style.
- Keep clipper flush to the skin to cut consistent lengths of hair within the cutting area.
- Clippers may be slightly rolled outward from the hair when reaching the desired length of the cutting area. Keep your canvas clean, pay attention to cut hair strands and remove any lose hairs along the nape and other areas of the cut.
- Begin all other crowns also in the center of the back area of the head, design crowns as needed.
- Be sure to leave room for error when creating crown sizes, allowing for a smoother and easier blend between different crowns or levels of hair lengths.

FIGURE 1: THE STAIR STEP AFFECT IN FADING TECHNIQUES



The crowns or levels established after the first crown are normally smaller sized crowns of hair lengths. The difference in hair lengths and crown development can be minimized by using the clipper over comb technique at a 45-degree angle utilizing bottom and top guides of the cutting areas. The stair step affect theory is explained utilizing only three crowns or levels. Yet, the actual number of crowns made within different haircut styles are determined by the needed hair lengths required to create the desired style.

THE HIGH FADE

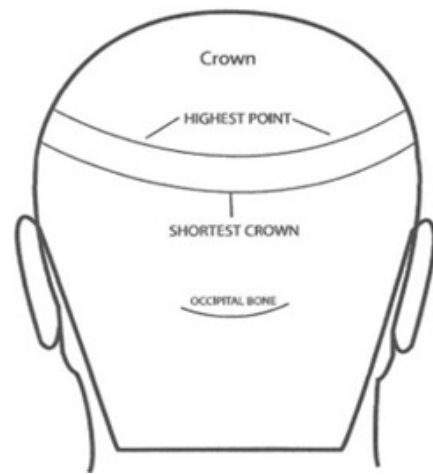


Figure 2: Side view of the crowns/areas of graduation in hair length levels of a high fade.

Figure 3: Back view of crowns/areas of graduation of hair length areas of a high fade.

The high fade is characterized by a very high or large 1st crown that is bald and ends along the crest of the head. The type of high-level bald fade is established by cutting a large 1st crown starting along the exterior or bottom areas of the head. The 1st crown begins in the nape area, extending around the head unto the bottom sides of the head, ending at the lower frames of the face. The first established level or the bottom level or a high fade is always skinned/bald. The internal features of the 1st crown, of the high fade, travels up inside of the areas of the parietal ridge, where the designed section of the 1st crown ends.

The amount of levels needed to establish a high fade style is determined by the desired length of the top or final crown of the hairstyle and the basic design of the intended style. The following center crowns are normally very small in size. Due to the sizes of the center crowns, the high fade is considered an advance skilled cut. The design of high fades styles is not definite, lines and sizes may be slightly altered and adjusted according to the client's face and head shape and the desired style result.

THE MEDIUM/LOW LEVEL FADE

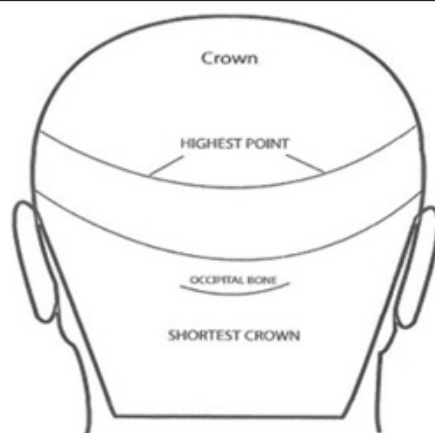
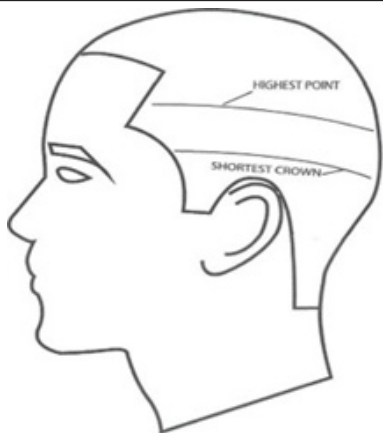


Figure 4: Side view of crowns of a medium/low level fade.

Figure 5: Back view of crowns for a medium/low level fade.

The medium/low fade is established by designing smaller crowns than those created in high fade styles. The crowns may range from ¼ to 1 inch in size. The crown with the shortest hair should be established slightly below the temple area on the sides of the head and above the occipital area in the back of the head. The medium/low fade should not be established higher than the temple area and the highest point of the second crown should not exceed the top area of the parietal ridge. This design of the crowns, as in using more curved or straight lines, is not definite and can slightly be adjusted depending on the client's head, face shape, and basic design of the intended style.

THE TEMP FADE AND FADE IN THE NAPE AREA

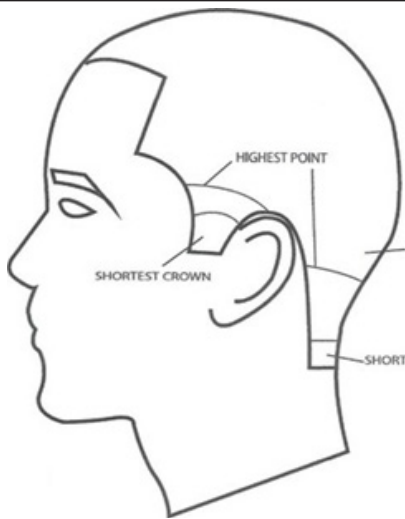


Figure 6: Side view crowns of a temp fade.

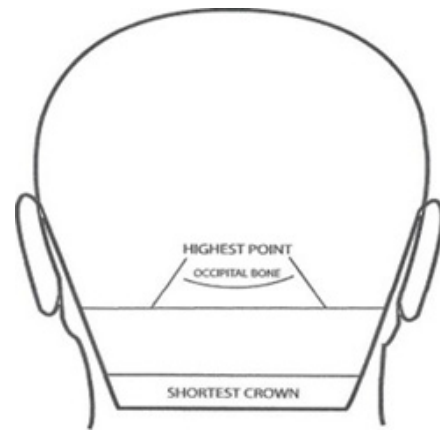


Figure 7: Back view of crowns for a 'fade out' or fade within the nape area.

The low taper also known as temp fade is created by cutting very small crowns within specific sections of the head (the temple area and the nape and neck areas). Starting at the nape, the temp fade is established by cutting very small crowns starting at the hair line of the nape, below the occipital bone area in the

back, and not higher than the temple area on the sides of the head. Like, the other fade styles, the design of the temp fade is specific; yet, the crowns may be slightly altered to accommodate variations in different temp fade styles, the client's head, and facial shapes.

Shear-cutting (tapering) areas and shear-cutting techniques

The current most popular men hair styles are cut utilizing faded techniques along the lower hairline, sides, and back of the head. Yet, the highest point of the hairstyles, the top of the head section, is established by using tapering techniques. The top areas of the hairstyles are sometimes much longer than the lower areas of the styles. The hair lengths in the top sections of the hairstyles require tapering from short lengths to longer lengths.

Techniques used in haircutting are always relevant to the tool being utilized. Shear cutting techniques require the usage of shears and a comb. Shears used in haircutting are usually shorter in size, ranging from 6 ½ to 7 ½ inches in length; because they facilitate better comfort and more precise results within all areas of the head, in haircutting. Shear cutting techniques encompasses terminology based on haircutting how the hair is combed, held, and cut, such as 180, 90, 45, and 0 degree. Different styles are maximized by demonstrating the 180, 90, 45, and 0-degree shear cutting methods. Angles, vertical lines, and diagonal and horizontal directions are used to establish layers and added lengths according to the desired style (Scali-Sheahan, 2017).

The 180-degree is an over directed haircutting position, meaning that the hair strand is combed away from its natural fall before it is cut. In men, short hair cutting techniques, the 180-degree cut is used to increase lengths of hair from the crown and crest areas and graduating into its longest length in the fringe area. When utilizing the overdirecting technique, the hair strands are overdirected from the perimeter line into guides within the crown and parietal ridge to establish pompadours and longer hair length styles within the bang area of the face. The 90 degree creates layered effects, the 45 degree establishes graduation and blending from shorter lengths to longer lengths of hair, and 0 degree produces weight within a haircut.

Other terms in shear cutting describe texturing techniques used to establish movement, remove unwanted weight and bulk, add volume, and special effects, such as spikey or wispy looks in hairstyles. The texturizing techniques are notching, point cutting, carving, slicing, and slithering. Notching creates a textured

look, by cutting chunky slices of hair from the end of the hair strand. Point cutting establishes a finer and less heavy affect than notching. Point cutting is performed by cutting the hair in angle and only using the point of the shears to cut the hair.

Carving and slicing are similar in technique, using open blades of the shears to slice or carve the hair. Slicing adds movement to hair styles and removes unwanted weight. Carving is a type of slicing technique. It is used to establish texture and cause hair to flow with separation within a haircut. Slicing also produces movement and volume; it is also used for thinning longer lengths of hair into shorter lengths along the parietal ridge and top of the head.

The top sections, of current popular fade styles, are cut into the desired style by cutting the longer lengths of hair utilizing shear cutting techniques. This haircutting process involves different ways of performing a shear cut. These types of haircutting methods include finger-and-shear cutting techniques and shear-over-comb techniques. Finger- and-shear cutting techniques involve cutting above the fingers, cutting below the fingers, and cutting palm-to- palm.

Cutting above the fingers is performed by holding the hair directly out from the head in a 90 or 45-degree angle. Cutting above the finger is useful for cutting the top sections of the head, which is often parted off as the horseshoe area. These areas include the parietal ridge, crown, apex, and fringe areas of the head. When cutting below the parted off horseshoe area (below the parietal ridge), cutting below the finger is useful for the comfort of the stylist, and for creating graduated effects and design lines along the lower perimeter of the hairstyle.

Cutting palm-to-palm is also a below the finger method of cutting hair. Cutting palm-to-palm is a choice of comfort for the stylists. In all methods of finger and shear cutting it is important to understand shear and finger placement. Stylists should remember to always place shears on the cutting line to ensure precision and to never cut beyond the second knuckle to prevent cutting yourself.

Shear cutting (tapering) areas of current popular hairstyles

Note: The diagrams represent the view from the top of the head, which is the highest point of reference of the hairstyle. The top of the head is the area where the longest lengths of hair is cut in today's men's popular hairstyles. The numbers and lines indicate the sections to establish and the directions for parting and cutting, according to desired styles.

The shear cutting diagrams illustrate two different examples of establishing a cutting guide from the shortest length of hair (already cut) to the desired area where the longest length of hair will be cut. The first number indicates the first hair cutting guide and the following numbers show directions and areas to set for the remaining cuts areas.

SHEAR-CUTTING (TAPERING) AREAS AND SHEAR-CUTTING TECHNIQUES

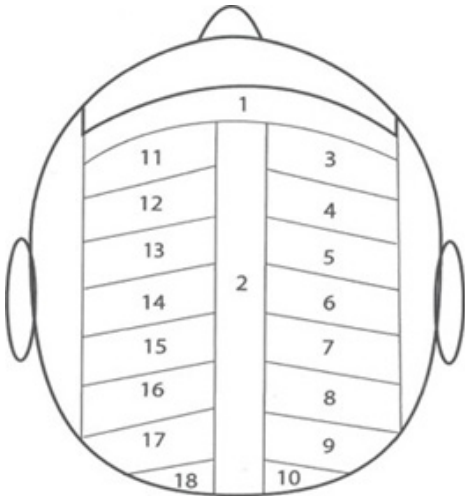


Figure 8: First example of how to cut the top section of the head. For styles with more length in the front hairline and the sides and back parts of the top section graduates into the shorter lower side and back areas of the head, of which were cut prior to starting on the top section.

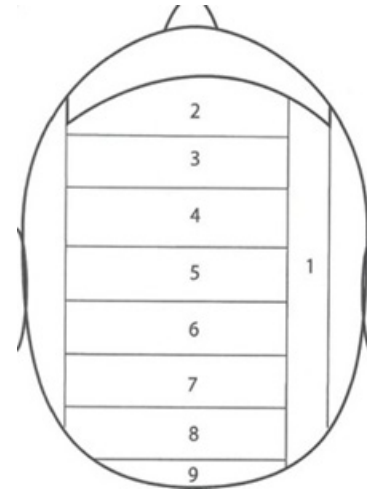


Figure 9: Second example of how to cut the highest section or top crown of hair within men most popular hairstyles. This example is appropriate for hairstyles requiring a part on either side of the head. Begin the first parting and cut on the side of the head where the part is will exist (right or left side of the head).

NEEDED IMPLEMENTS

Professional stylists acquire high-quality implements to practice haircutting and styling. The principal tools for cutting hair among the beauty industry are shears, razors, clippers, combs, and brushes. For styling, additional implements may be used for finishing styles, such as thermal styling and blow-drying. For better success, comfort, effectiveness, and safety it is important for stylists to choose the implements that best fit their personal preferences and styling needs.

Shears cutting is the foundation of haircutting. Shears are one of the oldest documented implements used for cutting hair and hairstyling. Stylists utilize shears to cut, blend, texturize and thin hair. Shears are designed to fit left and right-handed people. Shears are a crucial part of haircutting; they dominate the styling industry, because they are the best tool for cutting long hair lengths.

Haircutting razors are the perfect tool for tailoring haircuts into precise, high-quality, textured hairstyles. Haircutting razors work well when cutting hair of any length. Professionals who master the skill of razor cutting have advanced into the high skill level of haircutting. Razor cutting is essential for trimming wigs and extensions.

Straight razors are considered as an implement for haircutting when they are used for detailing, shaving bald areas of crowns, outlining, and for defining edge-ups. Straight razors help to make the hairstyle look clean, polished, and sharply designed. Straight razors may be used for haircutting techniques when a hair cutting razor is not available. Purchasing a good quality razor, whether a haircutting razor or straight razor, involves consideration of the razor style, size, grind, temper, finish, and balance. The attached handle of a razor is constructed either of metal, hard rubber, polymer materials or plastics.

Electric clippers are the most popular electrical hair cutting tool designed for the haircutting industry. The first electric clipper was invented in 1919 by Leo J. Wahl. Electric clippers have become one of the most widely used implements for cutting hair of shorter lengths. The Oscars, Wahls, and Andis were the first manufactures of electric clippers. They each are famous for different motor types, such as the rotary motor, the magnetic motor, and the pivot motor. Within the last couple of decades, several manufacturing companies have constructed their version of clippers. Yet the recent motors models still range from the original clipper motors designs.

The motor type determines the cutting power and blade speed. Certain motor types tend to perform better when cutting various types of hair. Rotary clippers are high-powered, heavy-duty haircutting tools. They perform well when cutting all types of hair. Magnetic clippers are also high-powered haircutting implements. Their blade speed is slower than the rotary clipper. The magnetic motor is good for cutting coarse, thick hair.

The pivot motor is not as powerful as rotary and magnetic clipper, but it is known for its reliability. Pivot clippers are generally used for cutting fine textured hair, for basic haircutting and tapering. Most clippers are sold with or present the option of purchasing attachable guards. Clipper guards are made of hard rubber, plastic; and they help to ensure precision and uniformity within a haircut.

Combs are valuable in haircutting due to their ability to detangle hair, maintain control of hair, and establish direction of hair strands. Combs may be purchased in various sizes, colors, and styles. Haircutting combs are usually 7 to 8 inches long. Colored combs are better for cutting different hair colors. The type of combs used in hair cutting are taper combs, pick combs, wide-tooth combs, all-purposed combs, and tailed combs. Haircutting combs may be purchased in materials of hard rubber, graphite, carbon, and metal.

Brushes are the necessary tool in haircutting for adding fullness, smoothing, creating waves, and to maintain control. Brushes are chosen for usage according to the bristles of which they are constructed. The type of bristle of a brush determines its purpose. Bristles of a brush may be manufactured from rubber, metal, synthetic, natural animal hair or combined materials. Hairbrushes are available in many different shapes, for example paddle brushes, round brushes, picks, and styling brushes.

Blow-dryers are used to complete the look of the haircut. Blow-dryers are necessary to create fullness, pompadour effects, to establish desired styles and to dry the hair. Blow-dryers are used to complete the finished look of different styles with the aid of combs, round brushes and freeform techniques of only using the finger to establish various looks while drying the hair.

SANITATION (INFECTION CONTROL)

The beauty industry is regulated by state and federal agencies for the prevention of the spread of disease among the profession. The Occupational Safety and Health Administration, known as OSHA; the Environmental Protection Agency (EPA); and state regulated agencies, such as state administrators and cosmetology and barbering state boards, regulate specific infection control measures to be performed by master cosmetologists and master barber stylists. State and federal regulators are held accountable for the welfare of their citizens. Therefore, strict health and safety procedures are mandated for the professional, licensed by the state, to protect the professional worker and the public citizens they service (Scali-Sheahan, 2017).

For the protection of professional workers and employees, the U. S. Department of Labor added OSHA as a part of its organization. OSHA's responsibilities are mainly to regulate the exposure of toxic substances within a place of business and to ensure that employees are informed of the existence of potentially toxic substances in the workplace. OSHA requires business owners to have available and to post information identifying potential hazards, first-aid measures, handling and storage information, exposure controls, disposal directions, and many other serious concerns related to the safety and control of the toxic substance.

The EPA is the association where all disinfectants are registered that are sold in the United States. Before a disinfectant product reaches the retail store counters, they must go through the process of being registered through the EPA. The EPA registration ensures that all professional strength disinfectants have the proper efficacy for killing bacteria, viruses, and fungi that may be present on surfaces. This information is better understood after obtaining the basic knowledge of the levels of decontamination:

- **The hospital level:** Highest level of effectiveness in killing all forms of bacteria, viruses, and fungi. 100% efficacy.
- **The disinfectant level:** The second highest level of effectiveness in killing bacteria, viruses, and fungi. Professional disinfectants are designed with the proper ingredients to destroy most bacteria, viruses and fungi. Disinfectants the second level of decontamination because they are not 100% effective in killing bacteria that has produced bacterial spores. Bacterial spores are hard shell that the bacteria organism produce, when conditions favorable (dark, damp, and dirty) to protect it while it remains dormant within unfavorable conditions, such as clean surfaces.
- **Sanitation:** Lowest level of effectiveness in killing germs. Sanitation methods are when cleaning the skin.

Types of disinfectants

In choosing and using disinfectants, it is of vital importance to read and follow instructions, which are listed on the manufacture's label. It is crucial to the effectiveness of the disinfectant to understand and follow all mixing instructions and contact and immersion times suggestions. Types of disinfectants are quaternary ammonium compounds, phenolic disinfectants, bleach, and petroleum distillates. Quaternary ammonium compounds (quats) are very effective when they are used properly. Quats solutions require 10 minutes disinfection time.

products are the mildest, only slightly retarding the growth of germs, to not be harmful to the skin. Examples of sanitation products are astringents, talcum and baby powder, and hand sanitizers.

Beyond the requirements for businesses to adhere to the laws and standards of OSHA and the EPA, it is the individual responsibility of stylists to ensure the usage of professional cleaning, disinfecting, and sanitation products. Professional stylists must make sure that all disinfecting products are labeled by name and that they have a manufacturer's label. For the most effective use of products used for decontamination, professional stylist should have comprehensive knowledge of the different types of pathogenic bacteria, viruses, biofilms, fungi, and parasites that could become transferable within the workplace.

Pathogenic bacteria are microorganisms that are disease causing or that are harmful to the body. Different types of pathogenic bacteria may cause serious concerns, such as staph infections, strep throat, pneumonia, tuberculosis, lockjaw, typhoid fever, lime disease, and syphilis. Viruses are submicroscopic particles that require a host to survive. Viruses are very hard to detect on surfaces. It is even difficult for viruses to be detected by power microscopes. Viruses are highly contagious and may exist anywhere. Common viruses that may be transferred within work environments are chicken pox, measles, smallpox, the mumps, polio, influenza, hepatitis, HIV, and AIDS (Scali-Sheahan, 2017).

Examples of biofilms are slime inside of drains and algae that builds up in ponds. Biofilms are colonies of microorganisms that stick to and accumulate upon surfaces and the human body. Biofilms are responsible for infections, such as cystic fibrosis, contact lens and corneal infections, conjunctivitis, osteomyelitis, prostatitis, and other infections associated with surgical and cutting instruments where biofilms are not visible. Fungi are types of organisms that grow and reproduce in mildews, molds, and yeast. Ringworm (tinea) is a type of fungus infection. Common fungal infections found in the beauty industry are tinea barbae (ringworm of the beard) and tinea capitis (ringworm of the scalp).

Like viruses, parasites survive by living on a host. Parasites do not take control of the host, like some viruses, yet they do live on or in the host. Parasites can be found on animals, food, plants, and humans. Parasites may be either internal or external for the human body. Internal parasites are contracted by eating food that is not cooked properly. External parasites are transferable by contact. Types of external parasites are lice, ticks, mites, and flies, of which may be present on haircutting tools and countertops.

After using quats the implements require rinsing, drying, and storing in a clean and dry storage cabinet.

Phenolic disinfectants are made from formaldehyde. They are very strong disinfectants and have been used faithfully for many years. Phenolics can be damaging to rubber, plastics, and some metals, causing them to rust. Phenolics are harmful to the environment if it is not disposed of properly, because they contain formaldehyde. Bleach is an effective disinfectant for combs, plastic styling tools, brushes, some metals, towels and

haircutting and styling drapes. Bleach can damage the skin and plastics. Bleach may also cause corrosion to some metals.

Petroleum distillates are petroleum based and excellent tools for metal haircutting implements. Petroleum distillates work

Sanitation procedures

In the beauty industry sanitation is a term which encloses all methods of cleaning, sanitizing, and disinfecting; to ensure proper infection control within all professional cutting and styling environments. To protect the public, it is detrimental for stylists to understand and respect state associated regulations enforcing strict policies to control and eliminate the spread of infectious organisms. For this cause, it is vital to follow the regulated protocol for infection control.

The first step of infection control involves cleaning all implements before and after each usage. The sanitizing steps of implements, tools, and equipment begins with brushing off cutting and styling tools to remove dirt, debris, and soiled particles from the implement. The next step of sanitizing is to disinfect the equipment. Disinfecting solutions must contain four main ingredients to guarantee infectious organisms, such as fungi, harmful bacteria, tuberculosis, and viruses. The Environmental Protection Association (EPA) force manufactures to visibly label professional disinfectants as fungicidal, bactericidal, tuberculocidal, and viricidal. These regulations are regularly enforced by state boards in each state within the United States.

After cleaning dirt and debris from clippers, of which are of metal and electrical tools, they should disinfect with a petroleum based disinfectant solution. Even though most disinfecting instructions suggest that shears be cleaned with a water-soluble disinfecting solution, because shears are also made of metal, it is optional to use a petroleum disinfecting solution to sanitize them and to prevent any possibilities of rusting.

Quaternary Ammonia Compounds (QUATS) is a disinfect with the EPA required ingredients. The product is dissolved in water to allow complete immersion of implements that are safe to disinfect in water, such as detachable clipper guards, combs, and brushes. These tools must also be cleaned before placing them into the quats solution, known as a wet sanitizer.

Due to state regulations, in most states, razors used in the beauty industry must be changeable blades. This was established to prevent the public contamination of blood borne

Tips for using disinfectants

Disinfectants should be mixed and used only on hard, nonporous, clean surfaces. Gloves should always be worn when mixing and using disinfectants. Always mix and dilute disinfectant products according to manufacturers instructions. Make sure all items are clean thoroughly before placing it into a disinfection solution. Always allow items to remain in

Safety precautions and set-up

The best advice for safe work practices and safety precautions is to learn to recognize safety hazards within the workplace. There are many concerns of safety to consider within work environments. When focusing on haircutting implements, the crucial aspect to remember is to always place clean and dirty implements into separate closed containers. As mentioned in the prior section, cleaned and disinfected implements should be placed in sanitized closed containers. Dirty implements should be placed in their appropriate container, marked 'to be disinfected'. These safety tips are detrimental for the prevention of contamination.

very well in removing grease and grime. Be sure to check all petroleum distillates to ensure that they are EPA registered and formulated to destroy bacteria, fungi, and viruses.

pathogens. Therefore, after each usage, blades in razors must be discarded. It is imperative that blades used to cut hair or to shave a client is not reused on another client. All used blades must be discarded into a sharps container for proper and safe disposal.

After disinfecting, whether with petroleum based or water-based solutions, all tools and implements must be wiped down and dried off with a clean towel to remove any excess of the disinfect. It is necessary to remove all disinfectant residue from tools to ensure that none of the solution gets on client's skin. Disinfectants are very harsh and could irritate the skin. For this reason, it is suggested that gloves are worn when using the products. After disinfecting tools and implements, they must be placed in a clean closed cabinet for proper storage.

One of the most productive ways to prevent the spread of germs is to regularly practice washing your hands. Hand washing is one of the most vital forms of sanitation among the profession of cutting hair and styling. Proper procedures for hand sanitation include the use of antiseptics. Hands should be cleaned before and after each service and every time the skin touches any object that has not been sanitized, while servicing clients. Stylists should also utilize hand sanitizer each time they go to the rest room and/or use their hands to cover their mouth when coughing and sneezing. It is important to remain conscious of possible of possible germ contamination.

Lastly, all styling drapes, hydraulic chairs, countertops, and floors must receive their appropriate methods of infection control to ensure proper sanitation. Styling drapes should be cleaned daily, and soiled and/or possibly contaminated drapes should be changed out with a clean draped immediately. The head rest of hydraulic chair should be covered with a clean towel or plastic cap when used by clients, and when cleaning barbering and styling chairs, it is crucial to make sure no hair is left in the creases, the seams, and on other parts of the chair. Hair should be swept from the floor after each client and cleaned daily. These methods of cleaning should be practiced daily to ensure proper infection control.

disinfection solutions the required amount of time. For certain implements the entire item should be completely immersed into the disinfecting solution. Change and dispose of disinfection solutions according to manufactures instructions (Scali-Sheahan, 2017).

Other important safety tips include keeping tools in good working condition; tools requiring maintenance should only be serviced by professionals. Electrical implements must be handled with special care, making sure the wire from clippers, for examples, do not twist, tangle or lay on the client's skin, electrical appliances and tools should always be unplugged before cleaning. Make sure all service equipment mechanisms are safely maintained by tightening all bolts and screws that may loosen during usage.

For the safety of clients and for the proper ergonomics of stylists, it is a good idea to use proper procedures for setting up to service clients. Even though it may not seem like much of a big deal, setting up implements correctly among workstations are also methods of safety. When receiving a client, after consulting with the client, and after a clear vision of the clients desired results of the service has been effectively communicated and confirmed, it is time to set up the workstation with the

implements needed for that service. It is a correct safety procedure for stylists to set up all implements on the dominant hand side of their workstations. This method prevents products, electrical wires, and arms and elbows from touching the client's face. The technique also prevents stylist from standing and leaning in improper positions, that may later cause body fatigue and pain.

CURRENT CUTTING TECHNIQUES FOR TODAY'S POPULAR HAIRSTYLES

The High Fade Pompadour, the Slicked Back Medium Fade, the Crew Cut High Fade, and the Burst Fade Fohawk are some of the most popular and fashionable hairstyles currently worn by men. Each design has its own flare of masculinity, trendiness, and

individual expression. Each style compliments all types of hair. Whether wavy, fine, excessively curly, or straight these styles may be cut to fit any texture of hair and any personality.

High skin fade pompadour

HIGH SKIN FADE POMPADOUR



Note. Underwood Barbering @ng tonsorial

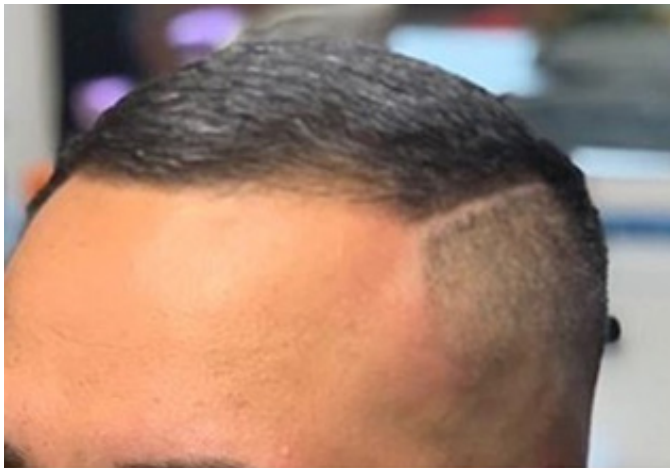
The pompadour fade is one of today's most requested men's hairstyles. The high skin fade pompadour is a type of high fade. The cut is finished long on top of the head and styled somewhat like a comb over, to establish high volume along the frontal hairline. As shown in the picture, a hard part may be added to detail the look and extra sophistication to the haircut.

The high skin fade pompadour is cut using clippers, guards, combs, and shears. Optional extra styling aids are a blow-dryer and a round brush. Figures 2 and 3 illustrate the crown development needed to create this handsome look. The first crown is cut with clippers or trimmers, then shaved very clean to the scalp with trimmers, balding clippers or a shaving razor. The middle crowns may be cut with clippers and guards, shear over finger, or clipper over comb to blend the crowns into the top area of the hair.

In the top section of the haircut, cutting guides are set according to the client's wishes for the height of the pompadour. After the guides are established the uncut hair on top of the head is trimmed to connect the top and middle guides. The hard part is a definite consideration within the cut. The hair below the part is cut to the length of the hair along the middle back middle sections and crown area of the head. Figures 8 and 9 are valuable examples of how the cut should be performed.

Crew cut high fade

CREW CUT HIGH FADE



Note. Taylorboy Barber Service

The crew cut high fade is the number one trend for men of the 21st century. It is a classical style for men of all lifestyles, hair textures, ethnicities. The hairstyle is cut using the same procedures for the high fade. The bottom part of the hairstyle is almost the same as the high skin fade pompadour. The difference between the two is that the bottom and sides of the crew cut is cut closer to reveal more skin up higher into the head, and the top section is short enough to be cut with clippers and a guard. A clipper, guards, and optionally clipper over comb is all that is needed to complete this short, classy look.

Slicked back medium fade

SLICKED BACK MEDIUM FADE



Note. Underwood Barbering @ng Tonsorial

The slicked back medium fade is a classic look. It is a highly requested gentlemen's cut. The slicked back medium fade features a mid-level bald cut blended into longer lengths of hair to create many levels of faded lengths. The highest point of the slicked back style may be cut as long or longer than pompadour styles. Unlike the pompadour hairstyle, the slicked back longer length of hair is not styled upward to create volume or lift on top of the head.

To cut the slicked back medium fade, the diagrams in figures 4 and 5 show the crown design needed to cut this hairstyle. Clippers, guards, clipper-over-comb, shear-over-finger, trimmers, and shaving razors are the implements required to create this look. The diagrams in figures 8 explain how to shear cut the top section of the hairstyles. The slicked back look may also be established in other hairstyles designed with undercuts, ponytails, braids, and locks.

Burst fade fohawk

The burst fade fohawk is a very high fashion style, unique with hard edgy features. It is a special haircut for men desiring the cool look. The burst fade fohawk is cut by performing very similar techniques of establishing levels in specific areas of the head as the temp fade, illustrate in figures 6 and 7. The crowns are formed by using very curved or 'c' shaped levels, of which elevate high into the side crest areas of the head. The nape area is normally designed into a 'v' shape, squared off, or slightly tapered. The highest point of hair of the burst fade fohawk is cut

to resemble a bursting or blast of hair sticking or spiked out on top of the head. This style is perfect for all types of hair.

Implements needed for this style will be determined by the client's hair type. The bottom sides of the style are cut using clippers, trimmers, and guards. The top and longer hair section may be picked out and free-handed with clippers or cut with shears and styled to spike up and out away from the client's head. The burst fade fohawk is a very popular style for young men and mature men also tend to look very handsome wearing the style.

BURST FADE FOHAWK



Note. Shades of Grey @ Royal Kutz



Note. Shades of Grey @ Royal Kutz

Styling techniques

A quality haircut is the foundation of a good hairstyle. Hairstyling is the process of arranging the hair into the look of the desired style. A well-designed haircut minimizes the need for having to utilize a lot of hairstyling techniques. Today's men's popular hairstyles may require a minimal amount of hairstyling due to the haircut, blow dry styling and styling aids.

For hairstyles, such as the pompadour and the slicked back look, hairstyling techniques are needed to create the finished and complete look of the hairstyle. To establish the styling effect for these styles, stylists must be proficient in blow drying skills. Other men's hairstyles, such as the burst fade fohawk,

may require the usage of a pick and a hair sponge to establish the specific look of the style. These examples show the vital importance for professionals to perform styling techniques.

Styling techniques for men with shorter hair tend to be quick and somewhat easier to demonstrate. It is important to consider the daily routine of the client, during the consultation, when deciding upon the finished look for a hairstyle. Determinations upon the usage of a hairdryer, other styling implements, and styling aids are made in accordance to the clients wishes and a committed daily routine of maintaining the hairstyle.

Basic styling techniques

Styling techniques are necessary to establish volume, height, direction, curls, twists, and many other effects that emphasize the uniqueness of a hairstyle. Several basic styling techniques are useful in establishing the various looks of different styles. The basic styling methods commonly used in men's hairstyling are natural drying, finger styling, and scrunch styling (Scali-Sheahan, 2017).

Natural drying is combing or finger combing (styling) the hair in place and letting it dry naturally. Finger styling is when the fingers are used to guide and manipulate the hair into different directions. Finger styling establishes a textured look that is not as smooth or as uniform as directing the hair with a comb. Scrunch styling is a type of finger styling. It works well with hair with a natural curl pattern. Scrunch styling is performed by gathering hair within the fingers and squeezing the hair together to enhance the curl or wave pattern.

Basic blowdry styling

Blowdry styling is a technique involving drying and styling the hair at the same time and within the same movements while utilizing a blow dryer and a styling implement to establish a specific finished look. A stylist must establish a style that reflects the client's personal preference, the client's lifestyle, and the client's ability to recreate and maintain the style. Throughout the process of styling while drying the hair, it is important to provide a quality blow drying service.

The following guidelines are necessary for quality blowdry styling services:

- Do not hold blow dryers too close to the hair or the scalp and never hold them in one area for too long. Blow dryers blow out hot air and get very hot; they will burn.
- Constantly move blow dryer back and forth to prevent harmful exposures to heat.
- To prevent burns, always direct the flow of air away from the client's scalp to prevent burns and toward the ends of the hair shaft to prevent frizzy appearances.
- Use all tools and implements safely.
- Choose and tools the correct tools to perform the service and establish the style.
- Styling capes and drapes require towels or neck strips to protect the client's skin and clothing. Work areas should remain organized, clean, and properly disinfected.

Tools for blowdry styling

To create the popular men's hairstyle of the 21st century, different tools are used to establish a diversity of appearances, including combs, picks, brushes, and hair sponges. The types of combs are those varying in size and teeth spacing; ranging from tapered combs to afro combs. Wider tooth combs help with shaping texture into styles and smaller teeth and smaller spacing create smooth surfaces by removing unwanted curly or wavy patterns within the hair.

Picks used in men hairstyling are known as afro picks. Afro picks are useful for combing out excessively curly hair and for detangling. The brushes used in men hair style are those normally used on straight or wavy hair. The type of brushes used

to establish different men popular styles are vent brushes and round brushes.

A hair sponge is a styling tool designed for styling excessively curly hair, also called natural hair. Hair sponges enhance the curl definition and increase coiling appearances of natural hair; causing natural hair to achieve the twist or locks look. The hair sponge reduces styling time in comparison to establishing the coiled or twisted effect by using a comb or rolling with the hair performing the finger or palm roll, as in basic techniques of re-twisting locks.

Blowdry styling techniques

The type of blowdry styling techniques used for styling men's short hairstyles are freeform drying, stylized drying, and diffused drying. Freeform drying is drying and styling the hair with the fingers while using the blow dryer. Freeform drying is what most people perform when quickly drying their hair at home. Freeform drying creates fullness and allows the hair to fall into its natural fall pattern.

Stylized drying is performed using styling brushes, such as vent and round brushes, and combs. Stylized drying techniques are used to establish fullness in specific areas of styles. To direct the hair, for example when creating straight back and parted hair styles. Stylized drying techniques are useful for establishing ridges, bends, and lifts, like when creating pompadour styles.

Diffused drying is the method of drying and styling the hair with a diffuser attached to the blowdry as a styling aid. Diffusers are used to prevent the direct flow of heat to the client's hair. Diffusers are used on curly or wavy hair, because they spread out the airflow from the blow dryer to prevent the hot air from straightening the natural curls patterns in the hair. Diffused drying is used on hair types which need to be picked out before creating the final effect of the style, for instance the burst fade fohawk.

Styling products

Styling products greatly assist in the forming, holding, maintaining, and healthfulness of hairstyles. The correct selection of styling products enhances the style. The types of styling products are foam, gel, liquid gels, volumizers, pomade, silicone, and hair spray. Foam helps to create volume and body within hair styles. Apply to the hair, then blow dry and style into the desired hairstyle.

Gel are used to slick back and mold the hair. Gels defines hair texture and establishes a strong hold. Liquid gels are for lighter holds and easier styling, molding, and defining. Gels help to add volume and extra body to hair styles. Gels are applied after the hair is dried and before the hair is combed into place.

Volumizers are applied to the base of the hair before the blow dry service. Vent and round brushes are used to establish the level of volume required to enhance certain styles. Silicone adds shine and luster to the hair. Silicone products may be used before or after the blowdry service. Hair sprays are sprayed on a finished hairstyle. Hair sprays hold the hair in position for a longer lasting hold.

CLEAN-UP AND DISINFECTION

After the completion of every haircut and style, infection control procedures must be followed for all implements, such as electrical tools, nonelectrical tools, work surfaces, hydraulic chairs and towels, linens, and capes. Hair clippers and blow-dryer are electrical tools. They cannot be completely immersed in disinfectants.

The proper procedures for cleaning and disinfecting hair clippers are first to remove all visible signs of hair by brushing the blades and wiping down remaining parts of the clippers. Put on gloves to protect your hands from skin damage. Pour a small amount of EPA registered petroleum distilled disinfectant into a clean container that is only big enough to immerse the entire blade areas of the clippers into the solution. After all indications of

hair have been removed from the clippers. Submerge only the teeth of the clipper blades into the disinfecting solution and turn the clippers down. Allow the clippers to run until no hair is seen dislodging from the blades. Then remove the clippers from the solution and wipe down until dry with a clean towel.

Blow-dryers may be cleaned and disinfected by using a clean towel to wipe all hair and debris from the implement. After all hair and debris are removed from the blow-dryer, put on gloves. After the hands are securely protected, pour a small amount of non-petroleum based disinfectant solution on a clean cloth towel. Wipe the implement down as needed, then store the tool in a clean closed container. Remember to check electric cords on electrical tools, ensuring that they are clean, untangled, and dry.

Nonelectrical tools, such as clipper guards, combs, brushes, shears, razors, and clips may be cleaned in a soluble cleaning solution, rinsed off then placed into a quats solutions for disinfecting. Quats disinfectants require a 10- minute complete immersion time period. Before removing implements from the quats solution, put on gloves. After removing the implements from the quats solution, rinse them off thoroughly, dry them with a clean towel, then store in a clean closed cabinet.

Work surfaces, including hydraulic chairs, counter tops, sinks, tables, armrest, headrest, draw handles, doorknobs, and floors should be cleaned and disinfected as a daily routine and before and after each client. As with other hairstyling tools, remove all hair from each item before disinfecting. Towels, linens, and capes are disinfected by laundering. Bleach can be used as a disinfectant for towels, linens, and capes. To prevent the chance of mildewing, ensure that all items are thoroughly dried before removing them from the dryer. Then fold and store in a clean closed cabinet.

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CURRENT CUTTING TECHNIQUES

Final Examination Questions

Select the best answer for each question and mark your answers on the Final Examination Answer Sheet found on page 34, or complete your test online at EliteLearning.com/Book

- Documentations of historical men hair styles are traced back as far as _____.
 - 600 A.D.
 - 1700's.
 - 2200 BC
 - 1500's.
- Charles Dickens is well-known for the _____ hairstyle.
 - Crew cut.
 - Flat top.
 - Even all-over.
 - Comb-over.
- The "slicked back" look is accredited to _____ in the 1980's.
 - James Brown.
 - Jerry Lewis.
 - Michael Douglas.
 - Richard Nixon.
- Current men's hairstyles include a variation of _____ to establish one complete look.
 - Many colors.
 - Contributing features.
 - Hair textures.
 - Different styles.
- The popular hairstyles of the 21st century is mostly come backs from the _____ of the 20th century.
 - 20's and 50's.
 - 40's and 50's.
 - 60's.
 - 70's.
- Current popular short hairstyles for men demands the ability to _____.
 - Fade and draw.
 - Taper and comb.
 - Blend and cut.
 - Fade and blend.
- What are the types of lines used in haircutting?
 - Curved and diagonal.
 - Horizontal.
 - Vertical.
 - All answers are correct.
- _____ is also used to remove weight when blending crowns.
 - Stroking.
 - Notching.
 - Flicking.
 - Racking.
- The most popular designs for men of the 21st century are tapered haircuts falling into the guidelines of _____.
 - Bald cuts.
 - Layered cuts.
 - Fades.
 - Stacked cuts.
- How are the techniques and mastered abilities of barbering described by professionals?
 - The art of clippers.
 - The art of manliness.
 - Good haircutting.
 - Great barbers.

Chapter 2: Dealing with Difficult People and Situations in the Salon

2 CE Hours

Learning objectives

After completing this course, the learner will be able to:

- Describe the physiological reactions that produce the “fight or flight” response.
- Explain the relationship between stress and illness.

- Define and give examples of very aggressive and very passive behavior.
- List some characteristics of active listening and explain its purpose.

Course overview

Every day we encounter difficulties and negative responses in others. What should we do when confronted by difficult people who are pains to deal or work with? This course is designed to

aid salon professionals that will inevitably encounter difficult people and situations and provide insights in how best to handle these encounters.

INTRODUCTION

You have probably worked with at least one or two “difficult” individuals in your career. It could be a coworker, manager, or client—anyone who makes your life more complicated or stressful by creating and including you in situations you would like to avoid. Difficult people tend to contribute to a negative atmosphere. They may have poor work habits or social skills. Difficult people are likely to complain when their business is too busy, and/or too slow. They may be petty and gossipy, start rumors, or repeat unhelpful comments.

Difficult people may talk too much, be loud, rude, and/or physically imposing. They may be verbally or physically abusive. They may be sulky or give you “the silent treatment.” They may be bullies or nags. They may be constant whiners, or pathological liars. Difficult people make your life difficult. While spas and salons are supposed to offer a little sanctuary from the daily grind, they may have just the opposite effect on cosmetologists or technicians who are plagued by a difficult personality at work—a client who always raises your blood pressure, perhaps, or a manager who won’t stay out of your business.

Difficult people encourage “burnout” in those around them. We may feel manipulated by them. They make us lose our temper, slow down progress, and prevent us from getting things done. They may make us feel guilty, anxious, or upset. In many cases, working with someone you don’t get along with is not only a difficult and stressful experience, but one that negatively affects

productivity. Coworkers who are not happy in their positions can “bleed” discontent onto their clients or coworkers. Even if you try to hide dissatisfaction or frustration from your superiors, coworkers, and clients, this kind of stress can build up, and it is possible to sense the negative energy in your environment, as well as be affected by it.

Every day we encounter difficulties and negative responses in others. What should we do when confronted by difficult people who are a pain to deal or work with? You may try to reason with the person, ignore the behavior, or respond in kind—someone launches into you - you launch back. But this brings you no closer to a solution and may make the situation worse. Ignoring the person contributes to lowered morale, in general, as difficult people tend to make everyone a little more on edge. Additionally, you may feel resentful that the individual causes you distress and uses up your time and energy. Irritation and frustration can mount, until tempers explode.

What if you could respond in a way that effectively diffuses the anger and directly addresses the dilemma? It is possible to change the way you deal with difficult situations and behaviors, to bring out the best in people and effectively address difficult people and situations. This chapter should help you:

- Examine the “challenging” behaviors you encounter.
- Understand something about people act as they do.
- Analyze how you react to them, and
- Learn ways to prevent and address difficult situations.

UNDERSTANDING BEHAVIOR I: HABITUAL RESPONSES; EMOTION VS. LOGIC

Before you can address the problem of difficult people and behaviors, you must be able to observe and identify your own actions and moods realistically and objectively. Answer these questions to assess how strongly you are affected by a particular difficult person, and to what degree this individual negatively influences your behavior:

- Talking or working with this individual drains my energy.
- When I know I have to have contact with this person, my mood takes a turn for the worse.
- I tense up around this person.
- I would be very relieved if I knew I did not have to encounter this person any more.
- I plan ways to avoid this person.
- This person seems to bring out the worst in me. I do not like how I act around him/her.

If you answered yes to these questions, you are having strong emotional reactions to this individual and are likely experiencing a significant amount of stress related to him/her. Tension or stress may manifest itself, over time, in physical symptoms like stomach aches or headaches, and stress-related behavior, including impatience, anger, sadness, and overreaction. In some people, long-term reactions to stress may include depression.

Stress over long periods of time can run you down and eventually take its toll on your health.

Learning techniques to handle difficult people or address difficult behavior involves a number of steps. The first step is learning to identify your own emotional responses in a difficult interaction and know this about human emotions and behavior: **Much of how we think and act is a matter of habit, or repeated patterns of behavior, including the way we deal with difficult people or situations. If our habits are negative, our results tend to be negative, too.** The challenge is to express the negative emotions you feel in useful, positive ways.

Most people are unable to behave logically under stress because they react automatically, without thinking. Confronted with difficulty, the body tends to respond with the “fight or flight” response¹, the heart beats more rapidly, and perspiration increases. This reaction, called “acute stress response” is an evolutionary reaction to threatening situations. It causes us (and other vertebrates) to react in one of two ways, to either address the danger (fight) or run away (flight).

During the acute stress response, the sympathetic nervous system triggers the release of epinephrine and norepinephrine from the medulla and adrenal glands. These speed up the heart rate and breathing and constrict blood vessels in certain parts of the body, while opening blood vessels in the muscles, which tighten, or tense, the muscles as the brain lungs and heart work harder, preparing the individual for either fight or escape. Adrenalin surges, making the person alert and aware, and physically ready for what comes next.

Humans commonly respond angrily to difficult situations because of this physiological response. Instead of responding with a thoughtful reaction, from the left side of the brain (the problem-solving, logical part), we react with the right side of the brain—emotional, irrational, and without logic. You can control this reaction by developing your awareness, identifying your physical reaction to stress and the associated emotional response. This insight allows you to begin controlling your responses in a difficult interaction, rather than having your responses control you.

Think about how you react when someone drives dangerously near you, cutting you off, for example. Most people respond angrily to a threat like this. How do you react? Does the anger fade quickly? Are you likely to say a few choice words about bad drivers to your passenger? Will you swear at the individual? Even follow him just so you can give him a piece of your mind? Do you find a way to stay irritated for a while, or, does this one moment pass easily, with you realizing that you felt personally threatened and, perhaps, even fearful for a moment?

Some people's attitudes are easily influenced. They may be "moody"—up one day or hour and down the next, with little or no idea why, reacting blindly or emotionally without analyzing their reactions or resulting behavior. Do you react automatically to the people around you? Does someone else's bad mood tend to "rub off" on you? If you are the kind of person who chooses to remain upset long after a near collision, you can't continue to blame the other driver. Realize that your responses to difficult people or situations are entirely your own decision and completely under your control. If you choose to replay the incident in your mind and "refuel" your anger, you are wasting a great deal of energy on events in the past that cannot be changed.

Next time you feel emotion and logic at odds with one another, pulling you in opposite directions, focus your attention on your physical and emotional reactions. When you are able to pause, instead of blindly reacting, you will begin to gain control over your moods, and choose how you react. While it may not be possible to do in all cases, it is a simple, but profound step towards controlling your moods, rather than being controlled by them.

Like us, other people's difficult behavior may be steeped in habitual patterns. We all develop responses to other people's words and actions that can automatically take over if we let them. By interrupting our own negative repeated strategies, it is possible to break the pattern, allowing the interaction to shift from one of frustration to the beginnings of a solution.

Difficult people are seeking particular things in response to their behavior. You may be unable to see the benefits they reap because they are not things you desire. Difficult people, for example, may not only want to get their way; they may get some satisfaction from "pushing your buttons" or making you lose your temper. Difficult people may feed into or encourage our own difficult nature. Instead of playing into their behavior by contributing to or escalating the conflict, learn to switch off your defense mechanism when confronted with negative actions or words. Practice the following:

1. Recognize your automatic reaction.
2. Take deep measured breaths and focus on your breathing until you feel the physiological response dissipating.

Learn to refrain from pointless arguments or accusations that exacerbate the difficult situation. This gives you an opportunity to respond in a way that is productive and brings about a good or better outcome. By recognizing and not reacting to or adding to conflict, you will no longer be held hostage by your moods and automatic reactions, and difficult people will not seem so difficult. Once you learn some strategies for dealing with problem behaviors, you will be able to take charge of the interaction or situation and promote a more peaceful environment.

Learning to deal with difficult behaviors in others requires you to manage your part of the interaction effectively. While events may occur beyond your control, your response is still within your control, and you are entirely responsible for your own reactions.

PRINCIPLES OF CONFLICT RESOLUTION (GETTING ALONG WITH OTHERS)

Working in harmony with other individuals can be a matter of establishing and implementing a number of principles to help you control your own words and actions and create the foundation for a peaceful, or at least, less stressful, work environment. While there are many different philosophies of conflict resolution, many stress the same guiding principles. The following guide, drawn from Zen Buddhist teachings², includes many of these common principles. Notice how many are directed at changes in one's own thinking and behavior:

- Take responsibility for our vulnerabilities and emotional triggers in relationships with others.
- Investigate our own responsibility in the conflict before speaking with another.
- Practice non-stubbornness by holding an open heart, a willingness to understand, and a desire to reconcile differences.
- Have face-to-face resolution of the conflict with the other person or people involved.
- Use anger in a constructive and respectful way, allowing it to teach and transform us for the better, avoiding the "poison" of envy and comparing ourselves to others.

Principle 1: Stop trying to change other people

Trying to change the difficult person does not resolve any problems and typically leaves you even more frustrated and angry. So, instead of trying to change the difficult person, to make them less difficult, accept that person as he/she is,

- Separate the behavior from the person, seeing the situation as an opportunity.

Perhaps the core principles of conflict resolution or dealing with difficult people are to maintain respectful relationships and try to resolve issues without emotion. The first part of this chapter introduced the importance of observing your emotions and learning to stop yourself from automatically reacting without thinking. The next part discusses some principles of respectful communication.

Like the principles above, these ways of thinking revolve around changing you and the way you respond to difficult people. This is because, as much as we try, we cannot change other people. The most effective changes are those we implement internally, changing ourselves. By changing the way you respond to difficult people, you change the type of interaction that results. By shifting the focus to yourself and your own behavior, you have the means by which to change the nature of the interaction from negative to positive.

with faults, like you. Simply by choosing to accept people as they are, we create a less stressful environment. Think of how easily people telling others how they should change leads to heightened conflict, and accept that you no longer have to try to

control or influence other people's thoughts and behavior—the realization that it is not your mission to convince everyone that

Principle 2: No blame-game

People grow accustomed to blaming others or themselves when things go wrong, rather than looking for ways to fix the problem without focusing on blame. But blame does little to resolve a difficult situation. Learning to address negative

Principle 3: It's not about you

A necessary aspect of this strategy is learning to depersonalize communication and behavior. It is the realization that, in most cases, the difficulties you encounter are **not at all about you**. When a person ignores you, or speaks unfairly to you, how do you handle it? Do you feel angry at the person, assume their words to you were malicious and intentional? As you go through the day, do negative feelings about the person persist? Do you hate others because you think they hate you? This kind of thinking perpetuates negative behavior on both sides and gets you no closer to a solution.

Principle 4: Treat people well

Practice treating difficult people with as much kindness and patience as you can. If you are respectful toward them, you may find their behavior loosens up, or bothers you less. Remember

Principle 5: Don't waste your time and energy on things you cannot change (like the past)

Many people are unable to let go of the anger or frustration associated with a source of negative stress. Practice mentally "throwing the problem away" by putting an end to rumination or "replay" of the situation in your head. Do not occupy your time repeating the story, or endlessly complaining to other people. Use this energy for more productive pursuits.

you are right. Leave that burden behind, and accept that you have no responsibility for changing minds.

energy or attitudes around you without blame is an integral part of dealing with difficult people. This means relaxing your judgment of people and assuming the best of those around you, giving them the benefit of the doubt.

Negative behaviors or responses often come from our own feelings of insecurity. Learn to listen to others without forming these presumptuous attitudes that revolve around your ego. Realize, when you are talking to a difficult person, that you already have a bias against them, that you may be predisposed to interpreting his/her comments negatively or in a judgmental way. In so many cases, a perceived snub has nothing to do with you. Perhaps the person you were speaking to had a long day, or is preoccupied with some recent bad news. By learning not to interpret the interaction as a personal affront, we give the person the benefit of the doubt.

that anyone can be someone's difficult person at some point, even you, given the right (or wrong) circumstances.

Choose to focus your energy on the present and future, rather than waste it on past events that cannot be changed. Many people find the "Serenity Prayer," by Reinhold Niebuhr, a good reminder about wasted emotional energy:

**God grant me the serenity,
To accept the things I cannot change,
The courage to change the things I can,
And the wisdom to know the difference.**

UNDERSTANDING BEHAVIOR II: COMMUNICATING NEEDS: ASSERTIVENESS, AGGRESSION, AND PASSIVITY

Much of a person's ability to deal usefully with emotions like anger and frustration is associated with his or her style of behavior or degree of assertiveness. Assertiveness refers to the spectrum or range of behavior between passivity, at one end, and aggression, at the other. It may be one of the first things you notice about another person's behavior.

Individuals respond to difficult situations with different degrees of assertiveness. Stress tends to pull at people emotionally, making them either more or less passive or aggressive than is usual for them. Assertive people differ from passive and aggressive people in their ability to acknowledge and state their own needs, and respect the needs of others. Passive or aggressive individuals are typically unable to do so.

Characteristics associated with aggressive or passive/aggressive tendencies:

- I often yell back when someone yells at me.
- When someone tries to boss me around, I frequently do the opposite of what he/she asks.

Aggression

Aggressive, or domineering, thinking focuses on meeting one's own needs at the expense of others. Aggressive individuals often ignore the impact of their behavior on others; it is an "I win, you lose," position, incorporating a variety of aggressive methods of control, including dishonesty. Judging, criticizing, out-talking, or being loud and intimidating can all be used to dominate other individuals.

Being aggressive often involves a belief system that puts the aggressor's standards and needs above others. Aggressive people may think they are the only ones that have a corner on the "truth" of the situation. They may be very stringent about following their rules, but not those of others'. Aggressive

- I often take my time "just to show" someone, when he/she tries to boss me around.
- I often make threats that I really don't intend to carry out.
- When I'm feeling insecure and jealous, I'll often pick a fight with someone rather than tell him/her directly what's on my mind.
- Starting arguments with someone when he/she disagrees with me is something I often do.
- Slamming doors is something I often do when I get mad at someone.
- I'll often do something on purpose to annoy someone, and then apologize when he/she accuses me of it.
- I will often break a "rule" someone has made just to spite him/her.
- When someone makes me do something that I don't like, I often make a point of getting even later.
- I often won't do what someone asks me to do if he/she asks in a nasty way.

individuals do not consider other people's wishes and have little respect for others' needs and rights. Things may have to go their way or no way at all.

Aggressive people may have had backgrounds in which domineering behavior was encouraged or rewarded. While they may appear very confident, they often have poor self-esteem, and may be unable to accept blame. Unlike passive manipulators, aggressive individuals tend to be obvious in their attempts to push people around. A "bully," for example, is one type of aggressive personality that typically uses some form of obvious mental, physical, or monetary coercion to force others to do as they wish.

Another type of aggressive or dominating personality is the “conman” who uses deception or subterfuge, often relying on verbal skills to persuade others to do what they want. Conmen differ from other aggressive manipulators in their ease and ability to lie, and lack of concern for speaking falsely. The terms *sociopath* and *psychopath* refer to two extreme forms of con-men behavior, individuals who have little regard for others’ welfare, and engage in extreme behavior to get what they want, with few or no signs of guilt.

Dominant or aggressive behavior may also manifest itself in judgmental control, a “holier than thou” or “know-it-all” attitude that keeps others off-balance. The judgmental person thinks he or she is morally and/or intellectually right or has “the

Passivity

Passive or nonassertive thinking focuses on meeting other peoples’ needs, at your own expense. It is a “You win, I lose” proposition. Passive people typically allow others to control them, but are also capable of manipulating or controlling others. Individuals who tend toward passive behavior in times of stress are likely to feel angry and victimized or taken advantage of. They may feel frustrated, feeling they never get their way, and have little control over their lives. They may be sulky or withdrawn, thinking that no one listens to what they say, anyway. They may have little confidence in themselves and be reluctant to accept change.

Indirect, passive manipulators may use subtle or devious means to get their way, including sabotage, sarcasm, “playing the martyr,” or the “silent treatment.” They may be inclined to use passive/aggressive measures, spreading rumors, making

truth” on his/her side, and implying that the person with which they are in conflict is not as intelligent, or as good a person, in some way. This kind of manipulation is dishonest in that judgmental people claim they are doing the right thing, while their real motivation is to control the situation and get their way.

While aggression allows the difficult individual to get his/her way in one sense, aggression manipulation works against the difficult individual because other people learn to fear or resent, and distance themselves, from the difficult person. Like passive individuals, aggressive people may have poor social skills and little trust in others. They may feel suspicious, angry, and wounded by others’ reactions to them.

fun of others, or talking behind others’ backs. They may hide their feelings, pretending that everything is fine while they are actually seething inside. Sometimes a person can go from one extreme to the other; a person who is typically nonassertive will become aggressive. This may happen because small amounts of resentment build up until “the last straw,” when they lose their temper.

Passive manipulation may also be subconscious, and include withdrawal, feeling depressed or “down,” and a disinclination to communicate or cooperate. Passive personalities may be overly dependent on others, hypersensitive to criticism, and lacking in social skills. Passive behavior can be frustrating to more motivated, efficient workers, who may feel they’re carrying “dead weight,” at the place of employment.

CHARACTERISTICS OF ASSERTIVE BEHAVIOR AND COMMUNICATION

Assertive thinking and behavior balances an active concern for one’s own welfare and goals with those of others. It comes from a genuine wish and attempt to find “win-win,” long-term solutions to recurring problems, as opposed to superficial or temporary, stop-gap measures that ignore the underlying cause of the problem. Assertive communicators face difficult situations squarely, while nonassertive people tend to avoid directly addressing the root of the problem.

The assertive approach utilizes the individual’s respect for him/herself, treating the other person in an understanding and kind way, yet focused and firm enough to accomplish the win-win solution. While the ultimate objective of the assertive approach is finding immediate and lasting solutions to problems³, assertive communicators endeavor to de-escalate conflict and improve communication, bringing people closer together. Assertiveness tends to be the *most effective response to nonassertive, aggressive, or manipulative behavior, but learning to act assertively typically requires some degree of training and skill*, whereas nonassertive and aggressive responses, by contrast, are emotional and automatic.

Assertive communicators tend to be more emotionally open and honest about their feelings and thoughts. They tend to act kindly and diplomatically throughout the difficult situation, and speak and act in respectful ways. Assertive communicators are more likely to express care or concern for another person, to compliment or commend him or her, even in the midst of a difficult situation.

Honest, but kind

Assertive communicators use words with great care because they know words can hurt people deeply, causing great pain. Choosing to speak kindly and carefully does not mean that you cannot voice your opinions or disagree with the difficult person. It means you do not use words to attack or undermine. During a difficult encounter, speak the truth, but tell it in a way that is supportive—building up self-esteem rather than tearing it down. Always bring attention to a sensitive issue in private, to avoid an audience, and try to discuss problem behavior without indicting the person behaving that way.

The following statements describe characteristics typically associated with assertive behavior and communication:⁴

- Confronting someone with a problem as it comes up is seldom a problem for me.
- Telling someone that he/she is taking advantage of me is not difficult for me to do.
- If someone is annoying me, I do not find it difficult to express my annoyance to him/her.
- Saying “NO” to someone when I would like to say “NO” is easy for me to do.
- I am able to ask someone to do me a favor without any difficulty.
- I do not have difficulty telling someone my true feelings.
- Challenging someone’s beliefs is something I can do with little difficulty.
- In general, I am very direct in expressing my anger to someone.
- I do not have trouble saying something that might hurt someone’s feelings when I feel he/she has injured me.
- Expressing criticism to someone is not a problem for me.
- I can express a differing point of view to someone without much difficulty.
- I often let someone know when I disapprove of his/her behavior.
- In general, I am not afraid to assert myself with someone.
- I do not give someone the “silent treatment” when I’m mad at him/her. Instead, I just tell him/her what has angered me.

Assertive communicators are honest, diplomatic, and diligent about keeping their word. They back up their words with action because they know that if you do not follow up your promises or statements with the specified actions or behaviors, people will begin to doubt what you say.

Words can bond people in close relationships or rip them apart. Assertive communicators realize their power and use them carefully. Poorly or angrily chosen words, once spoken, have an impact that can never be taken back. Thoughtless words

can get back to the person they're about, wounding him/her deeply, making him/her feel surrounded by false friends. When you are speaking about another person, consider the following: Would that person be wounded by your words if they were

Positive intention; High expectations and giving the benefit of the doubt

Assertive communicators are compassionate and nonjudgmental. They realize they cannot know all the experiences that made the difficult person what he or she is today. Instead of judging or blaming the difficult person, the assertive communicator is sensitive to the needs of the difficult individual, and treats him or her compassionately.

Assertive communicators know that much of our ability to know and get along with others is dependent on healthy self-esteem. We all travel with an "Achilles' heel," some weakness or sensitivity that is particularly acute to us. Sometimes what we react to in others' is the weaknesses we identify in ourselves. Difficult situations can be emotional and confusing. Unless you specifically state your good intent, there is a possibility that your words and behavior will be misunderstood or misinterpreted. Showing your positive intent through words and actions can be like knowing the magic words to make the situation easier.

In this important dimension of assertive communication, the speaker identifies a positive intention behind the difficult behavior, and treats the difficult person with a positive, charitable manner. This means acknowledging that the difficult individual does not mean to be difficult, that he or she is operating out of goodwill, and toward positive objectives.

Difficult people may feel victimized by the world around them—that no one is on their side, and everyone is against them. Showing your positive intent is showing the caring emotions that are the context for what you are saying. Showing your positive intention lets the difficult person know where, emotionally, you are coming from. When you state your positive intent toward the person, you give them positive feedback; the individual may expect to hear accusatory language, instead, he hears concern and interest.

DIFFICULT PEOPLE WANT TO BE HEARD AND UNDERSTOOD

Most people want two things from a verbal interaction. They want to know that they have been heard, and they want to know that what has been heard has been understood. Arguments often erupt in a situation where two or more people are trying to be heard and understood at the same time. For effective communication to result, one person must be the listener, open to hearing and understanding what is said.

Feelings of anger associated with the difficult situation are commonly the combination of two things: the original reason for unhappiness or distress, and the associated frustration and feelings of helplessness because no one is listening to, understanding, or helping you solve the problem. Listening to what the person has to say has an immediate diffusing effect on hostility by addressing one of the sources of anger. In fact, a kind, understanding word is sometimes all that is needed to cool emotional overreactions and promote good will.

Difficult people often feel their good intentions are being misunderstood, that they are not being heard and understood. Learning good listening skills and behavior, asking important questions, and providing appropriate feedback ensures that the difficult person feels heard and understood. In fact, by

Listening skills

Assertive communication requires good listening skills. Assertive communicators listen carefully, responding with sympathy and targeted questions that get at the heart of the issue. They pay close attention to what the individual is saying instead of wandering off on their own thoughts, or thinking ahead to how they will respond. Active listeners have an open mind and are able to consider other people's points of view.

repeated by someone else, out of context, without you around to defend yourself? Even after an apology, there is some residue of hurt or anger from wounding words.

Stating positive intentions can be as simple as learning to say, "I'm sorry that you're having a problem. How can I help?" Expressing concern immediately reduces anxiety and conflict and increases goodwill. The difficult person feels you are not against him or her. Holding these thoughts about the difficult person will influence the way you speak and act to the person, avoiding an accusatory language or tone. In stating or confirming that you understand the difficult person has good intentions, you develop a bond of goodwill. That you are both on the same "team" your intentions are understood.

Giving someone the benefit of the doubt is one of the most powerful tools for bringing out the best in people at their worst. People both rise and fall to the level of others' expectations. Have you noticed, once someone has a negative opinion of you, you may feel that it is impossible to redeem yourself in their eyes? When a difficult person behaves in a difficult way, you may be tempted to think, "That's why everyone has a problem with you." It is easy to let your preconceived notions about the difficult person allow you to make the assumption that a behavior is rooted in negative intention. But even behavior that appears negative comes from good intent.

We tend to associate difficult people with negative feelings and reactions. We can reinforce those notions about them, or we can assume the best, even if it is wrong. Assuming the best has a positive effect on difficult people. Instead of criticizing the person or telling them why they are wrong (making them defensive), you minimize their apprehensive, protective defense mechanisms. As they learn to disassociate you with negative words and actions, they will stop seeing you as the enemy, and be more receptive to what you say.

listening attentively, you can even prevent difficult people from becoming difficult, as taking the time to listen increases feelings of cooperation and understanding.

Understanding is both an emotional and intellectual process. In a difficult situation, you must convince the difficult individual that you are understanding on both levels. We do this by our appearance and behavior, the questions we ask, and feedback we give. Most people focus on the way you say things as much or more than what you say. Your intentions are not nearly as relevant as your behavior. Both should have the same message

When someone is venting their frustrations or complaining, demonstrate that you are paying attention to their emotions and words. Pay attention to nonverbal signs of communication and seek clarification if you suspect that you and the other person aren't "on the same page." Fatigue, disability, language difficulties, and cultural issues are some of the many factors that complicate communication between two people. Some people have an initial period of difficulty speaking their mind; they may feel rude, awkward, or not want to express disagreement with you. As you grow more familiar with one another, your interactions will likely become more natural and comfortable.

Being a good listener means that you:

- Don't tune out.
- Don't interrupt.
- Are open-minded – don't already have your mind made up.
- Maintain good listening behavior (like eye contact – don't look down or around room).
- Ask questions to clarify and provide feedback.

Do you tune out?

Sometimes we don't hear what people say because we are bored or preoccupied; the mind wanders off on its own little journey, thinking its own thoughts. While the person is speaking, we are contemplating many things, including what we will say when it is time to respond. You may have poor listening skills, in general, or the tendency to tune out the difficult person because you associate him/her with something unpleasant.

Do you interrupt?

Interrupting individuals before they are finished speaking should be discouraged. Try not to rush the difficult person, read his or her mind, or anticipate what he or she is about to say. Let them make their statement at their own pace. Do not try to hurry the discussion along, or solve the problem before you've heard all the pertinent details.

In some cases, listening may not be a useful use of your time. Difficult people who complain constantly sometimes try to draw others into their drama. In this case, keeping the interaction as short as possible. For difficult people who talk a great deal and listen too little, you may have to interrupt to be heard at all.

If someone raises their voice to you, will not let others speak, or complains without end, it may be necessary to kindly but firmly interrupt the individual and redirect the conversation. The interruption must be unemotional, without anger or blame. Speak respectfully to the individual, using his or her name to get their attention, for example, "Excuse me, John." Aggressive people are likely to raise their voices, in an effort to speak over you, escalating the conflict. Continue to politely repeat this until the difficult person finally stops speaking and turns his/her attention to you.

Do you listen with an open mind?

Some people are not willing to entertain the prospect of changing their opinion, no matter what they hear. Do you consider what the difficult person is saying without predisposition or bias?

Do you show good listening behavior?

Is your tone of voice and body language saying the same thing as your words? Are you making eye contact and nodding or commenting to show your interest? Do your questions further understand the difficulty? How do you look and act? Are you tapping your foot, or are your eyes darting around the room? Are you thinking about how you're going to respond to the individual? Not only your words, but your body language and manner of speaking (volume and tone of your voice) should convey interest and concern.

Do you ask the right questions and provide appropriate and supportive feedback?

Do you use the principles of active listening, paraphrasing and asking questions when you need clarification and to show you are interested and listening to what is being said?

At some point, the individual may stop talking or start to repeat what he/she has already said. At that point you provide feedback, consisting of a statement of positive intent, then feedback or clarification of what they just said. If you think you understand what the person said, briefly summarize what you heard using some of the same terms the difficult person

used. By using the same words they used, you convey that you have been listening intently and understood the meaning they intended. Do not replay the whole conversation; simply the main points. Note any statements in which the difficult individual mentioned his or her feelings as much as you emphasize what happened in the sequence of events.

Finding a solution to a problem often requires learning more information or different information than the difficult person is giving you. Clear up confusion with specific questions that will help you understand the difficulty. Asking questions also communicates to the difficult person that you are interested in finding a solution for the problem. Clarification (questions) should be phrased in an even-handed unemotional tone. Avoid sounding accusatory or phrasing questions in a blaming way.

Difficult people may speak in vague generalities, or provide little of substance in what they say, ask brief questions that clarify the factual details until you and others begin to have an understanding of the difficult situation, and why the difficult person feels about the subject the way they do. There are usually rationale reasons at the root of every action or behavior. Ask questions until you understand the motivation behind the difficult behavior.

Most clarification questions begin with "who," "what," "where," "when," and "how." Use them to fill in any information gaps left by the speaker. Asking questions that fill in the blanks helps the difficult person pull himself out of the difficult situation and also makes him feel his difficult situation is being addressed seriously and respectfully.

Your focus in asking questions should be:

- To clarify the meaning of the situation for the difficult person.
- To clarify their intention in regard to the interaction.
- To clarify the criteria for a solution or way to ease their distress.

Asking the difficult person to explain his or her reasoning can be very useful. Ask the difficult person what rationale or criteria are leading him/her to the problematic conclusion or decision. After learning these criteria, summarize them to the person and confirm that these are the reasons or rationale behind their position. If you sense defensiveness, acknowledge good intent and confirm that you understand what they are trying to accomplish.

After clarifying any questions you have about the difficult situation, summarize what you've heard, answering these questions:

- What is the problem?
- Who is involved?
- When it happened?
- Where it happened?
- How it happened?

By doing this, you demonstrate to the listener that you are working to understand his point, and you provide the individual with the opportunity to fill in any gaps, if either you or the other person missed an important detail. When you are done summarizing, ask the individual if you understand him correctly. And confirm that you understand.

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DEALING WITH DIFFICULT PEOPLE AND SITUATIONS IN THE SALON

Final Examination Questions

Select the best answer for each question and mark your answers on the Final Examination Answer Sheet found on page 34, or complete your test online at EliteLearning.com/Book

11. Tension or stress may manifest itself, over time, in physical symptoms like stomach aches or headaches, and stress-related behavior, including impatience, anger, sadness, and overreaction.
 - a. True.
 - b. False.
12. The "acute stress response" is an evolutionary reaction to threatening situations.
 - a. True.
 - b. False.
13. Blame is the best way to resolve a difficult situation.
 - a. True.
 - b. False.
14. Learning to depersonalize communication and behavior means the realization that, in most cases, the difficulties you encounter are all about you.
 - a. True.
 - b. False.
15. Negative behaviors or responses often come from our own feelings of insecurity.
 - a. True.
 - b. False.
16. Assertiveness refers to the spectrum or range of behavior between passivity, at one end, and aggression, at the other.
 - a. True.
 - b. False.
17. Passive thinking focuses on meeting one's own needs at the expense of others.
 - a. True.
 - b. False.
18. Aggressive people may have had backgrounds in which domineering behavior was encouraged or rewarded.
 - a. True.
 - b. False.
19. Indirect passive manipulators may use subtle or devious means to get their way, including sabotage, sarcasm, "playing the martyr," or the "silent treatment."
 - a. True.
 - b. False.
20. Assertive communicators are less likely to express care or concern for another person, to compliment or commend him or her, even in the midst of a difficult situation.
 - a. True.
 - b. False.

Chapter 3: Hair Coloring at a Glance

3 CE Hours

Learning objectives

Given the course materials, the learner will be able to:

- ♦ Review the structure of the hair strand to better interpret what you observe during analysis.
- ♦ Categorize the internal bonds and calculate their impact on color in the hair strand.
- ♦ Recognize the characteristics of the types of melanin and their production process.
- ♦ Distinguish a natural hair color shade's underlying pigment components using the law of color.
- ♦ Review and determine which pigments make up manufacturer's tint shades according to the color wheel.

- ♦ Recognize which hair textures cause results to vary from manufacturer color swatches when tinting.
- ♦ Identify results of using specific types of coloring agents on various hair types based on their ingredients.
- ♦ Distinguish the strengths of developers for use in various hair color products.
- ♦ Maintain the integrity of the hair strand by confidently applying the appropriate type of product.
- ♦ Perform a pre-service analysis that will lock in the essential information of: what do we want, what do we have, and what are we missing?

INTRODUCTION

An estimated \$42 billion annually is spent in the beauty industry in the United States. Although the most commonly requested service is a haircut, hair coloring has evolved over the last few decades as the front runner in salon service income. Hair coloring requires maintenance that keeps the client returning to the salon on a regular basis, thereby generating continuing revenue and a steady client base. Americans currently have more disposable income available for hair coloring services, even though many states are now taxing it as if it were a luxury. However, the bottom line is that the more the salon door swings open to a color client, the greater the income for the salon and staff. Many of the color clients aren't just maintaining a current color or blend of colors, but are frequently requesting a totally different look. That is the beauty of the hair color service: it is fun, and it is changeable. If you've ever had difficulty getting a true color result on a specific client, you're not alone. There are many variables in a strand of hair, ranging from texture and porosity values to underlying natural pigmentation and to previous coloration in the hair. These variables may cause your results to become uncertain. Are you having off-shade or off-level results on either fine or coarse hair? Did you know that texture is a factor in color results? We will review manufacturer's coloring agent pigment content and ingredient lists, as well as the melanin placement inside the strand to assist you in your formulation. Knowing the natural pigment present and how

it behaves will support you in your product choices. Are you automatically choosing a harsh product for the sake of saving time, thereby over taxing the strand? Could you instead use a low damage product with ample capability to protect the integrity of the strand? We will explore the categories of color agents and their actions on the strand. Make hair coloring analysis fast and accurate. By doing a thorough consultation, you are more apt to have successful outcomes. Become adept at believing what you see and knowing when to either accept or discredit what you hear from your client. Some clients prefer to keep their hair color practices private or omit information regarding using non-professional color products.

Your client consultation can be an auto pilot procedure that will enable you to truly make assessments for hair coloring at a glance. Train yourself to respond to visual cues from:

- The porosity value and gloss of client's hair strand.
- The base color, color cast or tonal value, and color variation within the length.
- Textures that vary from the manufacturer's formulation standard of medium.
- The client's eye color and skin tone which aid in identifying natural underlying pigment.
- The pigment combinations in manufacturer's color swatch or other visual aid of desired color as indicated by the client.

HAIR STRUCTURE REVIEW

As a review, the elements responsible for the composition of hair are of carbon, hydrogen, oxygen, nitrogen and sulfur. Each of these elements is present in all colors of hair and performs specific tasks in relation to strength, elasticity, and coloration. Variation in natural hair color is the result of the carbon to oxygen ratio. Typically, the hair is composed of 50.65% carbon and 20.85% oxygen. Darker hair contains more carbon in the mix, whereas lighter hair contains more oxygen after the production of its melanin. Also, the disulfide bond (comprised of sulfur atoms) is responsible for one-third of the strength of the hair attracts and holds the warm tones naturally found in the strand. **Excessively damaged hair with a weakened disulfide bond will appear to grab drab or ash tones when coloring.**

Hair strands typically possess three layers:

- **Cuticle:** Outermost layer of protective scale-like cells. Cells are arranged in an overlapping pattern similar to shingles on a roof with the fixed attachment toward the scalp and the movable edge facing the ends. These cells are transparent when healthy and intact, but become whitened and distorted when lifted excessively from their natural position or when exposed to extreme heat or harsh chemicals. These cells

respond to even mild chemicals as well as slight changes in pH, temperature or humidity. The cuticle layer reacts by clamping down tightly or lifting away from the internal layers of the strand. They provide only 10% of the hair's overall weight but contribute about 20% of its strength when healthy. Cuticle cells are responsible for the shine of the hair. The amount of layers that create the protective structure varies among races and textures of hair. This layer contains keratin protein, a necessary element for strength and flexibility. Cuticle damage can reach the point of no return, where the scales are damaged beyond repair or even torn away. This results in split ends and hair strands that break and refuse to hold color. Best practice is to cut away the damaged lengths. Be cautious when evaluating the cuticle's condition by the gloss of the hair only, since many products that contain silicone or waxes are being used that create sheen to the strand. Best evaluations are on clean, dry hair with no styling aids present.

- **Cortex:** The second layer of hair is the most complex layer. The cortex or cortical layer contributes about 90% of the weight to the hair strand. It consists of a multitude of fibers that are elastic in nature and provide 80% of the hair's overall

strength. Amino acids that form spiral chains make up the internal structure of these protein fibers, which are similar in structure to string cheese, are naturally bound together by various types of bonds. These bonds promote the flexibility and stretch factor to the strand. They are also responsible for maintaining the curl, wave, or straightness of the strand. By unlocking these bonds and shifting the alignment of their linkage, we can change the curl pattern or lack thereof. Although this chemical texture process is common, it can remarkably reduce the strength of the strand. When coloring hair that has been weakened by chemical texture service, a significantly weaker strand will result. We will further discuss these bonds later in this segment. Another structure in the cortex layer and the most important to hair coloring is the natural melanin or color pigment. These cells resemble a jelly like structure, similar to a jelly bean, and have also been likened to chocolate chips as baked into a cookie as to how they are imbedded into the strand. They are a permanent fixture between the fibers. Melanin will also be discussed later in the text.

- **Medulla:** The innermost layer of the hair. The function, if any, has not yet been uncovered. However, it is responsible for added bulk to the individual strand and to arguably provide extra strength when it is present. Typically, fine or baby fine hair is without a medulla layer.

Internal bonds in the hair strand: Each is responsible for 1/3 of the strength of the strand. These bonds secure together the amino acids and their linkages called polypeptide chains to give the hair its internal strength.

- **Hydrogen bonds:** Are numerous in the hair and are temporarily altered when the hair is exposed to heat and water. These bonds are reformed as the hair dries. When

the hair becomes wet, it appears to be a darker color due to the presence of excess hydrogen (H₂O). Be cautious in evaluating hair color when the hair is wet or oily, since the hair strand also becomes more stretchy when wet since this bond is broken, but normalizes when dry.

- **Salt bonds:** Are also numerous and are temporarily altered by changes in pH. Normal pH levels are 4.5-5.5 for the hair. Use of water, products or chemicals that have a pH that is not mildly acidic will temporarily change these levels. The salt bonds will normalize when the hair is cleared of the product. Continued exposure to harsh chemicals will weaken the salt bonds.
- **Disulfide bonds:** Are composed of two sulfur bonds and are fewest in number but are the most stable of all the bonds. They are only affected by chemicals. Weakened disulfide bonds occur from repeated use of chemical solutions such as hair color, lighteners, chemical relaxers, and permanent waves or a combination of these products. Shampoos with unduly harsh cleansing agents will also weaken these bonds from continued exposure. The harsher the product, the more damage is done. As a general statement, a lightener is harsher than hair color (tint/toner), and relaxers (sodium hydroxide) are harsher than perms (ammonium thioglycolate). But, within each category of product, there are varying levels of acids or alkalis that are incompatible with specific hair types. Refer to manufacturer's information for the best choice of product. In most cases, the disulfide bond is reformed either by a solution included with the service such as a neutralizer with perms, or it reverts as the product is oxidized and shampooed from the hair as in hair coloring. But once the disulfide bond has been disrupted, it will never be as strong as it was originally.

MELANIN CHARACTERISTICS AND PRODUCTION

- In review, remember that a hair strand is constructed in a fibrous bundle. Interlaced with these fibers are the color pigment granules known as melanin. In the case of healthy hair, the melanin is held tightly between the fibers or sort of wedged in place. As previously mentioned, some references liken this placement as that of chocolate chips embedded in a cookie. In order to remove the chocolate chip, damage to the cookie will result. Coloring agents that remove or lighten natural color pigment will open the cuticle layer and break down the disulfide bond, causing swelling and separation of the fibers and thereby damage to the surrounding strands in order to disperse the melanin granule.
- In the case of long hair or hair that has been exposed to strong detergents or other chemicals, as well as the persistent heat of styling tools, damage to the melanin granules will occur over time. The cuticle layer will expand and will no longer protect the inner fibers. The disulfide bond will weaken from exposure to chemicals and heat, and the melanin will begin to break down. The natural color will then start to leave the strand. Faded ends are a sure sign of damaged hair.
- Melanin composition begins with genetics, since DNA dictates the type of melanin that is predominant in an individual. The melanin in the hair, skin and eyes is directly related and contains the same compounds. Production and distribution of melanin occurs within cells called melanocytes. It begins with the production of yellow compounds called quinones, which come from the **amino acid tyrosine**. The building process continues with an **enzyme called tyrosinase**, which is a copper-protein complex. Enzymes act as a catalyst that causes a chemical reaction to take place, and in this case, tyrosinase causes tyrosine to oxidize which results in dihydroxyphenylalanine or **dopa**.

Let's make it easy:

Amino Acids + Enzymes = Dopa Color Compounds.

Amino Acid: Tyrosine → forms yellow Quinones.

Copper-protein **Enzyme:** Tyrosinase → adds oxygen to
Quinones = Dihydroxyphenylalanine
(Dopa)

Dopa is the base product or compound for melanin production. Long periods of oxidation cause the dopa to deepen in color. Remember that oxidation is a process whereby oxygen combines with an element and changes the appearance of the element. This process causes the initial oxygen present to diminish. When the tyrosinase continues to oxidize the tyrosine present in the quinones, the color goes from yellow to red. If further oxidation occurs, the color present will be purplish, indicating a deep blue base with red influence. As the compounds increase in color depth, they also gain molecular weight. This attributes to where and how they are placed inside the hair strand. This oxidation process goes through three levels and produces a new product at each level.

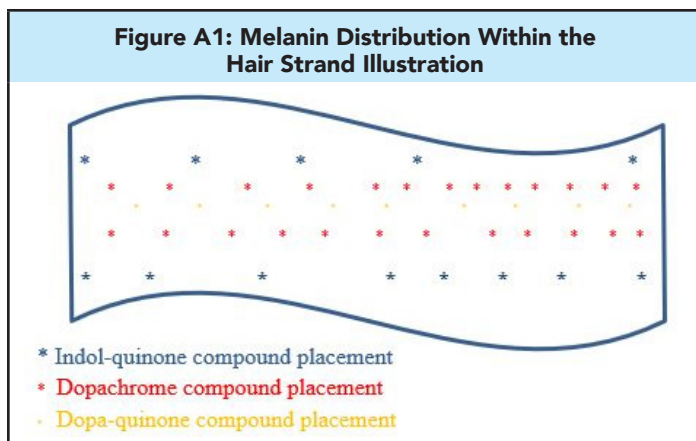
1. Dopa + oxidation = dopa-quinone, a yellow compound.
2. Dopa-quinone + oxidation = dopachrome, a red compound.
3. Dopachrome + oxidation = indol-quinone, a purple compound.

Consider this analogy: think of melanin production like making cookies. Combine ingredients (tyrosine and tyrosinase) to make the dough and then bake (oxidize). The cookie dough begins very pale but the longer it bakes, the darker the color of the cookies become. DNA determines how long the oxidation process continues and the resulting depth of the pigment, as well as the mixture of light, medium and dark compounds that will be present in the strand. The resulting melanin granules fall into two distinct categories known as **pheomelanin**, which is comprised of only primary red and yellow pigment, and **eumelanin**, which is black and brown pigment. Don't forget that

black and brown contain a great deal of primary blue in order to provide depth of color along with the darkest concentration of reds and yellows. The combination of pheomelanin and eumelanin contain all three of the primary colors of yellow, red and blue. The color wheel will be discussed at length further on in the text.

An individual's hair color is often a combination of all three color compounds (dopa-quinone, dopachrome and indol-quinone), as dictated by the individual's DNA. Natural blonde shades are the result of shorter oxidation, whereby the dopa-quinone remains a yellow compound. In natural blonde shades, there may be some darker pigmentation, but the majority is yellow. For strawberry-blonde shades there is likely a balanced mixture of dopa-quinone and dopachrome. For warm shades of deeper reds, some of the dopa may remain yellow without further oxidation, but the majority of the pigment is dopachrome. Shades that are brown and black contain mostly indol-quinone, but depending on the tone may have yellows of dopa-quinone and reds of dopachrome present.

- Melanin distribution in the strand is directly related to the size and molecular weight of the granule. Most of the pheomelanin or yellow (dopa-quinone compounds) and some red pigments are the smallest and remain clustered to the interior of the spherical strand. They are closest to the medulla if one is present. The bulk of the reddish pigment (dopachrome compound) is rather small to mid-size and located further toward the outside of the strand in an extremely scattered distribution pattern. The darkest pigment, eumelanin (indol-quinone compound) is the largest in size and molecular weight and hugs the outer edges of the cortex fibers.



UNDERLYING PIGMENT AND HAIR COLOR LEVELS

As a review, remember that hair color is sorted according to the depth of shade. Levels have been assigned a range or scale of 1 through 10, where level 1 is the darkest and 10 is the lightest. In order to fully understand the level system, you must think in terms of combinations of the three pigment compounds: yellow dopa-quinone, red dopachrome, and violet indol-quinone. The variety of combinations of these pigments is responsible for the makeup of an individual's hair color.

Since level 1 is the darkest, it has the highest concentration of eumelanin or black/brown pigment with the least amount of pheomelanin in the form of dopa-quinone. At the darkest levels, there may be quite a large amount of pheomelanin present in the form of dopachrome, as the reds can contribute more richness and depth of the tone. There may be some yellow or gold tones present, depending on the tone of the level. Tones are often referred to as warm, cool or neutral. Low level colors that have been described as blue-blacks which are cool, and have the highest concentration of eumelanin. Level 10 shades are the opposite of level 1 and have the most concentration of dopa-quinone, or yellow pigment, and very little or no indol-

- The importance of understanding the internal arrangement of the color pigmentation is in the way it reacts to chemical services in the salon. **It is crucial to recognize that melanin is removed from the hair in exactly the reverse order that it is created.** The eumelanin is broken up earliest with the indol-quinone being the first to leave the strand. This pigment that appears black and brown and contains the blue is the first color that lightening agents come into contact with and is a large target. The next underlying pigment targeted is the dopachrome from the pheomelanin. This is the single most difficult removal process. There is much diffusion of the color granules and they tend to attach to sulfur content in the hair. The adhesion to the sulfur leads to damage in the strand if it is over taxed at this stage. Disruption of the disulfide bond by overuse of hair lighteners will seriously weaken the strand. The final color remaining in the strand is the dopa-quinone, the yellow pigment. Total removal of this pheomelanin granule is never recommended, since it will destroy the integrity of the strand by dissolving the side bonds and breaking the end bonds of the polypeptide chains. This breakdown causes the formation of cysteic acid within the strand, which results in a chronically weaker strand, and no amount of conditioning will rescue the hair once it has reached this state. When this extremely damaged hair is wet, it has an expanded and slimy feel with an over elastic quality like chewing gum. Best practice is to remove damaged content by cutting it.
- Once pheomelanin and eumelanin have left the strand, they will never return to that segment of the hair. Reapplying harsh chemicals such as lighteners to hair that has already been decolorized or high-lift tints with high volume developers will further weaken and possibly destroy the strand. The nature of the lightening or bleaching agents in high-lift tints is to oxidize or break down melanin. If there is no melanin present, they will dissolve or distort whatever they come in contact with, such as cortical fiber or cuticle scales. In addition, lightening or bleaching agents will also alter the pH of the strand from acid to alkaline, weakening the side bonds and end bonds.
- If we re-visit the cookie analogy, compare the color removal process to that of removing chocolate chips from the cookies. The chips nearest the edges may come away with little change in the formation of the cookie; however, to remove all the chips, especially the internal ones, will destroy the cookie itself.

quinone for depth. An obvious redhead will have the highest concentration of dopachrome in pheomelanin. The ratio and interaction of the compounds whether yellow, red, or purple produces the resulting level. As an example, reds can occur at low levels in the shade of mahogany, through mid-levels of chestnut and higher levels of strawberry-blonde. The influence of eumelanin determines the depth of the color, while the yellow of the pheomelanin causes lightness and brightness.

As underlying pigment goes, the most influential in hair coloring is that of the dopachrome. Clients typically either embrace reds or wholeheartedly reject them.

Clients that wish to have red tones, shades or casts to their hair need a strong strand with a healthy cuticle. Red shades that are infused into weakened hair strands typically will not last and tend to fade to strange hues. Be sure the hair is reconditioned with protein based products prior to the color service appointment. Reinforcing the amino acids and overall protein in the strand will allow for better attachment of red tones.

Clients with healthy hair that insist on no red in their hair color are easily served. However, if their hair is damaged, it will require a careful pre-service evaluation and formulation of your color product. The weak hair strands tend to really grab onto the ash or drab tones. These shades can then look muddy and unnatural and may wash out their complexions. Weak hair stands with open cuticle cause oxidation of the natural color pigment and produce faded ends. Since the natural melanin is distorted, the problem lies in detecting which pigments remain and how

Color wheel components

Knowledge of the components of the color wheel is something that you should be able to recall instantly. Recall and memory images are formed differently among individuals. Some people are able to visualize the color wheel in their head in exact shades and arrangement instantaneously. Some people need to physically see a graph or chart to be comfortable with the data. Others still, need to write out or draw a rendition of the color wheel or chart as an activity in order for their mind to open the file on the information. Regardless of the method, the use of the information is crucial to be a good hair colorist.

Let's review the basic tools of color for the hair coloring process:

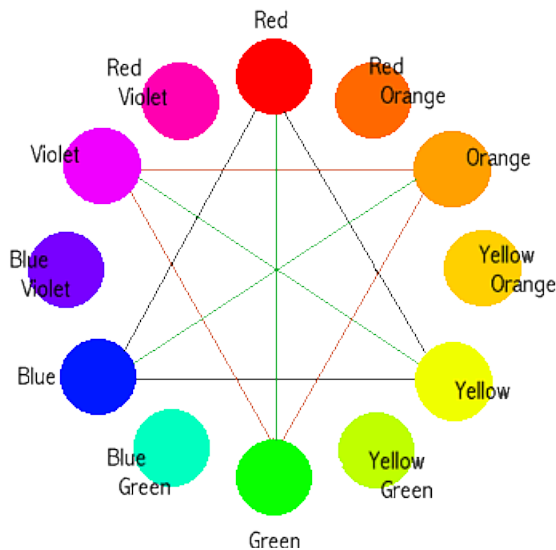
- The law of color: primary, secondary and tertiary levels.
- Color valuation: hues, tones and intensity.
- Complementary and/or neutralizing colors.
- Blacks and browns.
- Underlying pigmentation of the levels in the hair.

Color arrangement as seen through a prism is described with the acronym ROYGBIV, indicating placement of the colors: Red, Orange, Yellow, Green, Blue, Indigo, and Violet. The placement is the result of a naturally occurring phenomenon that will eternally remain the same. Red will never be next to green and blue will never come through the prism next to orange. This unchangeable arrangement is our greatest tool in the hair color industry. Many of us have experience in a color service gone awry with an off shade or unexpected result. But, if you do a careful retracing of steps including color components of the hair itself, the formula of product used, as well as the influence of any minerals present or poor health of the strand, you will unveil the miscue in your procedure. Final hair color is the result of influences from the presence or absence of other pigment on the strand.

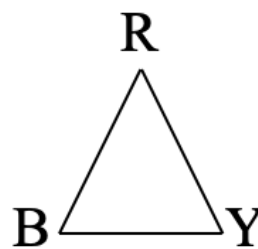
The color wheel is the simplest device for understanding the influence of pigment on other pigments. Speaking in regard to "influences", from a professional standpoint, the terms *green* and *yellow* are rarely discussed with regard to color formulation with clients. Even from a manufacturer's standpoint, the term *ash* or *drab* is typically used when indicating shades with green or gray. *Gold* is the most accepted term when referring to yellow pigment. Presentation of information regarding color elements with your clients should portray a pleasing connotation in order to inspire confidence. Be sure you are aware of the pigment content of these shades. Some gold shades contain just yellow, some have an influence from primary red as well. Ash tones can be varied from manufacturer to manufacturer, some having a gray influence, while others having a green influence.

they are going to interact with the formula to be applied. If the dopachrome has been compromised in any way, the ashy tones of the color formula will be left without a neutralizing color to act as a buffer. In turn, this causes the remaining shades to be expressed as mostly yellow, so when the bluish green hues of the drab tone are applied, it will create unnatural greens. The next section will review the color wheel and explore the interactions of pigments.

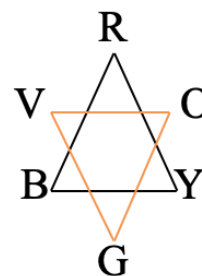
The color wheel is founded on the triangular arrangement of the primary colors: Red, Yellow and Blue.



If you don't have access to a color wheel and you are a visual or kinesthetic learner and need to see or physically draw the color wheel, it can be replicated easily enough using just pen/pencil and paper. Use the triangular format and indicate the primary colors using just the first initial in the word of the color as indicated below (R=red, B=blue, Y=yellow).



The next step is to plug in the secondary colors using the same procedure (V=violet, O=orange, G=green).



Although this is not as visually stimulating as one drawn in color, it still serves its purpose. Seeing the colors in the proper line up will take the guess work out of formulation.

Think of the terms of the law of color in their hierarchy as:

- **Primary:** First and foremost in importance. Foundational units or baseline components.
- **Secondary:** Second step or result of mixing two of the bases.
- **Tertiary:** Third step or result of mixing a secondary with one of its base component primaries for a total of three units.

The **primary colors** are shown and connected by a black triangular line. The placement of this triangle is upright with the point at the top. This triangle represents the foundational colors that are responsible for the production of all the other colors in the spectrum. Any shades that you expect to infuse into the hair strand are under the direct influence of these primary colors. The key to getting the anticipated result is in knowing the amount of each primary color present in both the hair strand and the color formula you have mixed.

The **secondary colors** are shown and connected by an orange inverted triangular line. These shades are merely the result of the mixing of two primaries. The single most important fact to remember about secondary colors is that they exist only

Color valuation: Hues, tone, and intensity

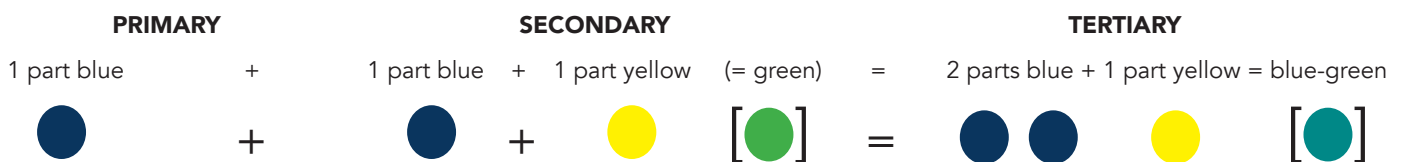
The hue of a color is a descriptor of its shade. In the hair color arena, hue is also described a tone or tonal value. Be aware that when using these terms in the art realm as related to painting, they tend to have alternate meanings. Assigning a tone to a color gives a clear idea of which direction a formula should go on the color wheel. Tones are categorized as warm, cool or neutral.

- Red and Yellow are the two warm primary colors. Warm tones gather and reflect brightness and brilliance from the reds and golds (yellow) in a formula. Warm tones offset unwanted drab or ash hues in a formula and make the color appear lighter.

Color equations

Color equations are a tool whereby a value can be placed on components of color tones to assist in formulation. **All color equations are formulated with primary colors only.** The secondary colors are a by-product of the primaries and as a result are implied and not stated. The same is true of tertiary colors. It would be far too confusing to use the secondary or tertiary colors in a written formula. The value of a secondary is always processed as two components, one of each of the primaries present. As an example: 1 part blue + 1 part yellow imply that green will be part of the formula. It would never be stated as 1 part green. Likewise, the value of the tertiary color blue-green would be processed as three components, one for the primary, and two that are actually primaries but make up the secondary present. For this example: blue-green = 1 part blue + 1 part blue + 1 part yellow. Again, green is never used as a component in color formulation since it is a secondary, and the tertiary level is just the result of a repeat of one of the primary colors present.

Tertiary color: blue-green (three components)



because of the interaction of the primary colors. If you've ever experienced a color service outcome in which the hair had a greenish cast, it was undoubtedly the result of blue pigment working directly over yellow, without influence from a red primary. For example, a numerical equation of secondary green is: 1 part blue (primary) + 1 part yellow (primary) = green (secondary). An off shade is usually the result of a missing primary.

The **tertiary colors** as shown on the color wheel are not connected on the diagram. They, like the secondary colors, exist due to the interaction of the primary colors, but they are taken one step further than the secondary colors. Tertiary colors are created by acting on the secondary color with the addition of another unit of one of the original primaries used in that secondary. For example, let's write out the equation of the tertiary color blue-green: 1 part primary blue + 1 part primary yellow (resulting in secondary green) + 1 part primary blue = tertiary blue-green.

- Blue is the only cool primary color. Cool tones mute the reflective quality of light and add depth or produce a matte value to the color as a result of the blue in the formula. Cool blue tones subdue any unwanted brassiness in the strand. Brassy tones are comprised of the secondary color orange.
- Neutral tones contain a balance of all primaries and leave the strand uninfluenced with warmth or coolness by their combined presence. Neutral tones assist in replacing missing pigment from gray hair.

Intensity refers to the concentration of pigment, also described as strength of color. Intensity of a tint can be adjusted. If you are limited on inventory, you can refine your available product by adding other tones within the laws of the color wheel. Formulation exercises appear in the next segment.

Let's go another direction and lay out a visual color chart of the equation for the tertiary color blue-green.

Primary color: blue (one component)

1 part blue



Secondary color: green (two components)

1 part primary blue + 1 part primary yellow = green



These equations can also be written out using pen or pencil without the use of actual color. As previously shown, simply use the first initial of the color to visualize the formulation. For example:

Primary Shades	Red - R	Yellow - Y	Blue - B
Secondary Shades	Orange - R+Y	Green Y+B	Violet R+B
Tertiary Shades	Blue-Green B+B+Y	Blue-Violet B+B+R	Red-Violet R+R+B
	Red-Orange R+R+Y	Yellow-Orange Y+Y+R	Yellow-Green Y+Y+B

Complementary and neutralizing colors

A valuable asset to the hair coloring industry is the knowledge and use of complementary colors. Colors that complement each other are located directly across the color wheel. Recall the triangular arrangement of the primaries and the inverted triangle of the secondary colors. A secondary is placed directly across the wheel from a primary that is not part of its composition. That is to say that green, made up of blue and yellow, is directly across from red. The word “complementary” indicates that it completes the color wheel by adding the missing primaries to the equation. This process adds balance and harmonizes tonal value with the completion of all color components. It thereby prevents off shades and tonal deficiency. Having balance in a color formula will in effect neutralize an undesired result. Let's cite an example: We have a client that prefers ash tones. The hair's natural level is a neutral level 5 (very light brown) with ends faded up to level 7 (dark neutral blond). The desired shade is going darker to a level 4 Ash, with no red or gold.

Formulation worksheet:

Natural level - main shaft	Natural level - ends	Desired level
5	7	4
Pigment component - main shaft	Pigment component - ends	Desired tone
Neutral Brown B + R + R + Y + Y + Y	Dark Golden Blond B + R + Y + Y	Ash B + B + Y

- Natural color components scalp to mid-shaft: Browns with a balance of reds and golds.
- Natural color components mid-shaft to ends: Very little brown, very little red. Contains mostly gold.
- Color components of desired level tint: Mostly brown with blue and yellow influence. Tint contains very little red pigment, if any.

In order to assess the information collected, the following questions need to be answered regarding the balance of the primary colors in the color wheel:

1. What do we have?
2. What primary are we missing?

The main shaft presents no real problem. However, the ends are faded and missing an all important element in the complementary shade of red. These ends will inherently grab

Color formulation

Color formulation is the process of choosing the appropriate shades of level and tone for the expected hair color outcome. It is rare to have a hair color client have a full head of virgin hair. So, many color services require additional steps or a combination of pigments for desired results. Manufacturer color swatches are client friendly and often prepared on synthetic strands giving a clear result on untainted samples. If a client chooses a swatch at level 7 with Red-Gold, it doesn't mean you can choose a tube of “7RG” and expect to have a perfect result. Careful analysis of the underlying pigment and condition of the

ash because they are damaged. The abundance of gold (yellow) present will react with the blue and yellow base in the ash shade of the tint. A muddy green cast to the ends will result.

The solution to the problem is reintroducing the missing red pigment back into the strand with a color primer or filler. This is done prior to the tint service with a reduced volume of developer such as a 5 volume since the cuticle is already open. Do not use high volume peroxides, since excessive oxidation will only cause damage to the already porous strand. Mix a color primer formula containing red at the lower level of 4 along with gold at level 6. The low volume of developer will cause expansion of the tint pigment inside the strand. **Color primers allow a base shade to be laid into the strand and will not be seen at the final level.** Leave on for no longer than 20 minutes and blot away, do not rinse or shampoo out before applying your normal tint formula.

Black and brown

Black and brown are colors that have received much attention in the hair color arena. The depth of a color is categorized by levels. Regardless of the brand of hair color used, the lower the number, the greater the amount of black or brown in a shade.

What causes black to look dark is the absence of light. The important thing to remember about the production of black is that it results from the most deeply saturated pigments of red—in the form of magenta, and blue—as in cyan, along with a strict brilliant yellow. Total darkness is the result of using the greatest saturation of pigment since little if any light can penetrate. Think of it as being in a dark, closed room without windows. Since no light is available, colors cease to exist.

Creating a black colored tint at the mixing station is very difficult, if not impossible, and best left to the manufacturers. However, it is possible to manipulate the shade of the black by adding colors with various tonal values. When attempting to alter the shade of black, such as in making a blue-black, it is necessary to add pure color pigments for the best results. Most manufactures have these additives available; some are designed to be used for specific levels of tints. For instance, one may be for low levels only, due to the intensity of the pigment. The use such a product on higher levels will distort the outcome of the level desired.

Brown shades are provided by manufacturers in a variety of levels and tones. Browns are easily manipulated. They, like black contain all of the primary colors. A slight increase in one of the three primaries will effortlessly change the brown. To add depth to the brown, use a blue base. To add richness or warmth, use a red base. To lighten or brighten, use a yellow (gold) base.

strand will assist your choices in product, proper formulation and methods of application as well as retail selections for home care. Many manufacturers provide hair color in premixed shades; some provide only pure tones for ease of mixing. Be sure you understand the numerical and alphabetical system for the brand you use. Within each brand is a category of neutral shades with a balance of all primaries; ash categories with influence of blue and yellow primaries, and a violet category of blue and red primaries, then a tertiary category of red-violets. There are also warm categories of pure gold as well as one of red with gold, then finally a stand-alone red line.

Color formulation should be fun and exciting and not something to be feared. Knowing the color wheel and the complementary shades will provide faultless results every time if you follow the prescribed steps of: "what do we want?", "what do we have?" and "what are we missing?"

Color formulation is not just adjusting the primary colors or tones in a shade, but also involves working with levels or depth. Let's use seasonal color as an example. Seasonal coloring tends to be lighter and brighter for summer and is darkened for winter. Whether a client wears a single shade or multiple levels, reducing a base color for winter by adjusting or dropping a full level may be too drastic. This is especially true in the mid-range of colors such as levels 4, 5, 6 and 7. It is possible to drop a half shade by mixing your current level with the next lower level in equal proportions. Be sure to keep accurate records.

Another method of dropping or lifting a half level is with cool or warm influence. Let's use the example of a level 6 red tint (6 R). To lighten the depth of the level 6, add gold (yellow) 6 G, this will create an orange underlay which will allow more light to penetrate the red. To deepen, add blue 6 B, This will create a violet underlay, which will prevent light penetration. If you compare manufacturer swatches of a 6 Red-Orange and a 6 Red-Violet, it will appear that the 6 Red-Violet is closer to a level 5 and the 6 Red-Orange will appear closer to a level 7.

Gray hair formulations require thorough exploration of "what do we have" and "what are we missing" but are relatively simple when remembering the development sequence of natural melanin pigment in the hair. From yellow compounds develop

reds, and reds develop into darker violets. If the attempt is made to tint the hair to a dark shade by jumping from zero pigment to full dark pigment, the missing elements along the way will be sure to cause a problem. In gray hair, yellows and reds must be replaced in order for the tint color to look natural. They can be primed in a preliminary step or they can be added to the formula depending on the nature of the service. A full head of gray hair is best primed in before the tint. Dimensional color with varied strands of color in less than 50% gray hair is usually OK to add missing components of red and yellow directly into the formula.

Developers can also be adjusted in formulation for better results. Typically a low volume of 5 or 10 is used for full deposit of color. Twenty volume peroxide is used for equal lift and deposit of color in the strand for tinting. It can also be used in the event of gray hair to presoften the cuticle for better penetration prior to tinting. Twenty volume peroxides as well as 30 volume peroxides are commonly mixed with hair lighteners or bleaches. Thirty and 40 volume developers are used for higher levels of lift, **but should not be reintroduced** to the same areas of the hair strand. Remember that the cuticle is easily damaged and hard to resurrect. Once the cuticle has been opened and the strand lightened, a reduced level of volume in a developer is best to maintain the internal structure of the amino acid peptide chains. Typically once a strand has been lightened, the only change you would likely make is to deposit a new tone or reintroduce depth. That being the case, reduced volume is all that is necessary. An in-depth look at developers appears later in the text.

PRE-SERVICE EVALUATION AND ANALYSIS

Client consultation and analysis should not be a daunting task. What makes it unpleasant to some professionals is the seeming overload of information to be gathered, sorted and processed, all in a short period of time. Being insecure of your ability to determine texture variances, porosity, and evaluation of underlying pigment will hinder the gathering portion. Sorting is akin to placing information in a specific file for easy retrieval. If these issues make the process seem loathsome, ease your stress by creating a system and make it an ingrained habit. By creating a tactile routine and using your senses of touching, visualizing, speaking and hearing, your muscle memory and auto pilot processes will kick in. If your current system doesn't include a written record, create one. Or if one exists and the document is arranged in a disorganized manner, make changes that make sense to you. Like in written math problems, they can be presented in the long form or you can use the short form. Either one is perfectly usable, but one works better for some than others. This is the key; use what works, make it work for you. If you work in a salon where there is a standard form that is mandated for all employees to use, great! But if it's not meeting your needs to organize your analysis, why not also use your own "worksheet"? Over the years, there have been many samples of analysis forms for various salon services in textbooks that were merely copied and put into use. Most are outdated, and may contain too many line items that are check box nightmares or have unusable or poorly presented data requests. Frequent updates or review of printed documents and supplies are needed.

An example of a client consultation worksheet would contain the following statistics:

- Client's name and the usual demographics such as address and contact information.
- Standard hair analysis indicators such as form, length, texture, density and porosity.
- Evidence of previous color service or chemical texture service in the hair, list product used if possible.
- Natural color level, tone, underlying pigment and intensity. Indicate whether it varies from scalp to ends.

- Percentage of unpigmented or gray hair.
- Detailed description desired color. Indicate single or multiple shades and placement of color hues. Drawing of the head shape showing placement may be helpful.
- Color formulations used, include volume of developer.
- Processing time.
- Comment section for your opinion on the outcome and for the client's opinion as well.

Compare your client's pre-service analysis to that of a doctor's exam of a patient. Consider the implications of an incorrect diagnosis from a doctor. You are in effect making a diagnosis for your client. Take into account the years a doctor spends in education, specifically the residency portion of training. This is the hands on element, with real patients, with real medical concerns. How much time did *your* training devote to hands on client analysis? Obviously, the medical profession has a seriously greater impact on life events than hair coloring, but this analogy should help to verify the importance of a regimented process that gets easier with lots and lots of practice and exposure to variables.

Statistics show that activity training causes a more learned response than that of reading or listening to lecture. At the end of these segments, there will be suggestions for activities to improve the analysis process that have been used with great success.

Analysis of hair qualities

Analysis of hair qualities is the single most important step in a pre-service consultation. It is after all the very fabric that you are changing. A caution to performing accurate assessments regarding hair qualities is the presence of product in the hair. The nature of styling aids is to leave behind gloss, body or texture as well as rigidity. Also, some shampoos and conditioners infuse oils or polymers onto the strand. The best analysis is done on hair that is clear of buildup. Many inaccurate conclusions are derived due to a coating on hair strands.

Texture

Texture is the size or diameter of the individual hair strand. Among individuals, hair texture is varied regardless of race, ethnicity or state of colorlessness. That is to say that not all Caucasian hair is fine, not all Asian or African American hair is coarse. And regardless of genetics, not all gray hair is coarse or wiry. Texture is directly related to the lack of or presence of a medulla layer, the amount of fibrous cords in the cortex as well as the mass of the cuticle layer. The concentration of the cortex fibers and the amount of layers in the cuticle provide bulk to the strand. These layers increase in size with exposure to chemicals.

Therefore, it is entirely possible to alter the texture of the hair through salon services such as hair color. When judging texture, be sure to evaluate the entire strand. There may be a variance in diameter from scalp to ends. This will assist in formulation.

Texture is described as: Fine, Medium, and Coarse. Medium texture is generally accepted as the one most commonly found.

- In regard to hair coloring and hair texture, always remember this: fine hair has the least amount of internal space, therefore, coarse hair has the most. Let's use the following facts and analogy to further illustrate:
 - Hair coloring is the addition of artificial pigment to the strand. Regardless of which manufacturer's product you choose, there are a certain amount of preset color

Exercise - How to confidently identify the various textures of hair

Comparative study is great for creating a baseline of knowledge.

Materials needed:

- Hair cutting scissors.
 - Index card.
 - Tape.
 - Highlighter is optional.
 - Single strand of hair from multiple sources (5-7 different people).
1. Collect a single hair sample (one hair) from various heads.
 2. Arrange the hair according to texture from finest to coarsest and lay out across the card.

Porosity

Porosity is dictated by the cuticle layer and detected through visual and tactile observation. Visual inspection reveals the shine factor or the gloss of the entire strand from scalp to ends. Oftentimes we fail to realize that porosity progressively alters in even healthy hair toward the end of a strand. Length equals age, and older hair has had more exposure to elements that detract from the natural state of a nearly closed cuticle. The more closed the cuticle, the more resistant to absorption the strand is. The following is a guide to understanding porosity classifications:

- Porosity is typically described as Good, Moderate, Poor, and Over-porous or Extreme.
- Although the term good is associated with something pleasing or positive, the state of *good porosity* is not necessarily attuned with the hair being in *good condition*. In order for hair to have the quality of porosity, or the ability to absorb, the cuticle layer must be raised, which usually indicates reduced protection of the inner cortical structure. Likewise, *poor porosity* isn't associated with hair in *poor condition*. Poor porosity is the state of a closed and robust cuticle that naturally provides protection and shine to the hair.
- Classifications of porosity rate from least or slowest absorption to the fastest are: Poor (also called Resistant), Moderate, Good, and Extreme:
 - **Poor porosity:** Is oftentimes associated with ethnic, Afro-American, or Asian clients and hair that is gray. Cuticle layers are more numerous and in most cases, the virgin state of these clients' hair would be resistant. Caucasian hair types usually have less cuticle layers that provide less rigidity, texture and resistance to absorption.

particles in each tube or bottle. These concentration levels are known as *parts per million or ppm*.

- Let's say you have two clients with hair exactly the same natural shade and condition but one has fine hair and the other has coarse hair. If you use the same color formula on each one can you expect the result to be the same? Remember, everything is identical except for texture.
- Consider this situation: you have two clear drinking glasses that contain water, one is a smaller size and diameter containing 4 ounces of water, the other is larger in size and diameter containing 8 ounces of water. Place two drops of food coloring in each glass and stir. Which is going to have a greater concentration of color and thereby be a more vivid shade?
- The smaller of the glasses will have a more dense concentration of color and look deeper in tone than the larger one.
- Manufacturers produce colors to be the truest on medium textured, moderately porous hair. That is the baseline of color swatch shades. Adjustments are necessary if your goal is to achieve the exact same shade. In the event that your client has a coarse strand, you will need to adjust your formula by adding more depth as previously described. Or if your client has fine hair, you can expect your final shade to be more intense than the swatch and will need to reduce the depth.

3. Carefully attach the hair at the top and bottom of the card with tape.
4. Observe the increase in size from the finest to the coarsest.
5. Keep the card on hand and refer to it as a guide if needed. Add to the card if necessary.
6. Compare client's hair to the card to gauge degree of texture.

*If using a white index card and some hair samples are very light in color, use a highlighter to draw a line and place the light hair over top the line of color before taping in place.

- **Moderate porosity:** Is associated with non-chemically treated hair. It's the result of a slight lift of the cuticle from exposure to cleansing agents, heat from styling tools and general age of the strand. Hair with moderate porosity has less lift in the cuticle than that of good porosity. It, therefore, absorbs at a lesser rate or slower pace than good porosity.
- **Good porosity:** Is associated with hair that has the cuticle layer lifted as the result of chemical treatments that are mild in action and infrequent. **Hair with good porosity usually needs the application of a surface active or instant conditioner to assist in closing down the cuticle after shampooing to avoid tangling.** Deep conditioners should also be used regularly to preserve the strength of the strand.
- **Extreme porosity:** Or Overly-porous is a circumstance of damaged hair. It is usually the result of using harsh chemical treatments or repeated chemical applications to the hair strand. Cuticle damage at this state is not reversible. Best case scenario is damage resulting in split ends and excessive tangling. But, in many cases the cuticle deteriorates leaving an unprotected cortex, which in turn can lead to the shredding of the strand.

In the event of long hair, as previously stated, length equals age, porosity levels will vary greatly from scalp to ends. Consider the age of the hair according to average growth rates. If you are working with hair longer than 8 inches and an average rate of growth is ½ inch per month, you have hair ends that are over a year old. Even with frequent trimming, the cuticle of the bottom lengths have had quite a bit of exposure to elements such as

cleansing agents, various styling products, sunshine and perhaps heat from styling tools. These elements will wear down the cuticle. When coloring longer hair, consider mixing two separate formulas and altering developer strength so as not to cause further damage to an already open cuticle on older hair ends.

- If decolorizing the strand, leave the ends bare of product until the last few minutes. Many times in the salon, we are conscious of time and busy schedules and apply from

Underlying pigment

Underlying pigment is a result of heredity and can affect the outcome of hair color formulation especially when lightening. Whether a client possesses an abundance of eumelanin and has dark hair or pheomelanin and has lighter tones, the color wheel and the laws of color will apply in altering their natural shades. Underlying pigment is easily discernable by observing not only the hair itself, but also the skin and the eye color.

In many cases, using the hair to evaluate the underlying pigment is truly a fool's errand due to previous color application. If you have only a small amount of virgin color at the scalp area, the placement near the scalp leads to difficult judgement. The hair must be lifted to allow light to pass through to observe true level and tone.

- **Visual cues of the skin's pigmentation** are easily detected on the underside of the forearm. Finding tones of equal balance of warm and cool indicates neutral skin tones. Shades of ivory, beige or neutral brown indicate that the client will look well in either a warm or cool color with no impairment from underlying pigment. This presents no issue in either color deposit or lightening process.
- When detecting a color cast in the skin that is red-brown or red-blue, leaning toward a beige-violet you will have strong red undertones in the hair. Lightening the hair will have warm tones through each of the stages of decolorization. Double processing may be required for light shades and a toner with a complimentary base shade should be used.

Exercise - Understand underlying pigment in individuals using eye color as a tool

his comparative study is adaptable for group size and involvement of time levels.

Method 1: Poll for Information

Materials needed for Method 1:

A group 3 or more people with previous hair color experience. Have a well-lit room with enough floor space for people to line up shoulder to shoulder.

Method 1:

1. Gather the group of people.
2. Evaluate the eye color of each according to depth.
3. Arrange them in a line shoulder to shoulder according to a darkest to lightest scale of their eye color.
4. Reevaluate, specifically looking for undertones of red. Rearrange if necessary.
5. Question each of the individuals to see if they have experienced difficulty in lightening their hair. Ask specifically about red-orange tones left in the hair.
6. Compare their responses with their placement in line. Did the people with the darkest eye color having the most red, have the most difficulty with lightening?

Method 2: Perform Strand Tests on Samples of Gathered Hair

Materials needed for Method 2:

- Index cards.
- Hair coloring bowls, brushes, foil.
- Pens.
- Masking tape.
- Hair lightening product.
- Developer.

scalp to ends so we don't have to revisit the head during processing.

- If adding color in a tinting or toning service on long hair, apply to the ends last and reduce the strength of the developer in a new mixture. Or simply add a bit of water, conditioner or shampoo to the original mixture for dilution of the developer.

- **Eye coloration** is an excellent tool for evaluating underlying pigment. It is a common occurrence for eye color to change on an individual. The eye is made of cells that are transparent and allow the absorption of light. And like the ocean or a body of water, they will respond to stimuli from the surrounding environment by reflecting back shades as well as hues of lightness or darkness. Eye shades also alter with emotions and illness. Even though the color of the eye's iris may change, the base tones will still reflect the underlying pigment. There are many shades of brown, blue and green eyes. There are also eye colors that are a combination of more than one color. Hazel is one of the chameleon colors that contain a mixture of shades. There are also clients that have eyes that are totally different shades from one to the other. When looking for pigmentation in the eye, look for depth of the shade. Are they dark brown, dark blue, etc.? Next determine the tone or color cast of the iris; is it a reddish brown, a deep dark brown as in almost black, or a lighter yellowish brown? Evaluate in the same manner with blue and green eyes. Also look for flecks of yellow, brown, green, and blue within the base shade.
- The evaluation of tonal value is a direct fit to the color wheel and the presence of eumelanin and/or pheomelanin. Do you have a working knowledge of the color wheel and understand its structure?

The individual with the red undertones in their irises oftentimes has difficulty with the hair lightening process. The visible reddish hue in the eyes and the peachy undertones in the skin indicate a strong presence of pheomelanin.

A group of people with previous hair color experience, at least 3 or more. Have a well-lit room with enough floor space for people to line up shoulder to shoulder.

Method 2:

1. Prepare materials for each person. Number index cards according to the number of participants to tape hair samples onto later.
2. Gather the group of people.
3. Evaluate each one's eye color according to depth.
4. Arrange them bodily in a line according to darkest to lightest.
5. Reevaluate specifically looking for undertones of red. Rearrange if necessary. Assign a number to each participant beginning with #1 at the darkest eye color.
6. Collect a sample of hair from each of the individuals by weaving a tail comb lightly in the nape area.
7. Ape the hair sample near the top. Leave enough of a tab on the tape to label it according to the participant's number.
8. Mix a small amount of lightening product and apply to the hair samples that have been arranged numerically on the foil sheet. Avoid getting product on the numbers of the tape tabs.
9. Allow for *half* of the time recommended for the lightening product to work and remove by thoroughly rinsing and blotting.
10. Evaluate and record the color of the underlying pigment brought to light at the half way mark. Compare the vividness of the red-gold to gold and gold to paler yellow stages present. Do they vary according to the depth of the eye color of the individual?

HAIR COLOR PRODUCTS

Let's review the basic types of hair coloring products. They fall into two categories: Oxidative and Non-oxidative. Oxidative hair color agents incorporate the use of developers to increase the longevity of the color. They penetrate the hair strand and through oxidation become part of it. Non-oxidative color agents are applied without developers and stay primarily on the outside or just under the surface of the cuticle layer. They are released through the shampooing process.

- Permanent hair tint: oxidative.

Professional permanent hair coloring tints

Professional permanent hair coloring tints penetrate into the interior of the hair strand and have the capability of darkening a light shade to the lowest level of darkness. Be aware of what primaries are missing in the strand so it can be reintroduced to avoid off tones in the darker levels. Permanent tints also have the ability to lift out natural pigment and lighten the shade up to three levels. For example, when looking at a color chart, going from a level 5 up to an 8 is quite a remarkable difference. Consider the ability of a tint in the event that a client has hair at a natural level of 7 or above. Using a hair lightener (bleaching agent) in this situation instead of a tint is purely overkill. High lift tints give outstanding results with perfectly toned shades in warm, neutral and cool colors. High lift tints are more gentle on the strand than lighteners. They effectively remove natural pigment and give the strands a polished tonal value in one application.

Ingredients in a professional permanent hair tint:

- **Lightening agents:** In permanent tints are hydrogen peroxide and ammonium persulfate based product that will diffuse natural pigment. When the color is sufficiently lightened, only then will the deposit process of the tint pigment take place. Once pigment is removed, it will not return to that area of the strand, and tints with lightening agents should not be reapplied to that area. Re-introducing a product with lightening agent will only compromise the integrity of the hair structure, producing a much weaker strand. If fading has occurred or if a different shade is desired, consider applying a demi-permanent product.
- **Pigment:** Dye ingredients derived from a coal tar product called para-phenylene-diamine, also viewed on ingredient lists as p-phenylenediamine, are known to cause sensitivity or allergic reaction. A patch, predisposition or skin test must be done on the client's skin 24/48 hours prior to application as required by law. Pigment from this source behaves more like natural melanin than any other dye product. It penetrates into the strand and remains fixed to the internal structure through the oxidation process. As it gains entrance to the strand, it expands when it is oxidized and becomes trapped beneath the cuticle layer. Healthy hair strands keep the newly formed granules in place with little if any fading. Manufacturers use primary color pigments to create various shades of color based on a ppm (parts per million) formula. They incorporate the amount necessary to infuse an average textured hair strand for maximum coverage of existing melanin or replacement of diffused melanin. Pigments present are coordinated with lightening agents in permanent

Demi-permanent tints

Demi-permanent tints are designed to enhance the natural color and add depth or warmth to the shades. They are capable of darkening the hair from a very light shade to the lowest level. Brilliance can be obtained by using a color with a gold base, but remember there is no expectation of lifting out natural color pigment to lighten the natural level. They do contain p-phenylenediamine and therefore require a 24/48 hour predisposition test. Demi-permanent tints penetrate the hair strand and develop just inside the cortex and the area between the cuticle layers as well. Demi-permanent hair coloring is the best product for fading of previously tinted hair, since the

- Demi-permanent hair tint: oxidative.
- Semi-permanent hair tint/toners: non-oxidative.
- Temporary color rinses/shampoos: non-oxidative.
- Lighteners (bleaching agents): oxidative.

Within each category there are an abundance of products from various manufacturers with similar capabilities. Be sure to gain education from the manufacturer's or distributor's representatives on the particular brand that you are using for optimal results.

tints. In dark tints, there is far less lightening agent than pigment for deposit. In high lift tints, the opposite is true; the mixture is predominantly lightening agent with very little pigment for deposit.

- **Shampoo or cleansing agent:** Activated by water at the conclusion of the service, these products are included for the easy removal of the tint. Tints are designed to be worked into a lather with the addition of warm water. This is a step most commonly skipped, colorists usually perform a thorough rinsing of the tint product and then application of a separate shampoo. This is counterproductive to the nature of the shampoo ingredient which is to release the majority of the tint product from the hair. The foaming action reduces the density of the product allowing it to lift from the hair and scalp.
- **Ammonia compounds or alkalizing agent:** Hair naturally has an acidic pH, whereas alkalizing agents are bases. During the tinting process, a change in pH opens the cuticle and shifts the internal salt bonds to expand the strand, allowing the natural melanin to disburse and give room to the newly oxidized color granules. Once the hair's pH is restored with the removal of the tint, the hair remains slightly enlarged, which adds body to the strand.
- **Conditioning agents:** Typically a form of oil is used to add shine and softness to the hair.
- **Peroxide based developers:** Are added to permanent tints prior to application. Many developers are a mixture of water, peroxide, ceteryl alcohol, alkalizing agents and phosphoric acids.

Permanent tints perform two separate activities during their processing time: lifting of natural pigment and depositing artificial pigment.

1. Lifting is obtained by opening cuticle layer to allow penetration of the product and breaking down natural melanin inside the strand.
2. Deposition of color occurs inside the strand as the aniline derivatives are oxidized and form large, permanent molecules.

Best uses of permanent hair color:

- Lightening natural shades up to 3 levels.
- Depositing color on fine limp hair to add extra body.
- Creating equal coverage for hair that is gray. It removes and adds color at the same time to improve the uniformity of the overall shade.

lower levels of alkalinity will do less damage to the hair than a permanent tint.

Demi-permanent hair coloring tint ingredients are identical to permanent tints, except for the absence of lightening agents and the use of a non-ammonia alkalizing agents. These changes permit the natural melanin to remain intact, thereby causing less damage to the hair. Demi-permanent tints have their own activators or processing solutions which are a reduced volume developers containing water, peroxide and phosphoric acid.

Best uses of demi-permanent color:

- Retint services to restore natural color to the hair.

- Refresh color to ends on previously tinted hair without excessive damage.
- Deposit only hair color service for curly and coarse textured hair. The reduced levels of alkalinity and lesser volume developers do not cause over expansion of the hair shaft.

Semi-permanent tints or toners

Semi-permanent tints or toners are designed to penetrate the cuticle somewhat. They gradually release during shampooing before completely fading away after several cleansings. Semi-permanent tints are self-penetrating without the aid of developers. They do contain p-phenylenediamine and therefore require a 24/48 hour predisposition test. Like toners, they may be mixed with a packet of "balancing crystals" that are intended to neutralize the hair of any remaining alkalies in the strand that may encourage the pigment to dissipate prematurely. Semi-permanent colorings are available in a variety of forms, including mousse, gel, cream, and liquid. Shades run from dark to light

Temporary color rinses or shampoos

Temporary color rinses or shampoos are meant to last until shampooed away and are most commonly available in liquid, mousse or spray form or are incorporated with a shampoo base. They contain harmless pigment that has been certified by the Food and Drug Administration (FDA). Since they are harmless agents, they do not require a patch test. The size of the molecule they are made of is fairly large and will not penetrate into the hair strand. They attract to each other and cling to the outside of the cuticle layer until they become wet. They are used to cover gray, change the tone, or enhance the shade of the hair at or near its current level of depth. Using a color rinse of a deep blue black on hair that is a natural golden blonde will cause a drab muddy result with a dull or matte appearance. Likewise,

Lighteners are bleaching agents

Lighteners are bleaching agents that remove natural color pigment from the hair. They break up the melanin that they come in contact with. Lighteners are a mixture of ingredients that work with 6 to 10% hydrogen peroxide to penetrate the strand. Ingredients such as ammonium persulfate, potassium persulfate and sodium persulfate provide a variety of pH reactions to adjust the strength of the product. Note that some lighteners are designed for off the scalp use only! **Serious burns to the scalp could result if used incorrectly.**

Blue and violet colored lighteners have a specific purpose. A lightener's only job is to remove pigment. The product itself may have coloration such as blue or violet, but it is not a type of tint. Tint is useless when added to lightener, because the lightener would actually prevent the tint from oxidizing into the interior of the strand. However, in some products, the blue or violet coloration of the product will diminish or neutralize the appearance of brassy golds or yellows left in the strand during the lightening process. Choose products that contain blue or violet bases according to the underlying pigment found in the strand as follows: If your client has an abundance of underlying red in their hair and eye color, it will show up during the lightening process very early and the lightener may seem to stop working, so be sure to use a blue, as opposed to violet. The brassy golds rich in secondary orange are neutralized by

Developers

Developers are primarily a hydrogen peroxide base (H2O2) with other additives that assist in oxidizing hair color pigment. The pH of hydrogen peroxide as a hair coloring developer ranges from 2.5 to 4.5 depending on the volume and additives present. Other additives assist in stabilizing the product and maintaining a shelf life as well as aiding in viscosity or thickness. **Developers are also known as catalysts, pronators, processing solutions or oxidizing agents.**

Hydrogen peroxide developers are available in a variety of volumes which allow for customizing hair coloring tints and lighteners alike. The volume of hydrogen peroxide is a rating

This reduces the chance of a frizzy appearance commonly associated with coarse or curly hair that is chemically treated.

- Introduction to hair color for a client who fears the commitment of retouch services.
- Blending or covering gray.

in warm, neutral and cool tones as well as neon and exotic colors that are incorporated onto pre-lightened hair. These colorings have the capability of not only staining the strand, but penetrating through the cuticle into the cortex on freshly lightened hair for increased durability.

Best uses of semi-permanent color:

- Infuse pre-lightened hair with exotic colors.
- Tone pre-lightened hair to a more appealing shade.
- Low maintenance color changes with no damage to the strand and no commitment to hair coloring retouches.

using a red-violet base on hair that is predominantly gray will result in a cool pink tone.

Best uses of temporary color agents:

- Clients that want to soften or blend their gray hair who shampoo their hair infrequently.
- Unusual or vastly different color changes for daily wear, costumes or special occasions.
- Clients that wish to tone down unwanted shades from water impurities.
- Clients that need to refresh their faded ends between color service appointments.

blue in the levels 4 through 7. The lighter golds formed with primary yellows at levels 8 and above are neutralized from violet colored product. Choose violet for hair with little influence from underlying reds.

If lightening to extremely lighter shades, a double process may be necessary, whereby a blue based lightener is followed up by either a second application of lightener or a toner. A somewhat fragile strand will result; be sure the hair is strengthened prior to the service, and suggest frequent reconditioning treatments or provide the appropriate product for retail sale.

Best uses of lightening agents:

- On scalp lightening with a mild product and mid-level developer for all over the head blondes.
- On scalp lightening with quick exposure to a mild product and low level of developer to break the base of the natural shade before processing with a tint. Remove by shampooing, then dry with cool air before applying tint. If no shampooing is done, the remaining lightener in the hair will be counterproductive to the depositing of the tint pigment.
- Off scalp lightening with foils, papers, or caps. Also used during ombre services or free hand painting in a baliaje technique.

of strength based on the amount of oxygen gas present in the liquid of the product. For example, 10 volume strength of hydrogen peroxide contains 10 times the amount of gas to liquid for a ratio of 10:1. Ten volume is considered a low strength in the hair color arena. Forty volume is an increase of 40:1 ratio of gas to liquid and considered quite strong when dealing with the hair strand. Lower volumes contain enough oxygen gas to cause oxidation of artificial pigment within the hair strand for a lasting effect. However, they are not capable of sufficiently breaking down natural melanin to lighten the natural hair color.

Some manufacturers customize the volume of developers to work specifically with a line of lighteners. It is unwise to deviate from their recommendations and manufacturer instructions should always be followed.

Using higher than 30 volume developers with lightening agents is not recommended as the breakdown of the disulfide bond will result and the internal structure of the hair will be compromised.

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Happy Coloring!

HAIR COLORING AT A GLANCE

Final Examination Questions

Select the best answer for each question and mark your answers on the Final Examination Answer Sheet found on page 34, or complete your test online at EliteLearning.com/Book

21. Excessively damaged hair with weakened disulfide bonds will appear to grab drab or ash tones when coloring.
 - a. True.
 - b. False.
22. Melanin creation begins with the production of yellow compounds called quinones which are associated with the amino acid tyrosine.
 - a. True.
 - b. False.
23. Melanin granules fall into two distinct categories: pheomelanin (which is comprised of red and yellow pigment) and eumelanin (which is black and brown pigment).
 - a. True.
 - b. False.
24. Melanin is removed from the hair in exactly the same order that it is created.
 - a. True.
 - b. False.
25. The process to gain the total removal of the pheomelanin granule causes the formation of cysteic acid within the strand which results in a chronically weaker strand.
 - a. True.
 - b. False.
26. The presence of eumelanin in the hair determines the lightness of the hair color, while the pheomelanin determines the depth in the shade.
 - a. True.
 - b. False.
27. Color arrangement as seen through a prism is described with the acronym ROYGBIV indicating placement of the colors: Red, Orange, Yellow, Green, Black, Indigo, and Violet.
 - a. True.
 - b. False.
28. Final hair color is the result of influences from the presence or absence of other pigment on the strand.
 - a. True.
 - b. False.
29. The single most important fact to remember about secondary colors is that they would not exist if not for the interaction of the primary colors.
 - a. True.
 - b. False.
30. Red is the only cool primary color.
 - a. True.
 - b. False.
31. Neutral tones contain a balance of all primaries and leave the strand uninfluenced with warmth or coolness by their combined presence.
 - a. True.
 - b. False.
32. All color equations are formulated with secondary colors only.
 - a. True.
 - b. False.
33. The following are equations of tertiary Shades: Blue-green—B + B + Y, Red-orange—R + R + Y
 - a. True.
 - b. False.
34. A secondary color is placed directly across the color wheel from a tertiary color that is not part of its composition.
 - a. True.
 - b. False.
35. Color primers allow a base shade to be laid into the strand and will not be seen at the final level.
 - a. True.
 - b. False.
36. What causes black to look dark is the absence of light.
 - a. True.
 - b. False.
37. Color formulation involves only shades of color level; tones are not involved.
 - a. True.
 - b. False.
38. During tinting, it is possible to drop the level of tint by a half shade by mixing the current level with the next lower level in equal proportions.
 - a. True.
 - b. False.
39. If the attempt is made to tint gray hair to a dark shade by jumping from no pigment to full dark pigment, the missing elements along the way will have no impact on the final color.
 - a. True.
 - b. False.
40. To add depth to a brown tint during formulation, use a blue based product.
 - a. True.
 - b. False.

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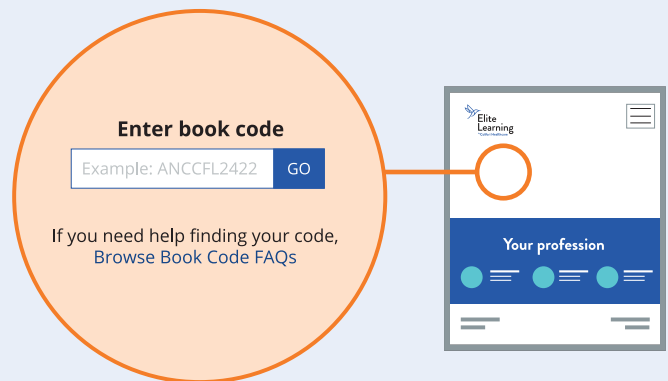
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