

Hair coloring part 1

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Hair coloring

- Color wheel
- Definition
- Hair structure
- Hair texture
- Density
- porosity
- Classification of color
- Patch test
- Preliminary strand test
- Contraindication
- Safety precaution

Color Wheel



PRIMARY



SECONDARY

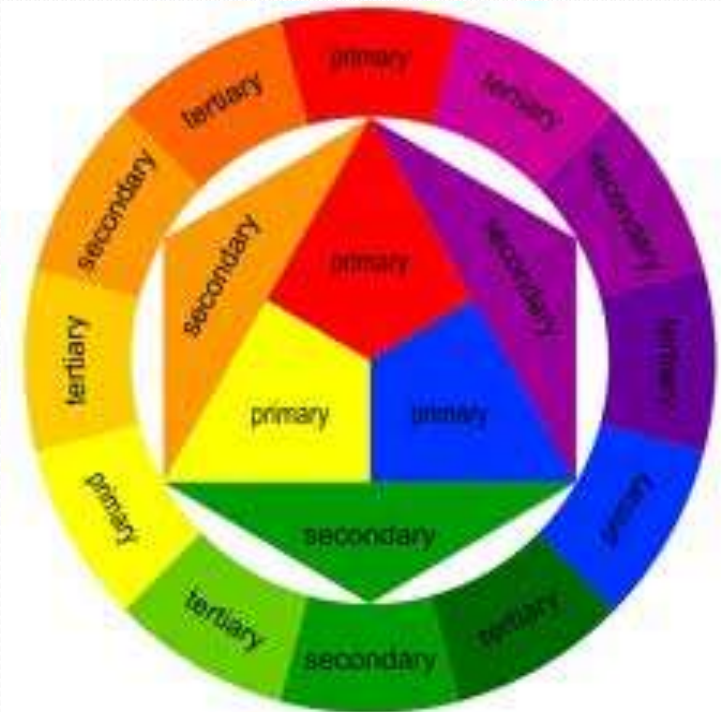
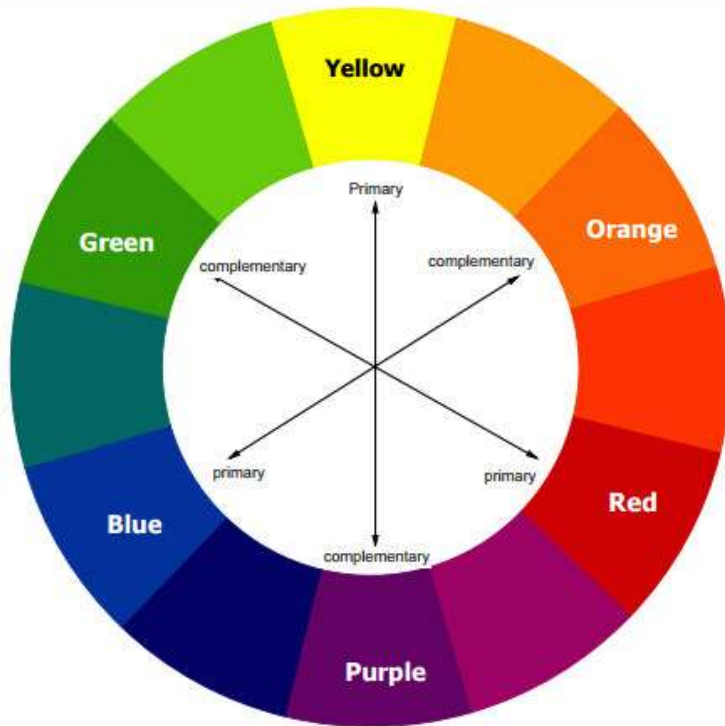


TERTIARY

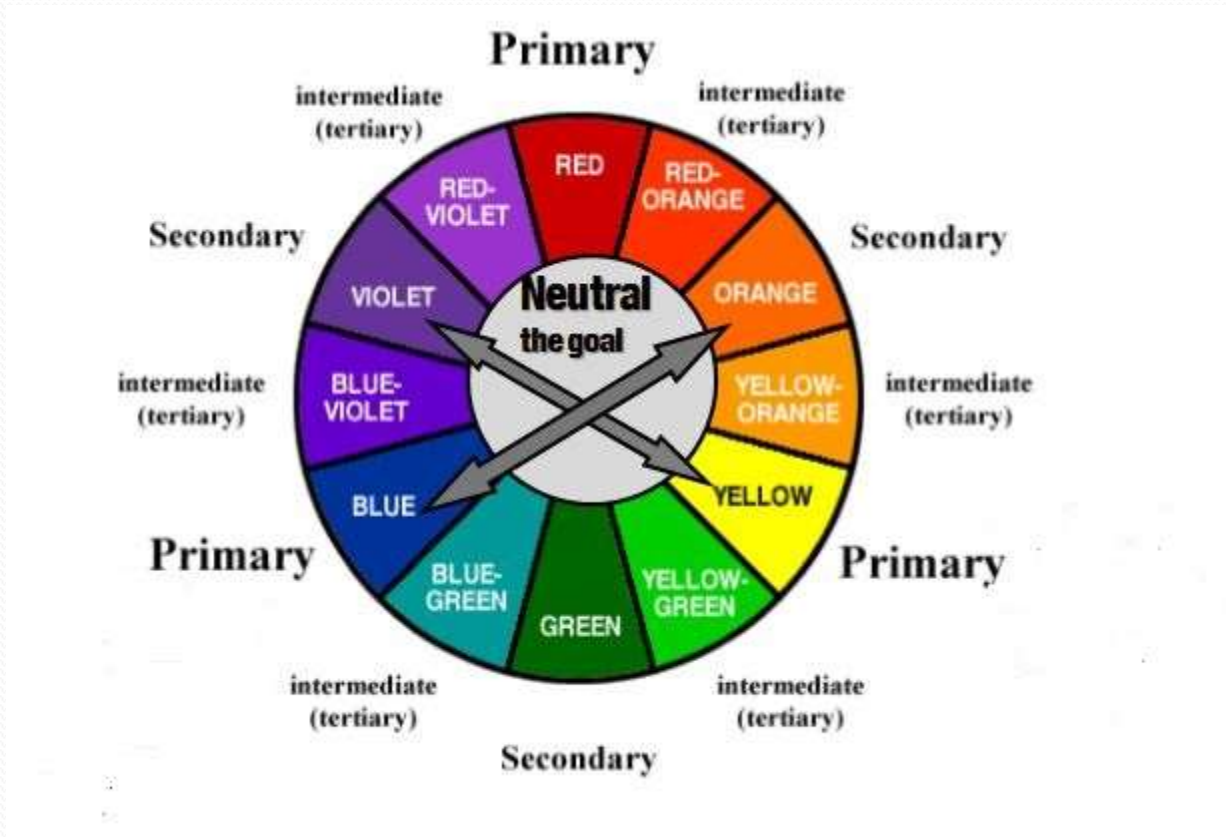


color wheel

Color Wheel



Tertiary colors



Hair coloring

- Color is dynamic.
 - It can be used to Express Personality, mood, fashion, and time.
 - Hair coloring has been with us since the beginning of the written history of cosmetology.
 - In ancient Egypt heena was used to color the hair red.
 - In Europe, indigo, sage and chamomile were used to change the color of hair.
 - During the Middle ages ,Blond or Black hair was Favored, while red was disliked.
- one of the most creative, challenging, and popular salon services is Hair coloring.

Hair Structure

- Hair Structure
- Hair is composed of the following three major components
 - 1. The cuticle which is the outermost layer of the hair. It protects the interior cortex layer and contributes up to 20 percent of the overall strength of the hair.
 - 2. The cortex which is the middle layer and gives the hair the majority of its strength and elasticity. A healthy cortex contributes about 80 percent to the overall strength of the hair. It contains the natural pigment called melanin that determines hair colour. Melanin granules are scattered between the cortex cells like chips in a chocolate chip cookie.
 - 3. The medulla which is the innermost layer of the hair. It is sometimes absent from the hair and does not play a role in the hair colouring process.
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Texture

- Hair texture is the diameter of an individual hair strand
- Large-, medium-, and small-diameter hair strands translate into coarse, medium, and fine hair textures, respectively. Melanin is distributed differently according to texture.
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- Fine hair - melanin granules grouped more tightly .(Hair colour faster)
- Medium - average reaction to hair colour
- Coarse - larger diameter and loosely grouped melanin granules, so it can take longer to process

Density

Hair density, the number of hairs per square inch, can range from thin to thick.

Density must be taken into account when applying hair color, to ensure proper coverage.



Porosity

- Porosity is the hair's ability to absorb moisture
- Porous hair - hair colour faster, and hair colour application on porous hair can result in a cooler tone than applications on less porous hair
- **Low porosity** - The cuticle is tight. The hair is **resistant**, it is difficult for moisture or chemicals to penetrate. it is difficult for moisture or chemicals to penetrate.
- **Average porosity** - The cuticle is slightly raised, The hair is normal and processes in an average amount of time.
- **High porosity** - The cuticle is lifted. The hair is overly porous and takes color quickly; color also tends to fade quickly, Permed, colored, chemically relaxed, and straightened hair will have a high degree of porosity.

Classification of Color

- Temporary Color
- Semi permanent color
- Permanent Hair color

Temporary Color

- Temporary Color to coat the hair shaft until the hair is shampooed
- Rinses
- Color Shampoos
- Color Sprays
- Crayons and mascara
- Colored mousses and gels used for slight color and for dramatic effects
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Semi permanent color

- Traditional **semi permanent hair color** is a no-lift deposit-only non oxidation hair color that is not mixed with peroxide and is formulated to last through several shampoos, depending on the hair's porosity
Traditional semi permanent hair color only lasts four to six weeks, depending on
- how frequently the hair is shampooed. Semi permanent hair color is a non oxidation hair color.

Permanent Hair color

- Permanent haircolor is used to match, lighten, and cover gray hair. Permanent hair color products require a patch test twenty-four to forty-eight hours before application. IT is designed to remain in the hair until it grow out.
- Vegetable tints –
- Permanent hair coloring is derived from a variety of sources. The earliest recorded hair coloring in history is that of staining with plant derivatives. As coating color ,heena,sage,chamomile were also applied. They are messy and time consuming.
- Metallic or mineral dyes-
- Mineral based color and compound Products, Combined with Plant Extracts, are another type of permanent color. These Agent are never used professionally because the damage to the hair can be quite serve the range of color extremely limited ,and the hair is left unfit for further chemical service.
- Oxidation tints –
- The Primary ingredient of todays penetrating permanent color is an aniline derivative .these tint molecules, derived from cal tar combine with the developer to from giant molecules within the cortex layer of the hair . these color can both lift and deposit so that the range of shades possible is almost endless.
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Demi permanent hair color –

- **Demi permanent hair color**, also known as **no-lift deposit-only color**, is formulated to deposit but not lighten color. Many demi permanent colors use alkalizing agents other than ammonia,
- and oxidizing agents other than hydrogen peroxide.
- Demi permanent haircolors are ideal for the following objectives:
 - • Introducing a client to a color service (because these products create a change in tone without lightening the natural hair color)
 - • Blending or covering gray
 - • Refreshing faded permanent color on the mid shaft and ends
 - • Making color corrections and restoring natural color

Patch test

- A patch test must be given twenty-four to forty-eight
- hours before coloring the hair with an aniline derivative product. Aniline derivative haircolors must never be used on the eyelashes or eyebrows. To do so may cause blindness.
- Colorist dermatitis involves the same types of negative
- reactions to products as those a client may experience. A negative skin test will show no sign of inflammation and indicates that the
- color may be safely applied. A positive result will show redness and a slight rash
- or welt. A client with these symptoms is allergic, and under no circumstances
- should she receive a haircolor service with the haircolor tested.
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Preliminary Strand Test

- Perform a preliminary strand test prior to lightening in order to determine the processing time, the condition of the hair after lightening, and the end results. Watch the strand carefully for its reaction to the lightening mixture, especially noting any discoloration or breakage. Reconditioning may be required prior to toning. If the color and condition are good, you can proceed with the lightening service. Carefully record all data on the client's service record card and file it for future use. If the test shows that the hair is not light enough, increase the strength of the mixture and/or increase the processing time. If the hair strand is too light, decrease the strength of the mixture and/or decrease the processing time. A patch test must be taken twenty-four to forty-eight hours prior to each application of a toner containing aniline derivatives.

HAIRCOLOR SERVICE RECORD CARD

• _____ Tel. _____

• Address _____ City _____

• Patch Test: h Negative h Positive Date _____

• Eye Color _____ Skin Tone _____

• DESCRIPTION OF HAIR

• Form Length Texture Density Porosity _____

• h straight h short h coarse h low h low h resistant

• h wavy h medium h medium h medium h average h very resistant

• h curly h long h fine h high h high h perm. waved

• Natural hair color _____

• Level Tone Intensity
 (1-10) (Warm, Cool, etc.) (Mild, Medium, Strong)

• Scalp Condition

• h normal h dry h oily h sensitive

• Condition

• h normal h dry h oily h faded h streaked (uneven)

• % unpigmented _____ Distribution of unpigmented _____

• Previously lightened with _____ for _____ (time)

• Previously tinted with _____ for _____ (time)

• original hair sample enclosed original hair sample not enclosed

• Desired hair color _____

• Level Tone Intensity
 (1-10) (Warm, Cool, etc.) (Mild, Medium, Strong)

• CORRECTIVE TREATMENTS

• Color filler used _____ Conditioning treatments with _____

• HAIR TINTING PROCESS

• whole head _____ retouch inches (cm) _____ shade desired _____

• formula: (color/lightener) _____ application technique _____

• Results: h good h poor h too light h too dark h streaked

• Comments: _____

• Date Operator Price Date Operator Price _____

• _____

• _____

Contra indication

- **Do not use oxidizing haircolor or haircolor with peroxide on hair that has been treated with metallic hair dye. If you do, the hair will swell and smoke, appearing to be boiling from the inside out. It is often difficult to lighten dark hair to a very pale blond without causing extreme damage to the hair. The client should be alerted to this danger before you proceed with the service.**
- **Medications can affect hair color. In the consultation,**
- **determine whether the client is taking an medications.**

Contra indication

- **Medical treatments for conditions such as diabetes, high blood pressure, and thyroid problems may all affect the outcome of color services and most other chemical services. Discuss this with your instructor for more information.**
- **Do not perform any hair coloring service if the client has abrasions or inflammations on the scalp. Do not brush the hair before a hair color service.**

Hair coloring Safety Precautions

- Perform a patch test twenty-four to forty-eight hours prior to each application of aniline-derivative haircolor. Apply haircolor only if the patch test is negative.
- Do not apply haircolor if abrasions are present on the scalp.
- Do not apply haircolor if a metallic or compound haircolor is present.
- Do not brush the hair prior to applying color.
- Always read and follow the manufacturer's directions.
- Use cleaned and disinfected applicator bottles, brushes, combs, and towels.
- Protect your client's clothing with proper draping.
- Perform a strand test for color, breakage, and/or discoloration.
- Use an applicator bottle or bowl (glass or plastic) for mixing the haircolor.
- Do not mix haircolor until you are ready to use it; discard leftover haircolor.
- Wear gloves to protect your hands.
- Do not permit the color to come in contact with the client's eyes.
- Do not overlap during a haircolor retouch.
- Use a mild shampoo. An alkaline or harsh shampoo will strip color.
- Always wash hands before and after serving a client.



Thank you

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