

Hair Colour for Hairstylists: Level 2

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Arden Magtiza

BCCAMPUS
VICTORIA



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Introduction

Hair Colour for Hairstylists: Level 2

Hair colouring is one aspect of hairdressing that is ever-evolving due to constantly changing trends. A true colourist can confidently pull from the basics and adapt to new techniques and the needs of industry.

This manual serves as a guide for apprentices who desire to stretch beyond their foundational colour knowledge and skills so as to reach a higher level of competency. This text will walk the stylist step-by-step through many current and advanced techniques used in the industry today.

Whether you have completed a Hairstylist Foundations program, Apprenticeship program, or are currently enrolled in Hairstylist Level 2 or equivalent, this resource will be valuable to you.

Topics covered in this resource include:

- How to perform a thorough colour consultation, which revisits and builds upon the basics of trichology and colour theory.
- How to select, formulate, and apply various non-oxidative and oxidative colouring products and lighteners, based on a thorough consultation and advanced hair analysis.
- How to extend beyond basic colour placements to create truly customized colouring and foiling outcomes.
- How to select and perform an advanced hair painting service.
- How to sequence and perform an advanced colour correction service.

Acknowledgements

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Chapter 1 - Back to the Basics

Learning Objectives

- Interpret basic colour theory and how it applies to formulating hair colour
- Interpret how hair behaves, and analyze the factors to consider when colouring hair
- Distinguish between non-oxidative and oxidative colouring products and how they work

To become a great hair colourist, you must understand the basics of colour theory and trichology. Once you have a solid understanding how colour works and how hair behaves, you will gain the confidence to get more creative with your formulating and placement.

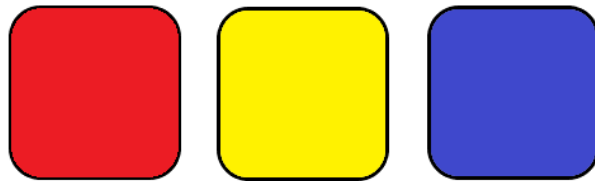
This chapter serves as an important recap of colour theory and colour-relevant trichology, along with the basics of non-oxidative and oxidative colouring products. These principles are fundamental to your success as a hair colourist and this section aims to prepare you for what is to follow throughout this manual.

1.1 Colour Theory

Colour has three main characteristics: **Hue**, **level**, and **intensity**.

Hue

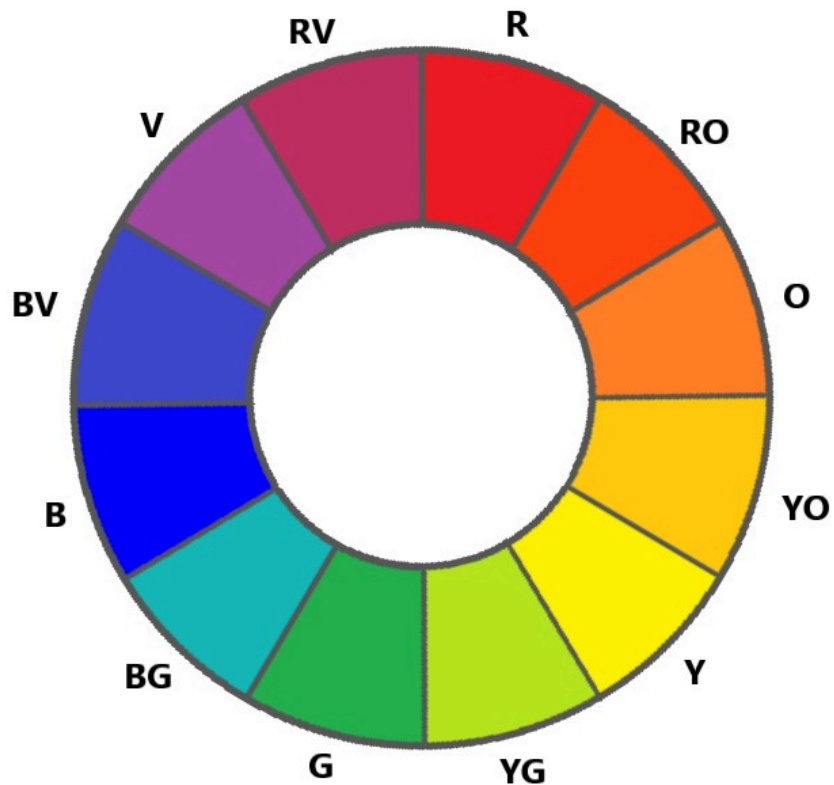
You will have learned in Hairstylist Foundations that the three primary (or “pure”) colours are red, yellow, and blue.



Every colour (or hue) that exists is the result of mixing two or three **primary colours** in varying proportions.

When all three are mixed in varying, yet fairly equal amounts, these primary colours create our natural looking hair colours from light to dark. But how?

Let's have a look at the **colour wheel**:



As you can see above, the colour wheel contains:

- Our three primary colours
 - Red
 - Yellow
 - Blue
- Three **secondary colours**, created by mixing two primary colours together
 - Orange
 - Green
 - Violet
- Six **tertiary colours**, created by mixing a primary colour with its neighbouring secondary colour.
 - Yellow-orange
 - Red-orange
 - Red-violet
 - Blue-violet
 - Blue-green
 - Yellow-green

The position of each of these colours on the wheel indicates its **tone**. In the graphic above, the left side of the colour wheel contains our cool colour tones (green, blue-green, blue, blue-violet, violet, and red-violet), while the right side contains our warm colour tones (red, red-orange, orange, yellow-orange, yellow, yellow-green).

Colours that sit directly across the wheel from each other are called **complementary colours**. Mixing two complimentary colours together will create a brown or grey colour result. Voila! Our natural, neutral hair colours are born!

Level

The **level** of hair colour is the darkness or lightness of colour in relation to itself and other colours. Level is the direct result of how these colours are mixed.

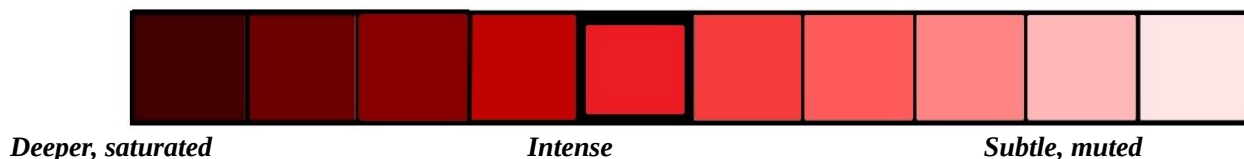
For example, what happens if you have an abundance of blue in your mixture? Or an abundance of yellow? Because blue is the darkest of the primary colours, an abundance of blue creates our darker levels. Yellow is considered the lightest, and so a majority of yellow in our mixture results in our lighter levels.

Universally, hair colours exist from a level 1-10, with 1 being darkest and 10 being lightest. Some colour manufacturers may use a 1–12 system, with 12 being the lightest colour level.



Intensity

Finally, **intensity** refers to the strength, or saturation, of colour. A colour will be much more saturated at a darker level compared to a lighter level. Colours are most intense in their “pure” form. For example, the red gradient below.



So how do the 3 main characteristics of colour, hue, level and intensity, affect how you will formulate artificial hair colour?

Remember this principle?

Existing hair colour + artificial hair colour = resulting hair colour

This means that in order to create the desired results, you must understand how to **alter** the existing hair colour with an artificial colour formulation.

Let's get started: Imagine that you have a new client sitting in your chair. Would you simply have them choose a hair swatch and slap that colour on? Hopefully not!

Before you head to the colour room to begin mixing up a colour formula, you must assess the following:

- What is the client's existing hair colour? This includes the hue (or tone), as well as the level.
- What is the client's desired hair colour result? Again, this should involve a discussion about hue and level, as well as intensity.
- Is the client going darker or lighter?
- Do you want to **enhance** or **neutralize** the existing colour?

In Chapter 2: The Consultation, we will have a more in-depth look at each of these factors. For now, let's revisit the science of hair, trichology, to explore how the hair strand itself can influence your colour choices.

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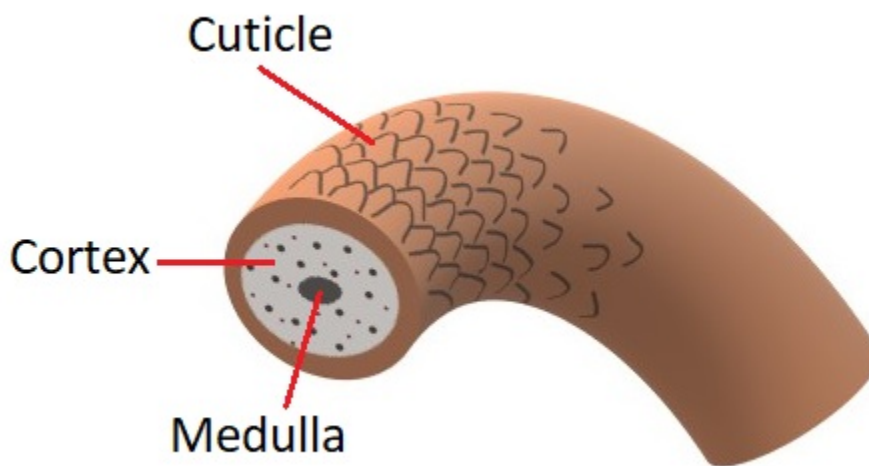
1.2 Trichology - The Science of Hair

When you are colouring hair, why must you consider the hair itself?

The Hair Strand

Each hair strand is made up of 3 layers:

- **Cuticle** – the outer covering made up of overlapping layers of scales. How these scales sit directly affects its porosity, which determines how the hair will absorb moisture and chemicals.
- **Cortex** – the second layer, gives hair its strength and elasticity and also houses melanin, which is the basis of natural hair colour.
- **Medulla** – The inner core, or pith, of the hair strand gives hair its structure and is often missing from very fine hair.



These various structural properties of the hair itself, as well as the hair's natural melanin, will have a direct influence on the end result of a colouring service.

Melanin

Firstly, let's revisit **melanin**. What is it, and why is it important?

There are two types of melanin that reside within the cortex of the hair strand:

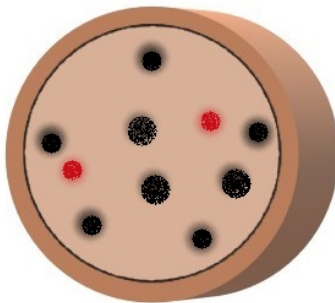
- Eumelanin – black or brown pigment
- Pheomelanin – red or yellow pigment

Varying combination, concentration, and size of these two pigments produce every natural hair colour that exists. For example:

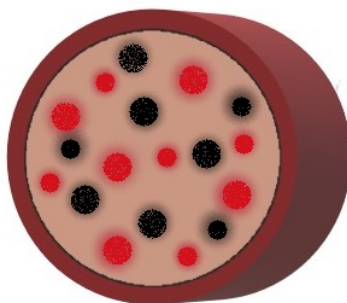
A heavy concentration of eumelanin, with a sprinkling of pheomelanin, results in dark brown or black hair:



A light concentration of eumelanin, with a sprinkling of pheomelanin, results in light brown or blonde hair.



A heavy concentration of pheomelanin, with a good amount eumelanin, results in a deep Auburn red shade of hair.



When hair is lifted with an oxidative colour or bleach, eumelanin is more easily obliterated than pheomelanin. This becomes more apparent when you look at the **underlying pigments** at each of the ten levels:



Notice how the underlying pigments range from dark red to palest yellow. This is because pheomelanin is tougher to remove, so when a client tells you that their hair “lifts warm,” you can assure them that that is the case for everyone!

When hair is coloured, the underlying pigment will affect the formula based on whether you want to neutralize or enhance these warm pigments. For example, does the client desire a cool chocolate brown hair colour or a more golden-brown hue? You will then use the colour wheel to create an appropriate formula.

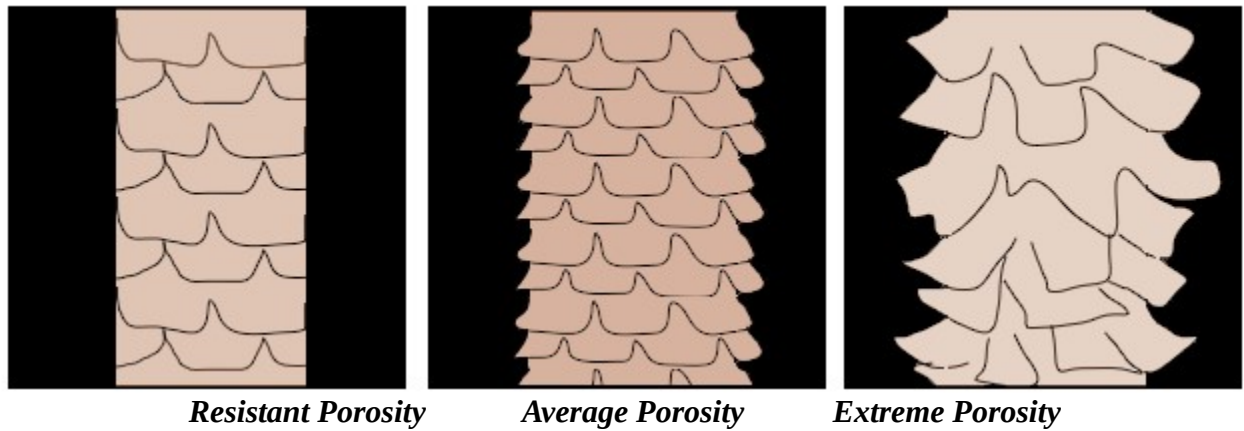
When going darker with a low-level developer, the underlying pigment will not be exposed, but you still must consider the existing tone of the client’s hair when formulating for the desired result.

Hair Condition

When consulting with a client, you must also assess the condition of the hair. There are three main characteristics to look at: **Porosity**, **elasticity**, and **texture**. All three physical factors will influence which products to choose and how to process the colour.

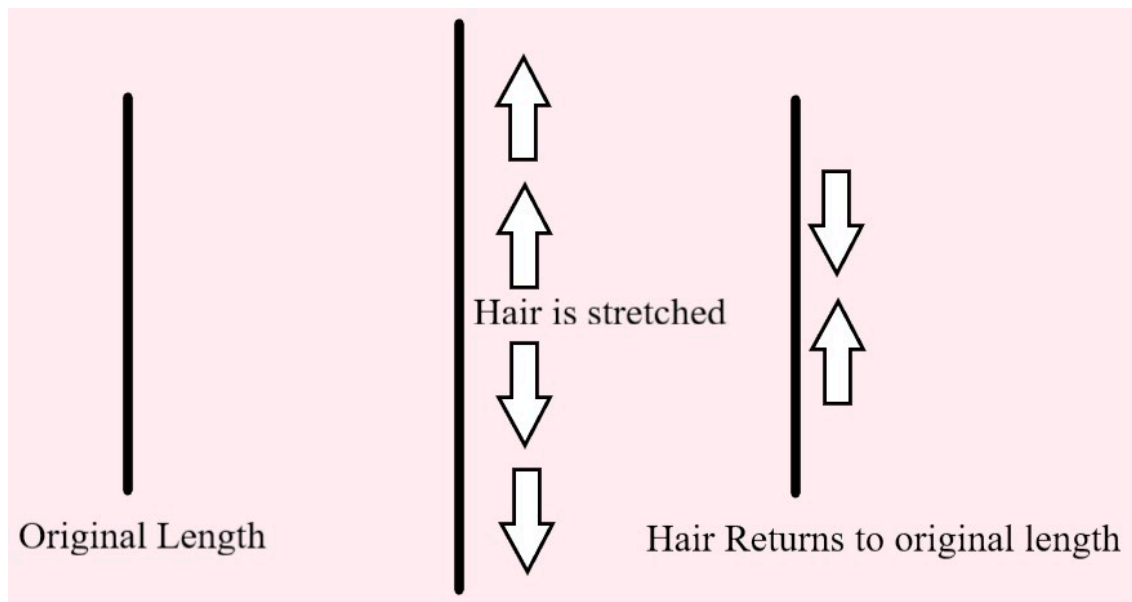
Porosity

Porosity refers to the hair’s ability to absorb moisture or chemicals. Porosity is influenced by how the cuticle scales sit in relation to each other.



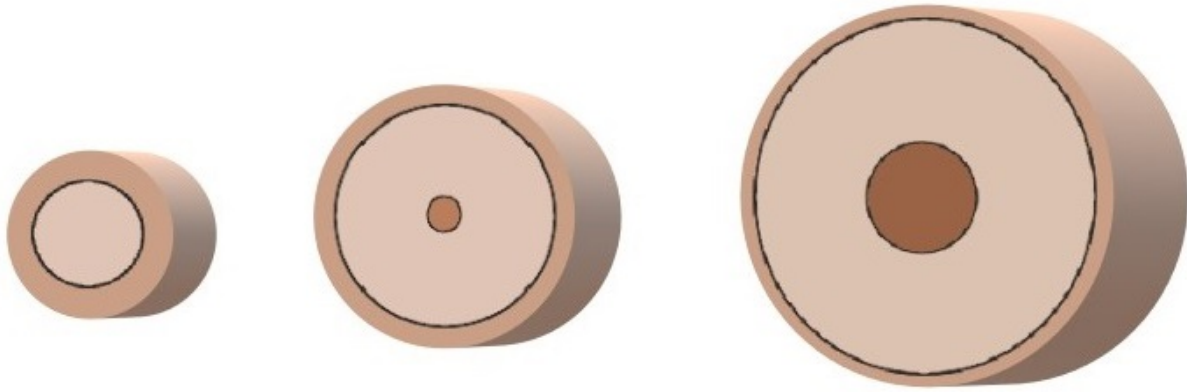
Elasticity

Elasticity is the hair's ability to stretch and return to its original shape without snapping.



Texture

Texture refers to the diameter of the hair strand and is generally described as fine, medium, and coarse.



Fine

Medium

Coarse

With these basics fresh in your mind, let's move on to how the various colouring products work, and how to decide which product is best for the client.

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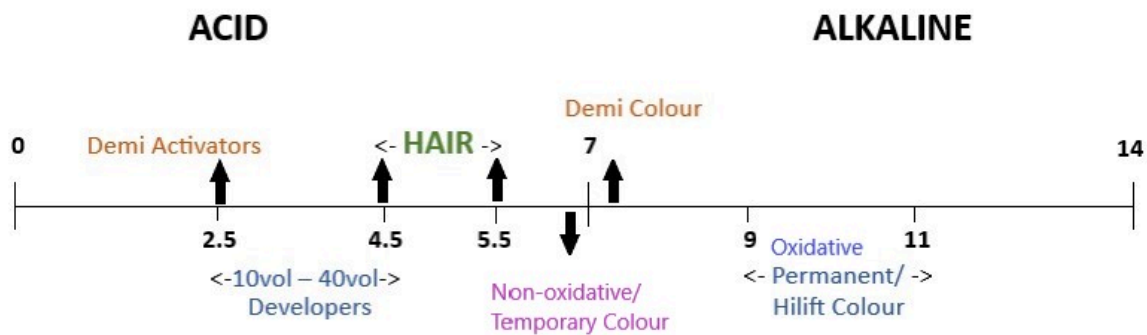
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1.3 How Does Hair Colour Work?

Let's have a closer look at how hair colouring products work, and how they affect the hair strand. This section will serve as a quick review of pH levels, **non-oxidative colour**, and **oxidative colour**.

pH Levels

pH scale is a scale from 0 to 14 that is used to determine the acidity or alkalinity of various substances. This scale is very important when colouring hair.



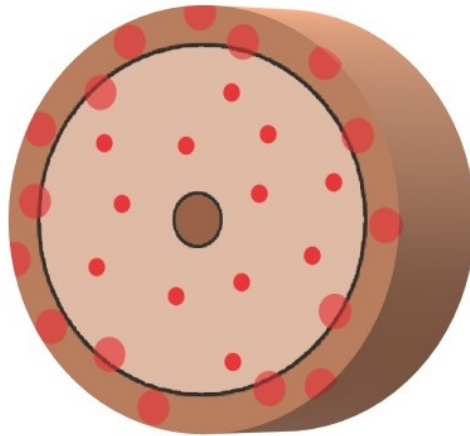
As you will have learned in your Hairstylist Foundations, hair has an acid pH of 4.5–5.5. Anytime a colouring product with a pH higher than 5.5 is applied to the hair, it will soften the cuticle and swell the hair strand, allowing the colour to penetrate.

Oxidative Colours

Hydrogen peroxide developers and demi activators are themselves acidic, so they require the alkalinity of the colour product itself to swell the hair and penetrate the cuticle. Once this action has occurred, the developer will begin to oxidize the colour inside of the hair strand. To clarify, the alkalinity of the hair colour is what causes the cuticle to swell and the acidity of the hydrogen peroxide (H_2O_2) is what causes the colour to oxidize. This **oxidation** turns the colourless molecules into coloured molecules, which explains why colour comes out of the tube white and begins to change colour once mixed with developer in the bowl. This is where the term “oxidative colour” comes from.

Demi-permanent colour resides at a pH of about 6.0–8.0, which will swell the hair strand just enough to penetrate just inside the cuticle layer. Permanent and hi-lift colouring products have a pH between 9.0–11.0 and are alkaline. These alkaline products swell the hair strand further to allow the colour molecules to penetrate through the cuticle layer and into the cortex. The alkaline ingredient in permanent colour is ammonia, or an alternate aniline derivative. Oxidative colour products have a

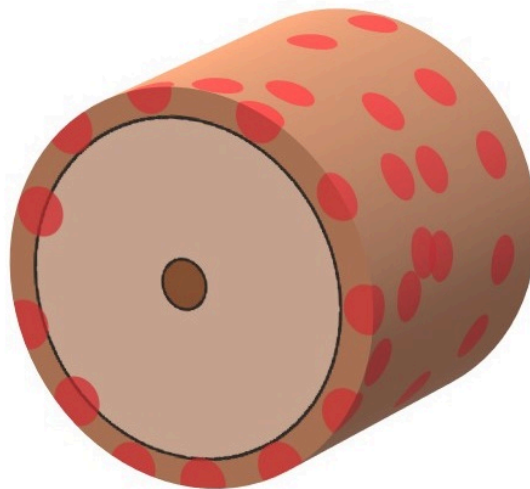
mixture of small and large colour molecules, with the larger sitting near the surface of the cuticle layer and the smaller sitting within the cuticle and cortex layers.



Oxidant colour molecules.

Non-Oxidative Colours

Non-oxidative semi and temporary colouring products generally have an acid pH and therefore do not swell the hair strand as much, which makes them a gentler option. Semi and temporary colours are deposit only and cannot lift hair colour to a lighter level. These products contain large colour molecules which sit on the surface of the cuticle layer.



Non-oxidant colour molecules

Once you have a solid understanding of how and why colour works the way it does, you will be better equipped to apply that knowledge to your colour consultations and colour formulations. In Chapter 2: The Consultation, we will review these principles in more depth.

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Chapter 2 - The Consultation

Learning Objectives

- Identify the appropriate use and content of a client record
- Perform all stages of a thorough client consultation
- Perform a thorough colour assessment

Every successful client interaction begins with a comprehensive consultation. As a stylist, learning to communicate with the client to ensure that you are both on the same page is key. This includes learning to recognize, inform, and educate the client on their particular hair limitations, all within a professional manner.

Remember, there is no such thing as a one-formula-fits-all colour service!

2.1 Client Records

Why keep client records? A client record helps the stylist communicate with the client by tracking changes in lifestyle and hair health, as well as keeping record of previous hair services, including colour formulations, haircut preferences, and retail products.

Most salons will keep an electronic record using their POS (point of sale) system, although some may choose to keep a paper file on each client. An electronic record system can save valuable salon space and is usually tied into each client's booking profile, making it easy to access at the click of a button. Many of these systems can also be accessed outside of the salon through a corresponding smart phone app. POS systems can be programmed to automatically send a text or email with an appointment reminder or even a "Happy Birthday" message to your client!

Whichever method you choose, a client record should contain the following:

- Contact info (phone and email)
- Retail purchase history
- Colour formulation history
- Notes on lifestyle that are relevant to their haircut/colour preferences

Optional, but equally important details to include:

- Referrals
- Birthday
- Personal notes such as how they take their coffee, a recent vacation they took, pets, etc.
These notes help to jog your memory and make your client feel special when you remember!

A well kept client record will keep you organized and prepared, and will add a professional touch to the services that you offer!

Client Record Example

Jane Smith

Email: janesmith@mail.com

Phone: 123-456-7890

Birthday: October 14th

January 3rd, 2019

Formula: 30ml 20 volume + 30ml 5N (All over colour)

Retail: Colour safe shampoo/hairspray

Notes:

- Wash and wear hair routine
- Takes her tea with milk
- Leaving for Jamaica next week for her daughter's wedding!

Referrals:

- Hannah Phillips
- John Summer

2.2 Hair and Scalp Assessment

A thorough client consultation is the basis for a successful hair colouring service. It is your responsibility to assess the characteristics of the hair and scalp and to ask specific questions that will determine your choice of colouring product, technique, and placement.

A new client is not the only client who should be receiving a thorough colour consultation. Hair and scalp concerns will change over time, as will lifestyle and priorities. Remember to treat every client with the same attention to detail, and you will gain a loyal, satisfied clientele.

So where do you start?

The pillars of a great colour consultation are:

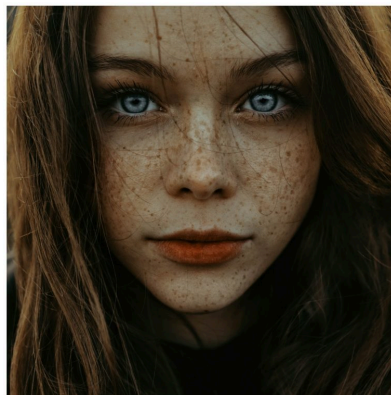
- Hair and scalp assessment
- Colour assessment, including:
 - Lifestyle and budget assessment
 - Strand test and patch test

This section will focus on the hair and scalp assessment.

When assessing the client's hair and scalp, you should be looking for the conditions that will determine your colouring process. Product choice, application technique, processing time, and the final outcome are all dependent on these conditions.

To begin with, assess the hair's **texture**, **porosity**, and **elasticity**.

Texture



When looking at the hair's texture, you need to be aware of the fundamental differences between hair

of fine, medium, and coarse texture as they relate to hair colour. Processing times and the alkalinity of your chosen product will depend largely on texture.

Fine hair has a smaller **cortex** layer and may lack a medulla altogether. This makes fine hair more prone to damage as the cortex is what gives hair its strength and elasticity. Fine hair that has been previously coloured will be more likely to have higher or **extreme porosity**.

Medium textured hair is most likely to behave predictably while colouring. This is because of its **average porosity** and balanced cortex-to-cuticle ratio.

Coarse hair has a wider diameter, which means a larger cortex to cuticle ratio and a strong medulla layer. Coarse hair is less prone to damage but is usually more resistant to the colouring process as it is more likely to have **resistant porosity**.

You can assess texture by look and feel.

Porosity

Porosity refers to the hair's ability to absorb moisture or chemicals. Hair with average porosity behaves predictably and can handle most colour services. However, in cases where hair has resistant or extreme porosity, there are considerations which must be made.

Resistant porosity is the term used when the cuticle layers are tightly packed, which affects the ability of the hair to absorb colour. Alternatively, extreme porosity is the term given to hair that has a damaged cuticle, in which the cuticle scales are raised or missing. A damaged cuticle is usually the result of excessive chemical treatments, or it may be due to environmental damage, such as over exposure to the sun. Hair that is very porous requires greater care. It may absorb colour too intensely, yet it also has the tendency to lose artificial colour more quickly.

Uneven porosity is present when hair displays two or more types of porosity at different areas throughout the head or along the length of the hair strand. Uneven porosity will likely require multiple formulas in order to achieve an even colour result.

To determine porosity, you can assess the hair by running your thumb and forefinger from ends toward the scalp on a small section of the hair. Hair that feels rough or backcombs easily has higher porosity. Hair with resistant porosity will feel smooth.

Video: Porosity Feel Test (https://viuvideos.viu.ca/media/Porosity+Test/0_lp9mfodt)

Note: Video has no sound.



An interactive or media element has been excluded from this version of the text. You can view it online here: <https://opentextbc.ca/haircolourforhairstylistslevel2/?p=49> (<https://opentextbc.ca/haircolourforhairstylistslevel2/?p=49#pb-interactive-content>)

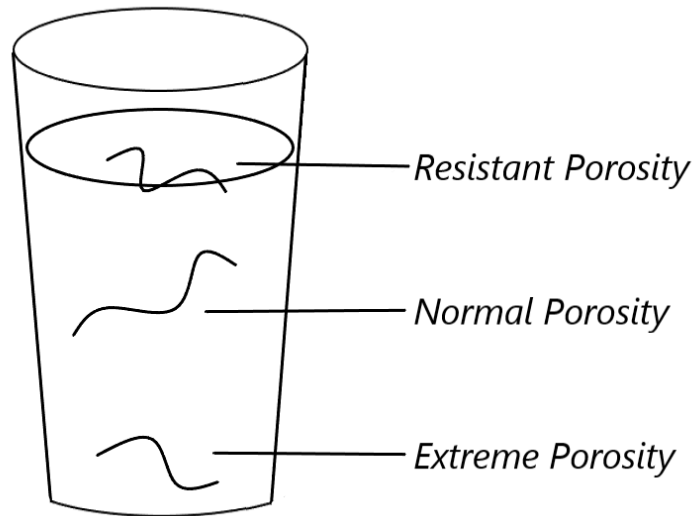
If you are still unsure which porosity is present on your client's hair, you can conduct a quick and simple porosity test.

- Place a strand of *clean* hair into a clear glass of room temperature water.
- Allow the strand to sit in the water for 15 minutes.

Resistant porosity – hair will float to the top of the water.

Normal porosity – hair will float in the middle of the water glass.

Extreme porosity – hair will sink to the bottom of the glass.



Elasticity

Elasticity is the hair's ability to stretch and return to its original shape without snapping. Poor elasticity is a sign of a weakened cortex.

To test the elasticity of your client's hair, you can conduct the following test:

1. Remove a single strand of your client's hair, preferably from the side of the head.
2. Holding it securely in one hand, run your thumbnail and index finger down the hair strand as if curling a ribbon. This will create a series of tight curls.
3. Gently pull the hair taut.
4. After 10 seconds, release the hair and observe whether it has returned to the original curl pattern. If it returns less than 50%, it has poor elasticity.

In the case of poor elasticity, care must be taken to avoid causing additional swelling of the hair while colouring, as breakage will likely result.

Scalp Considerations

In addition to checking the hair's structure, you should also be aware of any scalp irregularities. If you observe any abrasions, do not proceed with the hair colouring service. Inform your client of what you see, and ask that they return once it has healed. It could be something as simple as a bug bite that they scratched too vigorously, but you should avoid applying any chemical solution to an open sore as this could cause discomfort or spread infection.

Other scalp conditions to be on the lookout for are **psoriasis**, **ringworm**, **scabies**, and **head lice**. If any of these conditions are present, refer your client to a physician and discontinue the service.

If your client's scalp is clear of irregularities, be sure to ask the client about skin or scalp sensitivities, especially any that have resulted from previous colouring services, such as itchiness, burning, or discomfort. There are options for colouring products that may be gentler to the scalp, such as one with a low alkalinity. If you believe your client has a sensitivity to ammonia, you may choose to use a product which contains an alternate aniline derivative. An allergy or sensitivity can be determined through a predisposition or patch test (refer to Chapter 2.3 for more information on how to conduct this simple test).

Be aware that some medical conditions and treatments can also affect the hair's structure. A tactful way to inquire about such conditions is to ask if your client has noticed any sudden or recent changes to their hair. Brittle hair or sudden hair loss are just two scenarios which may point to underlying health conditions or treatments.

Once you have observed and gathered all crucial information about your client's hair and scalp, it's time to move on to the colour assessment!

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2.3 Colour Assessment

A good colour consultation covers the following bases:

- Existing **level, tone**, and percentage of grey
- Target level and tone
- **Underlying pigment** at target level (if going lighter).

Below is an example of a colour consultation template:

Existing level and tone	
Grey %	
Target level and tone	
Darker or Lighter?	
Underlying pigment	

Existing Colour

To begin with, you must assess the client's existing level and tone. Consider the hair's **existing colour** as your starting point, which is essential to know before making a plan to achieve the desired result!



Level can be determined by using the natural swatches in your preferred colour line. Hold the natural

swatch against the hair, starting at the root level and proceeding along the hair strand, to assess the closest level match between 1-10.

Remember to look for variances of level in different areas of the head, as well as throughout the length of the hair strand. If there is previous **artificial colour**, it should be fairly simple to spot these discrepancies. It is important to determine whether there is artificial colour present, as this will have an impact on the structure of the hair as well as the colouring process itself. Ask your client to give you an overview of their colour history, including all colour services performed in the previous two years. Having knowledge of your client's colour history will allow you to determine any surprises that may be hiding underneath their current hue.

To assess the tone of the existing hair, hold a section of hair towards the light, and look for the predominant tone where the light hits the hair strand. Use your **colour wheel** and colour manufacturer's swatches to help you determine whether you are seeing a **warm** or **cool** tone. If the hair reflects neither predominantly warm nor cool, you can consider it **neutral**.

If there are multiple areas with different levels and tonalities, such as in a colour correction service, assess each area individually. You may need multiple steps and formulations in such a case. Chapter 7 – Corrective Colour will address this process in more detail.

Grey Percentage

Next step is to determine whether the client's hair contains any grey, and if so, at what percentage. The percentage of grey will affect your formulation. This is because grey hair tends to be more resistant and requires the replacement of missing melanin.

Percent Grey	Developer	Natural shade	Fashion shade
0-30% grey	40ml 20vol	10ml	30ml
30-60% grey	40ml 20vol	20ml	20ml
60-100% grey	40ml 20vol	30ml	10ml

In the chart above, you will see a general mixing ratio for grey coverage. Most colour lines offer distinct mixing ratios and products for varying concentrations of grey hair, but the general rule is that you must include a "natural" shade, along with your fashion shade choice, within your formula. It is these natural colours that contain the balanced amount of pigment to effectively replace the missing melanin in the cortex of the grey hair strand.

Note: 20 volume developer is recommended for optimal grey coverage due to a balance of lift and deposit. However, different colour lines may have different recommendations, so be sure to follow manufacturer's guidelines.

Target Colour

Now that we have assessed our starting point, we can finally move on to the fun task of creating our colour formulas!

Most likely, your client will have a precise idea of the colour result that they would like to achieve, but keep in mind that everyone sees colour differently, and clients can often get the terminology wrong. It is up to you as the professional to ensure that you and the client are on the same page.

Encourage your clients to bring pictures of hair colours that they like. Consider that shadows and reflections in the picture may change the look of the colour drastically throughout the photo, so be sure that you are both looking at the same area of the photo. Use colour swatches to zero in on which tones stand out to your guest. The colour that looks great on the model in the photo may not be right for your client, and swatches held up to the face can help to tactfully show your client some options that may be more flattering for them.

Keep an eye out for photoshopping and lighting tricks. Clients may show you a colour result online that has been altered. Use this as an opportunity to kindly educate your client about how to spot altered photos and why the results may not be achievable. This strategy will help you and your client avoid any future disappointments.

Lighting can also have a drastic affect on colour!



This picture is the same client, on the same day, with the same colour. The picture on the left is outside, in the shade. The picture on the right is outside, in direct sunlight.

It is important to inform the client that although you may be able to achieve a similar outcome, the colour will look different in the salon versus the lighting that is in the photo.

On that note, be sure that the model in the photo has a similar natural level to the client. If your client

shows you a photo of a lightened result on a model with a natural level 7 base, but they have a natural level 4 base, you will need to explain the difference in processing time, underlying pigment, and achievable outcomes. The same is true for a client with existing artificial colour. In this case, it is important that the client know their desired result may not be possible in one appointment. The best way to continue such a service in a positive manner is to create a timeline for your client. Let them know what you can achieve today and what will be done in future appointments in order to achieve their goal. It is always better to under-promise and over-deliver! Be honest and upfront, and you will gain your client's trust and respect.

Once you have decided on a final colour result, there are a couple more factors to consider:

- If you are depositing to a darker level, keep in mind the ways in which hair texture, porosity, and overall structure can affect how the hair will respond to the colour.
- If you are lifting to a lighter level, you will need to choose between an oxidative colour or a bleach product. Remember that **oxidative colour** is formulated to remove natural **melanin** and will not lift artificial colour! If you are working with virgin hair, you will need to consider the underlying pigment at your target level in order to achieve your final result by either **enhancing** or **neutralizing**.

Budget and Lifestyle

Now that you have assessed your client's hair and scalp, and discussed and formulated a plan, you're good to go, right?

Not so fast!

Before you proceed, you must have an honest conversation about the cost of the service that you've planned, as well as the cost of future appointments should they be required in order to meet a specific goal. Budget need not be an awkward topic if you handle it like a professional. After all, you wouldn't hire someone to plan and build your house without knowing the cost up front, and as a professional hair stylist, you should not assume your client will be okay with a charge that is larger than they were expecting!

Break down the cost in a straightforward manner. Include colour services, treatments, and products required to maintain their new look. This gives the client the chance to consider their budget before proceeding and avoids any awkward questions at the end of the appointment. You do not want your guests to leave their service feeling uncomfortable. If a client is hesitant about the cost, this gives you the opportunity to offer them alternative options, such as a partial foil instead of a full head, or breaking down a large service into a series of appointments.

Budget goes hand in hand with lifestyle and priorities. If your guest is a laid-back type who generally only schedules an appointment once or twice a year and is requesting a drastic colour change, be honest and upfront about the cost and frequency of maintaining the new look. If life and responsibilities don't allow for frequent bookings, let the client know how this will affect the look of their hair. Often, a guest that does not visit the salon regularly ends up requiring more work and spending more money due to excessive regrowth or colour fade.

Patch Test and Strand Test

Now that we have covered all our bases, we can proceed with making our client beautiful, right? Yes, **unless** there are conditions that call for one more step.

A predisposition, or **patch test**, is recommended to determine whether a client has sensitivities or allergies to a colour product. This is especially important when a client has complained of discomfort in the past or if they are new to having their hair coloured.

A patch test should be conducted 24–48 hours prior to their service and is done by applying a small amount of colour product to the inside of the elbow and behind the ear. If there is any evidence of redness, swelling or discomfort such as itching, burning, blisters, or respiratory problems, this would be considered a *positive* reaction, and may require medical assistance. Do not proceed with the service!

A **strand test** allows us to test a colour formula directly on the hair in uncertain conditions and is advisable in the following circumstances:

1. **You are lifting an artificial colour with a bleach product.** In this case, a strand test will tell you whether the hair will lift evenly, what level it will lift to, and what underlying pigment will be exposed. This information is crucial in order to either choose the appropriate strength of product, or, shift gears and opt for an alternative goal. If your client is hoping for a neutral level 9 but their hair can only be safely lifted to a level 7, then you now have a visual to help guide your client's decision. For example, in this case you could find a level 7 end result that they are happy with, or you could create or adapt your long-term plan for subsequent appointments.
2. **You have assessed the hair's porosity as either extreme, uneven or resistant, and want to ensure that you can successfully create an ideal result.** Hair with extreme porosity is more at risk for damage and tends to process darker or soak up cool tones. Uneven porosity usually requires multiple formulas. Resistant porosity generally processes lighter than intended. It is advisable to test your formula to see how the hair will look and feel before committing to colouring the whole head. This extra step will avoid having the result turn out poorly. A strand test is conducted by applying your chosen formula(s) to a strand of hair, usually in a concealed area of the head. If you are dealing with multiple hair conditions and formulas, you should do a strand test in each area of concern. Apply and process your test formula according to manufacturers guidelines to ensure you will get an accurate result. Then, assess the results and work together with the client to decide on a course of action.

Congratulations! Your consultation is complete and you have gathered all the information necessary to perform a successful colour service!

In Chapter 3: Product Selection and Formulation, you will learn how to apply this information to determine your choice of colouring product and to formulate your colour, In addition, we will review the various tools used for a variety of colour techniques and services.

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Chapter 3 - Product Selection and Formulation

Learning Objectives

- Compare and contrast oxidative and non-oxidative coloring products
- Select an appropriate colouring product based on hair analysis and consultation
- Utilize the colour wheel to neutralize or enhance existing tone
- Select the ideal tools and supplies to perform various application techniques

In this chapter, you will learn about the different product options for lightening and darkening hair while focusing on the hair texture considerations that should be factored into your product selection. You will also review the various tools and supplies used for different colouring techniques.

3.1 Colouring Products

Now comes time to choose a colouring product to use. But first, recap the necessary steps that got you to this point!

1. Assess hair and scalp
 - **Porosity, elasticity** and **texture**
 - Existing **level** and **tone**
 - Percentage of grey
2. Perform a thorough client consultation
 - Determine target level and tone
 - Discuss maintenance, commitment, and budget

Next, you must:

3. Select an appropriate colouring product based on:
 - Lift or deposit
 - Grey coverage
 - Hair assessment
 - Lasting ability
 - Application technique
4. Consider existing tone/ underlying pigment
 - **Enhance** or **neutralize**
5. Select appropriate tools and supplies for selected application technique

Depositing, or Going Darker

Let's first compare options for depositing, or going darker:

Options for Depositing (Going Darker)

	Oxidative		Non-oxidative	
	Permanent	Demi-permanent	Semi-permanent	Temporary
pH	9–11 +	6–9	6–8	6–8
Regrowth	Yes	Subtle	No	No
Grey hair	Full coverage	Blending	Light blending	No
Lasting ability*	Until colour grows out	4–6 weeks	2–4 weeks	Until hair is shampooed
Mixing ratio ¹	1:1	2:1	No mixing required	No mixing required
Processing time ²	30–40 minutes	20–30 minutes	20–30 minutes	0–20 minutes
Uses/Ideal hair types	<ul style="list-style-type: none"> • Grey coverage • Course hair • Resistant porosity 	<ul style="list-style-type: none"> • Grey blending • Fine – coarse hair • Normal – porous 	<ul style="list-style-type: none"> • Light grey blending • Fine – medium hair • Normal – compromised 	<ul style="list-style-type: none"> • Vivid colours • Fast and fun colour change • All hair types • May stain porous hair
Techniques	<ul style="list-style-type: none"> • Root retouch • Global colour • Lowlights • Shadow root • Drop root • Toning with base break 	<ul style="list-style-type: none"> • Root retouch • Global colour • Colour balance • Lowlights • Shadow root • Drop root • Toning 	<ul style="list-style-type: none"> • Root retouch • Global colour • Colour balance • Toning • Vivid/pastel tones 	<ul style="list-style-type: none"> • Vivid/pastel tones • Fashion placement

*Lasting ability is calculated under ideal circumstances. Durability can be affected by:

- Porosity – hair that is overly porous tends to lose artificial colour and fade more quickly.
- Products – shampoos and products that are not formulated for coloured hair may cause fading. Hair that is frequently heat styled without heat protective products will also fade more quickly.
- Environment – factors such as sun exposure, pollution and poor water quality will all have an adverse effect on colour durability.

Some additional factors to think about when considering hair type and condition:

Depositing colour on healthy, medium textured hair is usually a pretty straightforward and predictable process. This is because the condition of this hair type does not generally have any porosity concerns,

1. Mixing ratios may vary. Follow manufacturers guidelines.

2. Processing time may vary. Follow manufacturer's guidelines.

which means you may follow the manufacturers guidelines for your colour line to achieve optimal results.

Fine Hair Considerations

When depositing colour/going darker on fine hair:

- Fine hair is generally not resistant to absorbing colour. Choose a colouring product with a lower pH, such as Semi or Demi-Permanent, to maintain the integrity of the hair strand.
- Fine hair tends to process darker than the intended level, especially if **extreme porosity** is present. It is recommended to formulate a colour that is one level lighter than the desired level.
- Fine hair that has been previously treated with oxidative colour products is more likely to be highly porous. A colouring product that is too alkaline will swell the already compromised hair strand and result in breakage or further damage.

Coarse Hair Considerations

When depositing colour/ going darker on coarse hair:

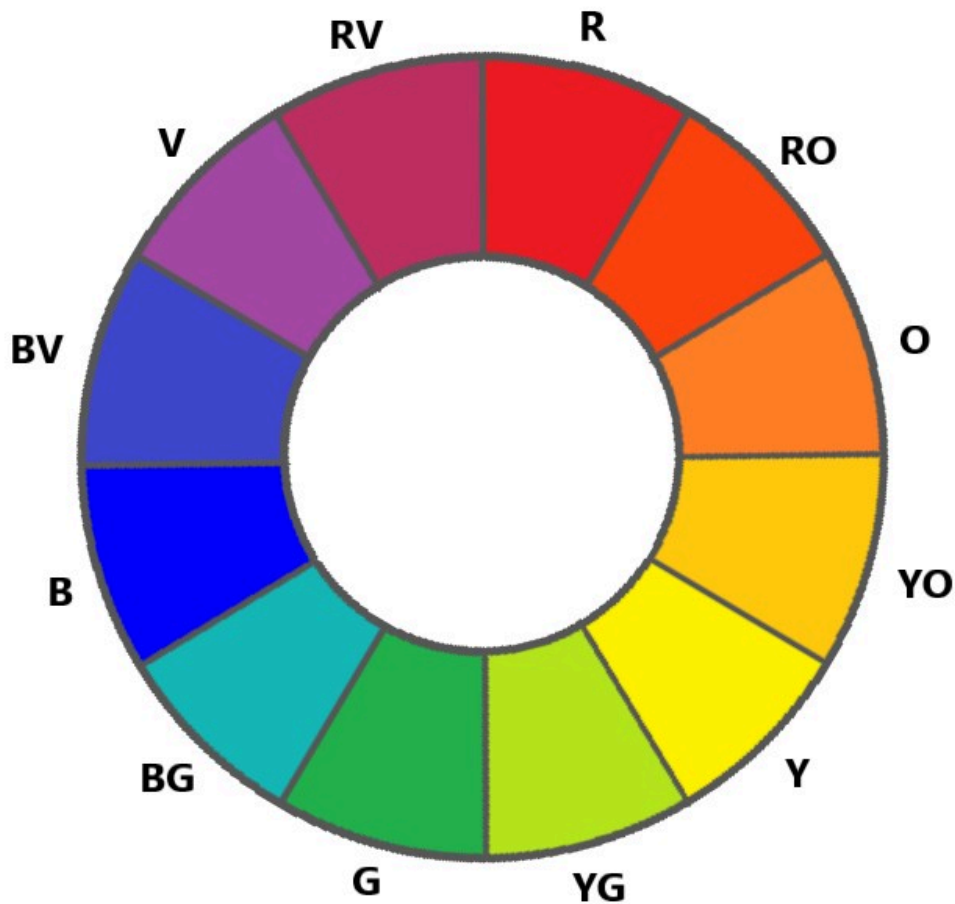
- Coarse hair with **resistant porosity** requires a higher level of developer, and a higher amount of ammonia within the formula in order to swell the hair strand and open up the cuticle layers effectively. Opt for an **oxidative colour**, with a 10 or 20vol developer. A **non-oxidative colour** product, such as a semi permanent, may not process effectively.
- Remember that coarse hair tends to process one level lighter than the intended level, especially if resistant porosity is also present. It is recommended to formulate a colour that is one level darker than the desired level.

Hair with **uneven porosity** must be formulated carefully, as each differing section will absorb and process colour differently. Generally speaking, more than one colour formula is advised in this case in order to achieve an even end result.

Existing Colour Considerations

Because the final colour result is the result of **existing colour** + **artificial colour**, you should take into account the existing tone of the hair. If the client is a copper-tinged level 6 to begin with and would like to be a level 5, we will formulate differently depending on whether they desire a **warm** result, a **neutral** result, or a **cool** result.

This is where the **Colour wheel** comes in handy.



If the client would like a warm result, formulate with the warm side of the colour wheel, by adding some gold, copper, or red to the formula to enhance the warm tone present in the hair.

If you want to neutralize the tone of the hair while you deposit, use the colour wheel to choose which corrective pigment to add to your formula. Remember that **complimentary colours**, colours that sit opposite on the colour wheel, neutralize each other. In the case of the copper-tinged level 6 client that would like to be a level 5, you would add some blue to your formula, as that is the complimentary shade used to neutralize orange.

If this client would like a cool result, you could add more of a blue-green tone to the formula, to over tone it. Keep in mind that this may create a “muddy” or dull appearance, as warmth in the hair is what reflects light and gives it shine. In cases of extreme porosity, care must be taken to not add too much of the cool tone to your colour formula, as porous hair has a tendency to absorb cool tones and reject warmth.

Lifting, or Lightening

Now let’s compare the options for lifting or lightening hair.

Options for Lifting or Lightening Hair

	Oxidative Colour	Bleach	
	Permanent or high-lift	On-scalp Cream or oil	Off-scalp Powder or clay
pH	9–11	~9 ³	~10–11 ⁴
Levels of lift	1–4 (on virgin hair)	4+ (on virgin or coloured hair)	4+ (On virgin or coloured hair)
Mixing ratio ⁵	1:1 permanent 2:1 high-lift	1:1–3:1	1:1–3:1
Processing time ⁶	30–50 minutes	Up to 1 hour	Up to 1 hour Max lift speed
Conditioning agents	n/a	Yes	No
Techniques	<ul style="list-style-type: none"> • Root retouch • Global colour • Highlights • Base break On virgin hair	<ul style="list-style-type: none"> • Root retouch • Global lightening • Double-process blonde • Highlights • Gentle brightening of previous blonding services 	<ul style="list-style-type: none"> • Lightening of mids-ends • Highlights • Balayage • Ombré • Hand painting

Some additional factors to think about when considering hair type and condition:

Fine Hair Considerations

When lifting/going lighter on fine hair:

- Factor in any structural effects that previous colour services have had on the hair, such as a higher porosity or weakened state. A lightening product that is too alkaline will swell the already compromised hair strand and result in breakage or further damage.
- If using oxidative hair colour, choose the lowest level of **developer** needed to achieve desired lift.
- If using a bleach product, use a low level developer, such as 10 or 20vol. Most colour lines

3. pH of lightener will depend on mixing ratio/consistency

4. pH of lightener will depend on mixing ratio/consistency

5. Mixing ratios may vary. Follow manufacturer's guidelines.

6. Processing time may vary. Follow manufacturer's guidelines.

will offer a gentler bleach option as well. If many levels of lift are required, it is best to use a low level developer for a longer period of time. Note: You may also opt to use a higher developer to bleach ratio, as this will reduce the pH of the lightening product.

Coarse Hair Considerations

When lifting colour/ going lighter on coarse hair:

- Whether using an oxidative hair colour or a bleaching product, you may need to bump up your developer to achieve the required lift. For example, if lifting 2 levels with an oxidative colour, opt for 30volume. This will increase the alkalinity to allow for adequate swelling of the hair strand and better penetration of colour into the **cortex**. This is especially important when dealing with resistant porosity.
- Coarse hair has a larger diameter, and a larger cortex, which results in a higher **melanin** concentration. For this reason, coarse hair will generally take longer to lighten, and will expose more **underlying pigment** as you lift.

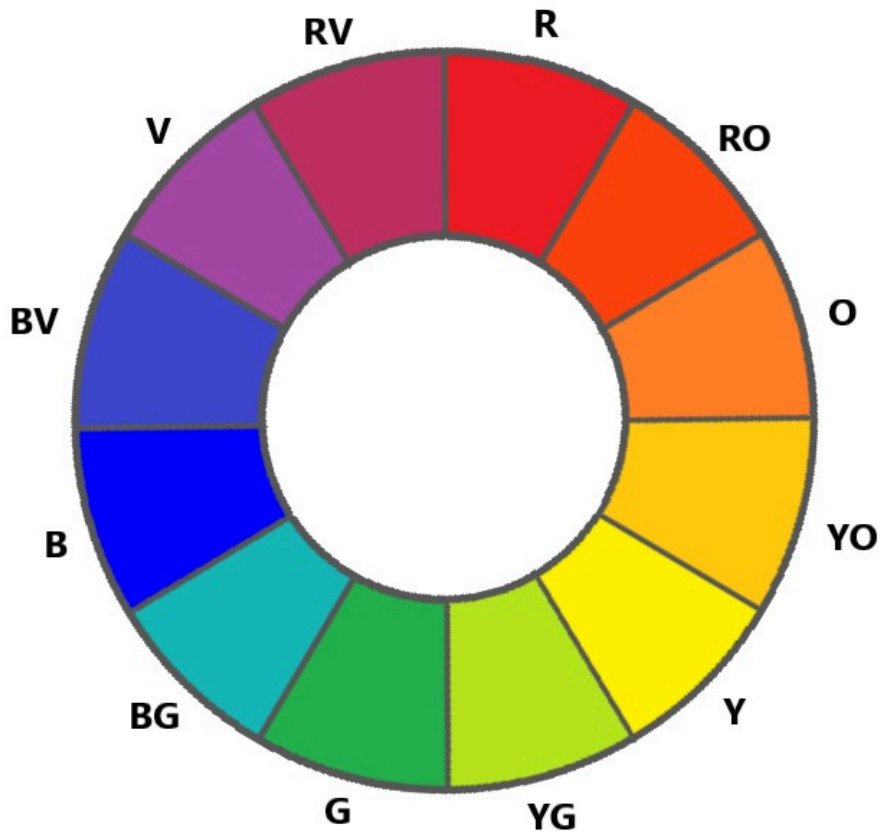
Underlying Pigment Considerations

Anytime you are lightening, you must be conscious of the ten levels of lift, and the underlying pigment that is exposed as the hair lightens.



When formulating, you must determine the underlying pigment at your *target* level. For example, if lifting from a level 4 to a level 6, the tone that must be considered is orange.

So what will you do with that orange? Do you want to *enhance* or *neutralize* it? Remember, this decision depends on your desired result. The second most important tool, along with the underlying pigment chart, is the colour wheel. This is where you will find pertinent information to help you formulate with consideration to the underlying pigment.



Enhancing the Underlying Pigment

If the desired result is warm-toned, as in golden, copper, or red, you can enhance the exposed underlying pigment to create a beautiful warm or vivid result. Once you determine the underlying pigment that will be exposed, choose a tone from the same side of the colour wheel to add to your formula. The more warmth you add, the brighter and more vivid the result. If you are looking for a more natural and subtle warm effect, add less. Alternatively, use a neutral natural colour, and let the exposed pigment do all the work.

A general guideline:

	Natural	Warm tone
Ultra vibrant	10 ml	30 ml
Vibrant natural	20 ml	20 ml
Natural warm	30-40ml	0-10 ml

Note: The above chart does not account for porosity or hair texture concerns, yet it provides a basic guideline to help you visualize an appropriate ratio of natural-to-warm colour tones depending on

your desired result.

Neutralizing the Underlying Pigment

If the desired result is neutral or cool toned, you will need to neutralize or overcorrect the exposed underlying pigment. You can do this by selecting a tone from the opposite side of the colour wheel to add to your formula. If your goal is a neutral result, add the complimentary tone. For example, neutralize yellow with some violet in your colour formula.

The amount of correcting pigment that you add to your formula will vary by level. Note: Generally, levels 3–6 contain a stronger underlying pigment, and will need more neutralizing pigment than lighter levels 7–10.

If you want an ash or cool tone result, select a complimentary tone appropriate for a darker level. For example, neutralize and overcorrect yellow with blue-violet or blue. Keep in mind that over correcting may create a “muddy” or dull result, as warmth in the hair is what reflects light and adds shine.

When using bleach for a double process technique, your corrective tones will be added to the toner, depending on which level you have lifted to.

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3.2 Colouring Tools and Supplies

Selecting the correct tools and supplies for the technique that you choose will help you create the best result possible.

Let's summarize the various colour tools and their best uses.

- **Gloves**
- **Colour bowl**
- **Colour bottle**
- **Whisk**
- **Colour keys**
- **Weigh scale**
- **Timer**
- **Colour cape**
- **Towels**
- **Foil comb with rat tail**
 - For foil application and slicing/weaving
- **Teasing comb**
 - To create seamless blends in your hair painting techniques
- **Balayage board**
 - Without comb – creates a sturdy surface for hair painting
 - With comb – holds backcombing in place while creating a sturdy surface for hair painting
- **Hair clips**
- **Cushion clips**
 - For use with hair separators to hold in place
- **Cotton**
 - To keep sections separate when hair separators are not ideal
- **Tint brushes**
 - Standard 2-inch flat tipped
 - Ideal for root touches and foiling
 - Stiffer brush for more precise saturation at root or in foil

- Wide standard 3–4-inch flat tipped
 - Ideal for foiling, balayage, all over toner/colour application.
 - More surface area/ more efficient saturation than 2” standard
- Slanted tip or V-angled brush
 - Ideal for precision hair painting
- Feather-soft tint brushes
 - Ideal for hair painting
 - Achieve maximum glide with better product transference to hair
- Balayage brush
 - Ideal for balayage / ombré saturation
 - Maximum product load
 - Achieve maximum saturation
 - Usually have feather soft bristles for glide and product transference
- Hair Separators:

Hair Separators

	Ideal Colour Techniques	Ideal Colour Products	Pros	Cons	Re-usable?
Foil	<ul style="list-style-type: none"> • Highlighting • Lowlighting • Weaves • Slices • Backcombing techniques 	<ul style="list-style-type: none"> • Bleach • Colour 	<ul style="list-style-type: none"> • Neat/compact • Insulating for maximum processing • Can apply product close to scalp 	<ul style="list-style-type: none"> • May slip • May rip • Must open to observe processing 	NO
Cling Film	<ul style="list-style-type: none"> • Balayage • Ombré • Backcombing techniques 	<ul style="list-style-type: none"> • Bleach • Colour 	<ul style="list-style-type: none"> • Cost effective • Non-slip • Transparent to see placement and processing progress • Keeps product moist without insulating 	<ul style="list-style-type: none"> • Hard to work with • Not efficient/ must rip as you work • Difficult to remove individual sections 	NO
No-stick Film	<ul style="list-style-type: none"> • Balayage • Ombré • Backcombing techniques 	<ul style="list-style-type: none"> • Bleach • Colour 	<ul style="list-style-type: none"> • Cost effective • Non-slip • Transparent to see placement and processing progress • Keeps product moist without insulating • Pre-ripped sheets • Easy to use 	<ul style="list-style-type: none"> • Difficult to remove individual sections 	NO

<p>Thermal Strips</p>	<ul style="list-style-type: none"> • Highlighting • Lowlighting • Weaves • Slices 	<ul style="list-style-type: none"> • Bleach • Colour • Heavy direct-dye product 	<ul style="list-style-type: none"> • Lightweight • Sturdy • Non-slip • Insulating • Can apply product close to scalp • Pre-ripped • Easy and efficient to use • Easy to remove 	<ul style="list-style-type: none"> • Must open to view processing progress 	<p>YES</p>
<p>Meche</p>	<ul style="list-style-type: none"> • Balayage • Ombré • Backcombing techniques 	<ul style="list-style-type: none"> • Bleach • Colour • Heavy direct-dye product 	<ul style="list-style-type: none"> • Non-slip • Transparent to see placement and processing progress • Keeps product moist without insulating • Pre-ripped • Easy and efficient to use • Easy to remove 	<ul style="list-style-type: none"> • May slip • Not ideal for small sections 	<p>YES</p>

Chapter 4 - Lightening Virgin Hair and Regrowth

Learning Objectives

- Determine the best lightening product based on hair and scalp assessment
- Develop formulations for a global virgin lightening service using oxidative colour products
- Perform the steps of a global virgin lightening service using oxidative colour products
- Develop formulations for a global virgin lightening service using bleach products
- Perform the steps of a global virgin lightening service using bleach products
- Develop formulations for a global toning service
- Perform the steps of a global toning service

Now that you have covered the basics of colour theory, trichology, and formulating, you are ready to learn specifically about lightening virgin hair.

What do we mean when we use the term “virgin hair”?

Virgin hair is hair that has never been chemically treated with products such as colour, perms, or relaxers. It is often the easiest hair to lighten, as it is generally healthy in terms of elasticity and porosity, and it does not require the extra challenge of lifting through artificial pigment.

4.1 Hair and Scalp Assessment

As with any service, when performing a virgin lightening service, you must begin with an assessment of the hair and scalp, followed by a detailed colour assessment.

Texture, Porosity, and Elasticity

As detailed in Chapter 3, **texture**, **porosity**, and **elasticity** will affect your choice of colouring product when lightening hair.

To review:

Fine textured hair is generally less resistant to the lightening process due to an increased chance of **high porosity**. In the case of virgin hair, this porosity may be caused by heat styling or environmental factors. Fine hair also lacks a substantial **cortex** layer which makes it more prone to damage, as the cortex is what gives hair its flexibility and strength. This puts fine hair at greater risk of poor elasticity and breakage. If your client has fine hair that has poor elasticity, it is a good practice to perform strengthening treatments prior to the lightening service.

Recommendations for Lightening Fine Hair

- Use the lowest volume of **developer** possible to achieve your desired lift
- Choose a low alkaline lightening product to avoid excessive swelling of the delicate hair strand
- Monitor the lightening process carefully to avoid over-processing and damaging the hair

Coarse textured hair is more likely to have **resistant porosity**, which can make it tougher to lighten. Coarse hair has a substantial cortex layer which provides the hair strand with the strength and flexibility to withstand the lightening process with less chance of damage; however, this larger cortex also means that there is more **melanin** to diffuse, usually resulting in a stronger **underlying pigment**.

Recommendations for Lightening Coarse Hair

- If working with resistant porosity, bump up your developer to achieve the desired lift
- Choose a higher alkaline lightening product to swell the hair strand effectively
- A second application may be required to reach the desired level of lift when using a bleach product
- Monitor the lightening process to avoid over-processing and damaging the hair

Scalp Considerations

As you perform your consultation, you should be checking the scalp for any irregularities or abrasions. Remember to ask your client about whether they have experienced any scalp sensitivity in the past.

Colour Assessment

Once you have assessed the hair and scalp condition, perform a thorough colour consultation to determine the following:

- a. Existing **level** and **tone**
- b. Target level and tone
- c. Levels of lift required

The amount of lift required will help us determine whether we will use an **oxidative colour product** or a bleach product.

Oxidative colour and high-lift have the ability to lift up to 4 levels. Bleach products have the ability to lift more than 4 levels.

Note: The amount of lift that can be achieved with either option depends on the structure and condition of the hair.

Final step is a **strand test** and **patch test** – especially important when your client is new to colour!

Next, let's look at oxidative colour products and bleaching products individually.

4.2 Oxidative Permanent and High-Lift

Characteristics of oxidative permanent and high-lift colour products:

- Ability to lift up to 4 levels
- Lift and deposit tone in one process
- One formula will produce an even result throughout the hair

Formulating

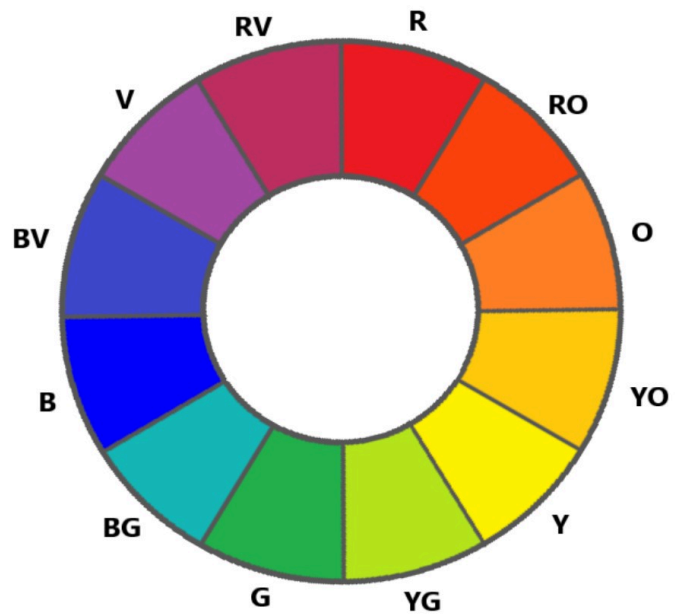
Below is a review of how many levels of lift can generally be expected with each volume of developer:

	Levels of lift	
	Permanent 1:1 mixing ratio	High-lift 2:1 mixing ratio
10vol	0–1	/
20vol	1–2	/
30vol	2–3	2–3
40vol	3–4	3–4

Note: High-lift colouring products are higher in alkalinity and are designed to achieve lighter colour results. These are recommended to be used with either 30-volume or 40-volume developers. Due to their higher alkalinity, these are a great option for hair with resistant porosity.

Let's summarize what we have learned so far about formulating for lift by looking at some examples of oxidative colour formulas and using the underlying pigment chart and **colour wheel** below:

Level	Underlying Pigment	Neutralizing Tone
10	Paletst yellow	Violet
9	Pale Yellow	Violet
8	Yellow	Violet
7	Yellow - Orange	Blue - Violet
6	Orange	Blue
5	Red - Orange	Blue - Green
4	Red	Green
3	Red - Brown	Green
2	Dark Red - Brown	Green
1	Black	



Example 1

Hair and colour assessment:

- Existing level (XL) and tone: 5 neutral
- Target level (TL) and tone: 7 natural copper
- Levels of lift required: 2*
- Underlying Pigment (at TL): yellow-orange
- Neutralize or enhance?: Enhance
- Porosity: average
- Elasticity: good

Fine hair formula: 40ml 20vol* + 20ml 7 Natural + 20ml 7 Copper

*20vol lifts 1–2 levels

Explanation: When working with fine hair, use the minimum volume of developer required to achieve the desired levels of lift. Copper will enhance the yellow-orange underlying pigment, and the natural will balance the warmth for a softer result.

Coarse hair formula: 40ml 30vol* + 25ml 7 Natural + 15ml 7 Copper

*30vol lifts 2–3 levels

Explanation: When working with coarse hair, use the maximum volume of developer required to achieve the desired levels of lift. Copper will **enhance** the yellow-orange underlying pigment, and the natural will balance the warmth for a softer result.

Note: For the course-hair formula, the amount of natural has increased slightly in relation to the amount of copper. This is because coarse hair generally has a stronger underlying pigment and therefore does not need as much enhancing tone.

Example 2

Hair and colour assessment:

- Existing level (XL) and tone: 5 neutral
- Target level (TL) and tone: 8 neutral
- Underlying Pigment (at TL): yellow
- Levels of lift required: 3*
- Neutralize or enhance?: Neutralize
- Texture: Fine*
- Porosity: Extreme*
- Elasticity: Good

Fine Hair Formula: 40ml 30vol* + 30ml 8 Natural + 10ml 8 Violet

*30vol lifts 2–3 levels

Explanation: When working with fine hair, use the lowest volume of developer required to achieve the desired levels of lift. Violet will neutralize the yellow underlying pigment (complimentary tones). Because the hair is fine and porous, the hair will more readily absorb the cool tone. Using primarily natural in the formula will soften and dilute the violet tone to prevent an over-toned result.

Example 3

Hair and colour assessment:

- Existing level (XL) and tone: 5 neutral
- Target level (TL) and tone: 8 neutral
- Levels of lift required: 3*
- Underlying Pigment (at TL): yellow
- Neutralize or enhance?: Neutralize
- Texture: Coarse*
- Porosity: Resistant*
- Elasticity: Good

Coarse Hair Formula: 40ml 40vol* + 40ml 8 Violet

*40vol lifts 3–4 levels

Explanation: When working with resistant coarse hair, use the higher volume of developer required to achieve the desired levels of lift. Violet will neutralize the yellow underlying pigment (complimentary tones). Because the hair is coarse, the underlying yellow pigment is likely to be quite strong. In this circumstance, adding a natural into the formula would dilute the necessary neutralizing tone, resulting in a warm outcome.

Next up, let's look at a complete virgin lightening process using oxidative colour.

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4.3 Application Process: Global Lightening Service - Oxidative Colour

Tools and Supplies Required

- Colour safe gloves
- Colour cape
- Towels
- Hair clips
- Brush and Comb
- Colour Key
- Colour Bowl
- Weigh Scale
- Tint Brushes-
 - Standard 2 inch
 - Wide standard 3–4 inch (optional)
- Cotton (optional)
- Foil/Balayage Board (optional)

Application

Prepare your client for their **oxidative colour** lightening service by performing the following procedure:

1. Drape your client using towels and a colour cape. First, place a towel around the client's shoulders. Then, fasten the colour cape loosely, allowing just enough room to tuck a towel into the outside of the cape. This provides a surface to lay the coloured hair on, which will keep the colour cape clean. If your client has very long hair, tuck the outside towel in so that it lays lengthwise (see following photo).



2. Ensure that the hair is fully dry.
3. Brush through the hair to remove tangles
4. Section and divide the hair into 4 quadrants using your comb and clips. Section nose to nape, then ear to ear.

Before we get into the application of the oxidative colour, let's pause for a moment to review the different areas, or zones, of the hair. Keep in mind that we are referring to **virgin hair** in this chapter, so the following does not account for any chemical influences.



- Zone 1, or the regrowth area, is the area of the hair that sits within the first $\frac{1}{2}$ to $\frac{3}{4}$ inches from the scalp. This zone is also referred to as the “Hot Zone” when colouring, as the heat

from the scalp will encourage the hair to process more quickly.

- Zone 2, or the mid-lengths, contains the segment of hair that sits between Zone 1 and the more porous ends. Generally, this hair will have a healthier structure and will process the most predictably according to manufacturers guidelines.
- Zone 3, or the ends, generally contains the most porous hair on the head. Not everyone will have a Zone 3. This is the case with shorter hair or hair that has an even **average porosity** from roots to ends. In instances where the porosity is more extreme through the ends, this hair will process more quickly and is more likely to soak up any cool tones added to the colour formula.

Take a moment to consider in which zone you would begin your application, based on the information above...

Once you have prepared the client for their colour service, gathered your tools and supplies, and mixed up your oxidative colour formula:

1. Don your gloves
2. Begin your application in the darkest sections. Generally, this will be the back two quadrants, as the hair around the face tends to be lighter and easier to lift.
3. Beginning at the bottom of the quadrant and working upwards, use $\frac{1}{4}$ inch subsections/partings and apply your colour **only to Zone 2**, $\frac{1}{2}$ inch to $\frac{3}{4}$ inch away from the scalp, and through the mid-lengths. We begin in Zone 2 as this area is typically slower to process than Zones 1 and 3. You may choose to use your wider tint brush for this area for maximum efficiency and saturation. Be sure to saturate the hair fully on either side of the subsection/parting to ensure an even colour result. As mentioned above, not every client will have a Zone 3. If this is the case, apply the product through to the ends in this step. You may find it helpful to use a foil/balayage board to support the subsection that you are applying colour to. This provides a sturdy surface to allow ease of saturation, and keeps your hands free of product, preventing transfer onto Zones 1 or 3. If you prefer to use your hand to support the subsection, keep a towel nearby to wipe your hands periodically throughout the application.
4. Drop the hair without pressing it into the previous section to ensure that the regrowth remains free of product. If necessary, you may place a length of cotton between each subsection/parting. Continue this application throughout your four quadrants.
5. Once the colour had been fully applied to the mid-lengths, beginning in the same back quadrant as before, begin to apply your colour to the regrowth area, **Zone 1**, working in the same $\frac{1}{4}$ inch subsections/partings. Begin the application in the top of the quadrant, and work downwards towards the bottom. It is a good idea to switch to your standard 2 inch tint brush at this time for maximum neatness and control. Be sure to saturate the hair fully on either side of your subsections/partings.
6. Lastly, using your wide tint brush, apply your colour formula through the more porous ends if

a **Zone 3** is present.

7. Allow the hair to process at room temperature. A helpful tip to avoid colour transfer to clothing and to keep things neat: fold the bottom edge of the outer draping towel up and secure at the sides with clips to create a neat little package (see following photo).



By applying your colour procedurally, as in steps 1–7, you will achieve an even colour result from roots to ends. Remember, the roots will process faster than the mid-lengths. The ends, if porous, may process even more quickly and begin to look muddy if **cool** tones are present in the colour formula.

Video: Global Virgin Application – Oxidative Colour (https://viuvideos.viu.ca/media/Virgin+Oxidative+Application/0_dhkbspqg)

Note: Video has no sound.



An interactive or media element has been excluded from this version of the text. You can view it online here: <https://opentextbc.ca/haircolourforhairstylistslevel2/?p=63> (<https://opentextbc.ca/haircolourforhairstylistslevel2/?p=63#pb-interactive-content>)

Processing

When processing an oxidative tint, the general timing is:

- Oxidative Permanent – 30–40 minutes
- Permanent High-Lift – 40–50 minutes

Note: Always follow manufacturers guidelines when timing your colour process.

Be sure to process for the full recommended time in order to allow the colour to lift adequately and deposit the associated tone effectively. Rinsing too early may result in a brassy or warm result, as the tone will not deposit fully and the underlying pigment will be left somewhat exposed. (The exception to this is when applying to ends with extreme porosity.)

Oxidative colour is non-progressive, which means that it will stop processing on its own. For this reason there is no need to observe the decolorization process itself, but please be sure to check in with your client regarding scalp sensitivity or discomfort. A slight tingle may be felt as the colour oxidizes, but a burning sensation is not normal, and the colour should be removed immediately in such a case.

Colour Removal

Once the colour has processed fully, bring your client to the sink:

1. Don your gloves.
2. Prior to adding water to the hair, emulsify the hairline by massaging with your dry, gloved fingertips in a circular motion. This will begin to lift the colour off of the skin to avoid staining.
3. Rinse the hair with warm water until the water runs clear. The hair must be fully rinsed to avoid scalp irritation. This is especially important in the nape and around the ears, which can be tougher to rinse effectively.
4. Shampoo twice with a colour-safe shampoo and follow with a suitable conditioner.
5. Style as desired, and don't forget to educate your client on the best products to care for their coloured hair!

Retouch Schedule

As with any service, it is up to you to recommend an appointment schedule that will best maintain your client's hair.

A global lightening service such as this one should have a retouch schedule anywhere from three to six weeks, depending on growth. Ideally, your client should not have more than $\frac{1}{2}$ to $\frac{3}{4}$ inches of regrowth at their next appointment. Keep in mind that once the regrowth is over $\frac{3}{4}$ inches, you will no longer have the heat from the scalp to help the colour process, and will need to treat the retouch as a virgin application, which can be tricky on such a small amount of regrowth!

You also must ensure that you do not overlap onto the previously lightened hair. This can cause colour

banding and breakage. Remember that once the hair has been subjected to an alkaline chemical, its structure is permanently altered and more susceptible to damage.

When performing a retouch service:

1. Prepare the client and the hair as noted above.
2. Starting in the back two quadrants, work in $\frac{1}{4}$ inch subsections/partings, from the top down, carefully applying colour to the regrowth only. Avoid overlapping onto the previously coloured hair and be sure to fully saturate both sides of your subsections/partings.
3. Process per the manufacturer's guidelines
4. Follow the colour removal guidelines as noted above.

Refreshing the Ends

When your client returns for their retouch appointment, you may notice that their ends have faded and need refreshing. Assess the hair's condition, considering porosity, texture, level, and tone. Formulate a semi-permanent colour product that will match the formula at the regrowth.

1. Apply your root retouch application, then wait until the root has processed about halfway.
2. Mix up your semi permanent colour formula, and apply it to the mid-lengths and ends, being careful to avoid the regrowth area.
3. Ideally, the semi-permanent colour product should process for the last 10–20 minutes of your retouch process, depending on texture and porosity.

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4.4 Bleaching Products

Characteristics of bleaching products:

- Ability to lift more than 4 levels
- Lift only, may require toning service
- May require a different formula for each zone to ensure an even result

Formulating

When using a bleach product to lighten, it is important to note that the volume of the developer does not determine the **levels** of lift. Rather, it determines the speed of lift. The alkalinity will increase with your volume of developer, so you must keep in mind the affect that your bleaching product will have on the hair structure and integrity.

You must consider the hair zones in the formulation stage of a global bleach application. This is notably different from the procedure when using an oxidative colour produce, which generally requires just one formula.

Let's take a look at how to formulate one zone at a time:



- Zone 1, or the regrowth area, is the area of the hair within the first $\frac{1}{2}$ to $\frac{3}{4}$ inch from the scalp. In Zone 1, the heat from the scalp encourages the hair to process more quickly. Keep this in mind when choosing your developer strength. Use the general guidelines for hair texture—fine hair is generally easier to lift, while coarse hair may be more resistant.

- Zone 2, or the mid-lengths, is the area of the hair between Zone 1 and the more porous ends. Because the area does not have the advantage of body heat to help it process, you may need a stronger volume of developer than you will use on the roots. Again, keep in mind how texture affects the lifting process when choosing your developer and product.
- Zone 3, or the more porous ends, will generally require the gentlest bleach formula. These porous ends will lift more quickly than the mid-lengths and will need care to prevent damage to the hair structure. Not everyone will have a Zone 3—in this case, use the same formula that was used on the mid-lengths.

Let's summarize what we have learned about formulating for lift by looking at some examples of bleach product formulas:

Example 1

Hair and colour assessment:

- Existing level and tone: 5 neutral
- Target level and tone: 9 neutral/cool
- Levels of lift required: 4
- Underlying pigment: pale yellow
- Texture: fine*
- Porosity: zones 1 and 2: average; zone 3: porous
- Elasticity: good

Formulas:

- Zone 1: 40ml 20vol + on scalp cream lightener
- Zone 2: 40ml 20vol + off scalp powder lightener
- Zone 3: 40ml 10vol + off scalp powder lightener

Explanation:

- **Zone 1:** Heat from the scalp will facilitate processing. Fine hair is easier to lift. Use a gentle cream lightener option with 20 volume, as the porosity is average.
- **Zone 2:** Switch to an off-scalp powder lightener for added strength, while keeping the 20 volume developer. Fine hair is easier to lift.
- **Zone 3:** Porous ends require more care. Drop the developer down to 10 volume.

Example 2

Hair and colour assessment:

- Existing level and tone: 5 neutral
- Target level and tone: 9 neutral/cool

- Levels of lift required: 4
- Underlying pigment: pale yellow
- Texture: coarse*
- Porosity: Resistant throughout
- Elasticity: good

Formulas:

- Zone 1: 40ml 30vol + on scalp cream lightener
- Zone 2: 40ml 30vol + off scalp powder lightener

Explanation: Coarse hair with resistant porosity will require a higher level of developer than fine hair. This client will likely require a second application to reach their target level and tone, if the hair condition allows.

Note: Many colour lines contain lightening powders that can be used on **or** off the scalp. These are instead differentiated by levels of lift, or speed of lift, and likely vary in alkalinity or ammonia levels. When using these lightening products, consider how pH levels affect the hair and use the appropriate strength of product. (For example, where there is a suggestion to use an off-scalp powder lightener, use your colour line's gentler option.)

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4.5 Application Process: Global Lightening Service - Bleaching Product

Tools and Supplies Required

- Colour safe gloves
- Colour cape
- Towels
- Hair clips
- Brush and comb
- Colour bowl
- Weigh scale
- Tint brushes-
 - Standard 2 inch
 - Wide standard 3–4 inch (optional)
- Cotton
- Foil/balayage board (optional)

Application

Prepare your client for their bleach lightening service by performing the following procedure:



1.

Drape your client using towels and colour cape. First, place a towel around the client's shoulders. Then, fasten the colour cape loosely, allowing just enough room to tuck a towel into the outside of the cape. This provides a surface to lay the coloured hair on, which will keep the colour cape clean. If your client has very long hair, tuck the outside towel in so that it lays lengthwise (see photo to the right).

2. Ensure that the hair is fully dry.
3. Brush gently through the hair to remove tangles
4. Section and divide the hair into 4 quadrants using your comb and clips. Section nose to nape, then ear to ear.

Once you have prepared your client for the lightening service, gathered your tools and supplies, and mixed up your bleaching product(s):

1. Don your gloves.
2. Begin your application in the darkest sections. Generally, this will be the back two quadrants, as the hair around the face tends to be lighter and of finer texture.
3. Beginning at the bottom of the quadrant and working upwards, use 1/8-inch subsections and apply your first formula **only to Zone 2**, 1/2 to 3/4 inches away from the scalp and through the mid-lengths. You may choose to use your wider tint brush for this area, for maximum efficiency and saturation. Be sure to saturate the hair fully on either side of the subsection. As mentioned previously, not every client will have a Zone 3. If this is the case, apply the product through to the ends in this step. **Note:** Bleach must stay wet in order to continue processing, therefore not saturating effectively will result in brown spots or patchiness. The hair should be coated with product. It should look opaque. You may find it helpful to use a foil/balayage board to support the subsection that you are applying colour to. This provides a sturdy surface to allow ease of saturation, and keeps your hands free of product, preventing transfer onto Zones 1 or 3. If you prefer to use your hand to support the subsection, keep a towel nearby to wipe your hands periodically throughout the application.
4. Drop the hair without pressing it into the previous section to ensure the root area remains free of product. If necessary, you may choose to place a strip of cotton at the root between each subsection.
5. Continue this application throughout your four quadrants.
6. Once the lightener had been fully applied to the mid-lengths, beginning in the same back quadrant as before, begin to apply your second formula to the regrowth area, **Zone 1**, working in the same 1/8-inch subsections, now working downwards from crown to nape. It is a good idea to switch to your standard 2-inch tint brush at this time, for maximum neatness and control. Once again, be sure to saturate the hair fully on either side of your 1/8-inch subsections.
7. While you are working, be aware of any Zone 2 areas that may have dried out, and apply more product to these areas as you work, using the corresponding formula.
8. Lastly, using your wider tint brush, apply your last formula through the more porous ends if a **Zone 3** is present.

9. Allow the hair to process at room temperature for up to an hour (follow manufacturers guidelines). If the hair is particularly resistant, it may be draped loosely under a plastic pop-up for a short period to allow the heat from the scalp to facilitate the process. Check often to ensure the hair does not heat up too much, causing condensation on the plastic pop-up or product liquification. If condensation or liquification occur, it will cause discomfort for your client and scalp irritation.
10. Keep the lightener moist throughout the processing time by reapplying as necessary.

By applying your colour procedurally, as in steps 1–8, you will achieve an even colour result from roots to ends. Remember, the roots will process faster than the mid-lengths. The ends, if porous, may process even more quickly and begin to look muddy if cool tones are present in the colour formula.

Video: Global Lightening Service: Virgin Bleach Application (https://viuvideos.viu.ca/media/Virgin+Bleach+Application/0_0nv49skc)

Note: Video has no sound.



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Processing

When processing a bleach product, there is no set timing. While most manufacturers will state that lightener should process for up to one hour, the hair may process more quickly.

- Check the hair every 10–20 minutes, depending on texture, so as to observe the degree of decolorization.
- Check in with your client throughout the process to ensure they are not experiencing any scalp discomfort. If your client is experiencing pain or discomfort, the product should be removed immediately.
- Once you believe that the hair has reached the desired level, perform a decolorization check, as the hair will generally look lighter when coated with a bleaching product and may trick your eye. To perform the check, choose a small section of hair, and remove the product by running a damp towel down the strands. If hair is not yet processed to the desired degree, reapply product to your test section and continue processing.
- Process until an even degree of lightness is achieved throughout the hair, or until an hour has passed. Coarse or resistant hair may require a second application. Note: second applications are only performed if the hair structure allows.

Product Removal

Once the bleach product is ready to be removed, bring your client to the sink:

1. Rinse the hair until the water runs clear. Use cool–lukewarm water, as the scalp may be sensitive after the bleaching process
2. The hair must be fully rinsed to avoid irritation, this is especially important in the nape and around the ears, which can be tougher to rinse effectively. Note: If the hair is to be toned following the lightening service, any bleach product remaining in the hair will eat through the colour molecules and prevent the toner from depositing.
3. Shampoo twice with a suitable product, using gentle pressure, being careful not to rub the scalp too vigorously. If you are using a toning shampoo, such as one with violet tones, be aware that areas of higher porosity may turn purple.
4. If your intention is to tone the hair, **do not** condition the hair at this stage. Doing so will close the cuticle and prevent the toner from depositing effectively.

We will discuss toning more in Chapter 4.6: Formulating the Toner.

Retouch Schedule

As with any service, it is up to you to recommend an appointment schedule that will best maintain your client's hair.

A global lightening service such as this one should have a retouch schedule between three to six weeks, depending on growth. Ideally, your client should not have more than $\frac{3}{4}$ inches of regrowth at their next appointment. Keep in mind that once the regrowth is over $\frac{3}{4}$ inches, the hair will no longer have the heat from the scalp to help the lightening process along, and you will need to treat the retouch as a virgin application, which can be tricky on such a small amount of regrowth!

Ensure that you do not overlap onto the previously lightened hair. This can cause breakage. Remember that once the hair has been subjected to an alkaline chemical, its structure is permanently altered and more susceptible to damage.

When performing a retouch service:

1. Prepare the client and the hair as noted above
2. Starting in the back two quadrants, work in $\frac{1}{8}$ -inch subsections, carefully applying lightener to the regrowth only. Avoid overlapping onto the previously lightened hair and be sure to fully saturate both sides of your subsections.
3. Process, monitoring the decolorization process for up to one hour.
4. Follow the bleach product removal guidelines as noted above.

Refreshing the Ends

When your client returns for their retouch appointment, you may notice that their ends need some brightening or, in some cases, slight lift in order to lift past stubborn underlying pigment.

Assess the hair's condition. If there are no porosity or elasticity concerns, you may choose to do a brightening service:

1. Following the root retouch application, allow the root to process fully, shampoo and towel dry.
2. Mix up a low alkaline bleach product. Use a 10 volume developer with a gentle bleach product, such as an off-scalp oil or cream lightener. Using a 2:1 or 3:1 developer to bleach mixing ratio will reduce the pH of the product and make it a thinner consistency for ease of application.
3. Apply the gentle bleach formula onto the towel-dried mid-lengths and ends, being careful to avoid the regrowth. Ideally, this product should only process for approximately 10–20 minutes.

Note: A brightening service is not ideal for a client who requires more than two levels of lift, or one that has hair integrity concerns. Keep in mind that texture and hair condition are important factors when choosing to do a follow up brightening service. If the hair is compromised in any way, this service is not recommended.

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4.6 Formulating the Toner

Anytime a colour is applied over pre-lightened hair in order to change the tone, it is referred to as toning. Toners can be used to neutralize or enhance underlying pigment or simply to deepen the level. Generally, a **non-oxidative** or low alkaline product will be used to tone, such as a semi- or demi-permanent colour product. These options are gentler to avoid excessive swelling of an already compromised hair strand.

Before formulating a toner:










- Determine the level that the hair has lifted to,
- Assess the pre-lightened hair to determine texture and porosity, and
- Decide whether you will be **enhancing**, **neutralizing**, or deepening the level.

Level

To create an optimal toner formulation, you will need to determine what level the hair has lifted to. This is crucial for a couple of reasons:

- Underlying pigment is different at each level of lift, which means the neutralizing or enhancing tone will also be different at each level.
- When choosing the toner level, it is always best to tone **on-level** (or slightly darker if a deeper tone is desired).

Let's take another look at the underlying pigment chart:

Level	Underlying Pigment	Neutralizing Tone
10	 Palest yellow	 Violet
9	 Pale Yellow	 Violet
8	 Yellow \longleftrightarrow	 Violet
7	 Yellow - Orange \longleftrightarrow	 Blue - Violet
6	 Orange	 Blue
5	 Red - Orange	 Blue - Green
4	 Red	 Green
3	 Red - Brown	 Green
2	 Dark Red - Brown	 Green
1	 Black	

Refer to the chart, and compare the neutralizing base at a level 8 to a neutralizing base at a level 7. At a level 8 yellow, the recommended neutralizing tone is **violet**:

$$Y + V = \text{Neutral}$$

Whereas at a level 7, only one level darker, the recommended corrective tone for the yellow-orange underlying pigment is a **blue-violet**:

$$YO + BV = \text{Neutral}$$

This visually explains why it is so important to tone on-level.

For example, if the hair is lifted to a level 7 and a level 8 violet-based toner is applied, the violet will tone out the yellow but leave the orange, which will make the orange stand out even more against the neutral background.

Look at it this way:



The violet will neutralize the yellow, and you will be left with an unwanted brassy tone.

Note: The exception to this tone on-level rule applies only if you should choose to use an oxidative toner. Oxidative toners have the ability to shift your pre-lightened hair by approximately ½ to 1 level or so, allowing you to use a slightly lighter level to tone. However, please be aware that an oxidative colour should only be used on hair that can cope with additional swelling!

When performing a bleach and tone service, you should avoid lifting past the target level, as this will put undue stress on the hair.

Another scenario to consider: The client was lightened in the past and would now like to be a bit darker. When toning in order to deepen the level, think of the above scenario reversed.

For example, it is not ideal to use a blue-violet-based level 7 toner on pale yellow level 8 pre-lightened hair. This will give us a bluish over-toned result.



The violet will neutralize the yellow, and you will be left with a bluish tinge.

A better approach would be to use a violet-based toner mixed with some natural to create your deeper target level.

Consider this example formula to be used on existing level 8 pre-lightened hair where the client would like a neutral level 7:

40ml Semi Activator + 10ml 6N + 10ml 8V

This formula would create a natural violet level 7 (by mixing level 6 and level 8), which will neutralize the yellow and darken the level, without creating an over-toned result.

Note: Remember that anytime you colour hair more than 3 levels darker, you will need to fill the hair with the missing underlying pigment! More on this in Chapter Chapter 7 – Corrective Colour.

Texture and Porosity

When assessing the hair structure and integrity, there are some considerations to keep in mind:

Medium Hair

Medium textured hair that has been lightened without any resulting porosity concerns can be formulated using the colour wheel according to basic colour theory. A semi-permanent toner that has been formulated with a **complimentary colour** tone will generally neutralize effectively. When enhancing, choose the **warm** tone that will give you your desired result and mix according to manufacturers guidelines.

Fine Hair

Fine hair will generally be more porous after a lightening service, especially when lifted to the lighter levels 8–10. Porous, fine hair is at risk of soaking up cool tones and over-toning to a grey or muddy appearance. A good tactic to combat this is to add a little gold to your formula, even when neutralizing. Although this may seem counterintuitive, porous hair will reject warmth and absorb cool tones, so adding that bit of warmth will help to balance out the end result. Let's look at this example:

If the client has level 9 pre-lightened hair, the underlying pigment will be pale yellow. The natural instinct to neutralize this would be to tone with violet, right? After all, the colour wheel shows that Yellow + Violet = Neutral.



But, if the hair is porous, it is like a sponge, ready to soak up that violet in a much greater concentration. So what you are left with looks more like this:



You may end up with a violet-tinged neutral, which will look drab and darker than a level 9, since cool tones do not reflect light and they tend to look darker to the eye.

Adding a bit of gold to our formula will give us:



The extra gold will balance the extra violet that will be absorbed by the porous hair and you will be left with a brighter, more neutral level 9 result.

Alternatively, if you want your result to be refined without complete neutralization, you can add a *small amount* of natural or a *small amount* of clear to your formula. Both of these options will dilute the violet pigment. The natural will create more of a beige result, while the clear will create a more translucent outcome.

If your goal is to enhance the underlying pigment for a warm result, formulate with the assumption that hair with high porosity will not absorb warmth as easily and may need a bit more of your enhancing tone to achieve the ideal result.

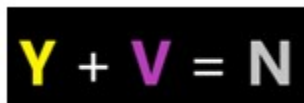
Note: Whether you are neutralizing or enhancing fine/porous hair, remember to formulate 1 level lighter than the desired result due to the tendency of fine hair to process darker than intended.

Coarse Hair

Coarse hair has a larger concentration of melanin, which generally results in a stronger underlying pigment following a lightening service. In contrast to a fine hair scenario, coarse hair may need more neutralizing tone added to the formula to neutralize effectively.

If the client has level 8 pre-lightened hair, the underlying pigment will be an intense yellow.

The colour wheel tells us that yellow + violet = neutral.



But if the hair is coarse with a saturated yellow undertone, what you are left with looks more like this:



The hair will end up with a warm golden result, rather than a true neutral. This will work great if you are looking for a refined yet warm result without complete neutralization.

For a truer neutral result, adding a bit of extra violet to our formula will give you:



Additionally, be aware that although the bleach product will have opened up the cuticle layer to some degree, you will still need to assess for resistant porosity at this stage on a coarse-haired client. Resistant, coarse hair will need a more alkaline colour product to swell the hair strand to allow for optimal toner processing. In this scenario, you may choose to use an oxidative toner such as a permanent colour product.

This will not only allow for greater penetration of the colour molecules for a more opaque result, but will also work to diffuse underlying pigment. In this scenario, you will need to formulate for the target level of underlying pigment.

Example:

- XL: Prelightened level 7
- TL and tone: Level 8 Neutral
- Underlying Pigment: Intense yellow
- Formula: 40ml 20volume + 20ml 8VV – for 1 level of lift and extra corrective tone

Uneven Porosity

Hair with uneven porosity will need to be formulated accordingly. Assess each area of porosity individually for an even result.

Using what we've learned so far about toning, let's look at the following scenario:

Example

Your client has just had a global virgin bleach lightening service and has lifted to an even level 9 with a pale yellow underlying pigment.

- Texture: Medium

- Porosity: Regrowth and mid-lengths are average, ends are extreme.

How would you formulate for an even neutral result?

- XL and tone: level 9 pale yellow
- TL and tone: level 9 neutral

Regrowth and mid-lengths: Because these areas have medium hair texture and average porosity, formulate according to basic colour theory:

Formula: 40ml semi activator + 20ml 9V (to neutralize pale yellow underlying pigment)

Ends: The ends have extreme porosity and will absorb a greater concentration of corrective tone. Add a bit of gold to the formula to avoid over-toning.

Formula: 40ml semi activator + 15ml 9V + 5ml 9G

Many colour lines also carry a product known as a porosity equalizer. This is a liquid product that is applied to the damp hair and combed through prior to toning.

Note: As with any situation in which you are unsure of how the hair's texture or porosity will affect the result, a test strand is recommended prior to toning the entirety of the hair.

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4.7 Application Process: Global Toning Service



Tools and Supplies Required

- Colour-safe gloves
- Colour cape
- Towels
- Hair clips
- Wide-tooth comb
- Colour bowl or bottle
- Weigh scale
- Tint brush – 2-inch or 3–4-inch standard

Application

Prepare your client for their toning service by performing the following procedure:

Note: Hair should first be rinsed and shampooed thoroughly following the lightening service and prior to the toner application.

1. Change the colour cape if needed.
2. Tuck a fresh towel into the outside of the colour cape.
3. Carefully comb through the towel-dried hair with a wide tooth comb to remove tangles.
4. If using a porosity equalizer, apply to the hair and gently comb through for an even application.
5. Section the hair into four quadrants using your comb and clips. Section nose to nape, then ear to ear.

Once you have prepared your client, gathered your tools and supplies and mixed-up toner:

1. Don your gloves.
2. Begin your application in the back two quadrants, as the hair around the face is often a finer texture and will generally process more quickly.
3. Beginning in the nape and working upwards, working in ¼-inch sections, apply the toner to the length of the hair from base to ends. If more than one formula is being used, apply each formula to the corresponding areas of porosity, working base-to-ends on each section.
4. Work quickly and efficiently, as toners may process quickly on freshly lightened hair.
5. Outline the hairline for even application.

Video: Global Toner Application (https://viuvideos.viu.ca/media/Toner+Application/0_lavh8akx)

Note: Video has no sound.



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Processing

While processing a toner, you should remain with your client. Although it is always ideal to allow the product to process for the full recommended timing, freshly lightened hair may process more quickly than expected.

The general timing is 20 minutes for non-oxidative toners and 30 minutes for oxidative toners. Allowing the hair to process for the full amount of time will give the toner greater longevity. Accurate

formulations that take texture and porosity into consideration will be more likely to allow for optimal processing times.

If you feel that the hair has reached the desired tone before the recommended processing time, you can check by selecting a small segment of hair and running a damp towel down the strand to remove the toner and allow you to see how it has deposited. If it has not fully processed, re-saturate the strand and continue processing.

Process until the desired tone has been reached, or until the full time period has passed.

Product Removal

Once the toner is ready to be removed, bring your client to the sink:

1. Rinse the hair until the water runs clear using warm water.
2. Use a colour-safe shampoo and conditioner.
3. Style as desired.

Don't forget to educate your client on how to properly care for and maintain their hair! Toners will inevitably fade away and expose the underlying pigment over time. To prevent premature fading, clients should minimize heat styling and use colour-safe products to clean and style their hair.

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Chapter 5 - Foiling Placement and Technique

Learning Objectives

- Analyze hair texture and density
- Distinguish between different types of weaves and slices, and differentiate when to use each type based on desired results and hair assessment
- Determine the appropriate angle for your foils and develop a plan of application
- Determine how to apply foils around certain areas of the head and in cases of unique hair growth

Foiling is a great way to add dimension and create a truly customized colour for your client. Whether you perform a full head of highlights or foil in combination with another technique such as hair painting, the professional hairstylist must make many decisions before and during the service. In this chapter, you will learn how to adjust your placement and application according to hair texture and density, as well as how to use different toning techniques for endless creative possibilities!

5.1 Weaves Versus Slices

Hair Texture vs. Hair Density

Hair **texture** and **density** will determine many aspects of our foil application, including how we weave or slice the hair. Some stylists and clients may confuse and interchange the terms texture and density, so let's take a moment to differentiate the two.

- Hair *texture*, as we know, can be assessed as fine, medium, or coarse, and refers to the diameter of the hair strand.
- Hair *density*, on the other hand, can be assessed as thin, average, or thick, and refers to the actual amount of hair on the head.

It is possible for a client to have:

- Fine hair, thick density — meaning, small diameter hair strands with a lot of density.
- Coarse hair, thin density — meaning, large diameter hair strands with low density.

See the difference?

It is important to know the distinction and to assess your clients accordingly before you choose a technique.

Foiling Application Techniques

Before we get into how texture and density can affect your technique, let's recap what the different foiling application techniques look like.



Fine weave. The result is an evenly dispersed, blended colour.



Medium weave. The result is blended, with notable dimension.



Heavy weave. The result is a high-contrast, dimensional colour.



Slice. Result is high-contrast streaks of colour.

Comparing Foiling Techniques

Each of these techniques will give a different result on their own but will also look very different according to hair texture and density.

A fine weave that looks subtle and blended on a client with low density or fine hair texture will likely disappear on a client with thick density or coarse hair texture.

As well, a heavy weave that adds definition to the hair on a client with thick density or coarse hair texture will likely overwhelm and look stripy on a client with thin or fine textured hair.

Therefore, it is critical to understand that the definition of what each weave looks like will change when working with different textures and densities

To get a visual comparison, let's look at the 3 weave techniques, and how they differ on two clients with different hair textures:

Fine, Medium, and Heavy Weaves on Fine and Course Hair

Weave Technique	Fine Hair	Coarse Hair
Fine Weave	 A close-up photograph showing a fine weave technique on fine hair. A rectangular piece of crinkled aluminum foil is placed over a section of hair. The hair is pulled through the foil, creating a fine, vertical section. The hair is dark brown and appears very thin.	 A close-up photograph showing a fine weave technique on coarse hair. A rectangular piece of crinkled aluminum foil is placed over a section of hair. The hair is pulled through the foil, creating a fine, vertical section. The hair is dark brown and appears much thicker than the fine hair in the adjacent image.
Medium Weave	 A close-up photograph showing a medium weave technique on fine hair. A rectangular piece of crinkled aluminum foil is placed over a section of hair. The hair is pulled through the foil, creating a medium-width, vertical section. The hair is dark brown and appears very thin.	 A close-up photograph showing a medium weave technique on coarse hair. A rectangular piece of crinkled aluminum foil is placed over a section of hair. The hair is pulled through the foil, creating a medium-width, vertical section. The hair is dark brown and appears much thicker than the fine hair in the adjacent image.

Heavy Weave



If you choose to use a slice application, rather than weaves, remember that no matter the texture or density, a slice needs to remain thin enough to achieve optimal saturation. However, you may choose to put back to back slices into hair with a coarser texture or thicker density to achieve the same level of impact.

Next up, how to use angles to your advantage!

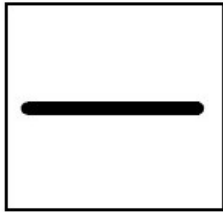
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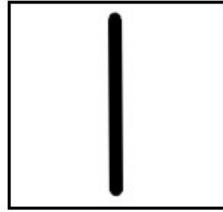
5.2 Foil Application Angles

Anytime we are working with hair, whether it is styling, cutting, or colouring, we must consider how the hair falls. The same is true when we are deciding how and where to place foils.

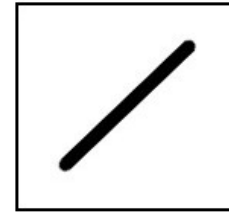
There are 3 ways in which we can place our foils:



Horizontal

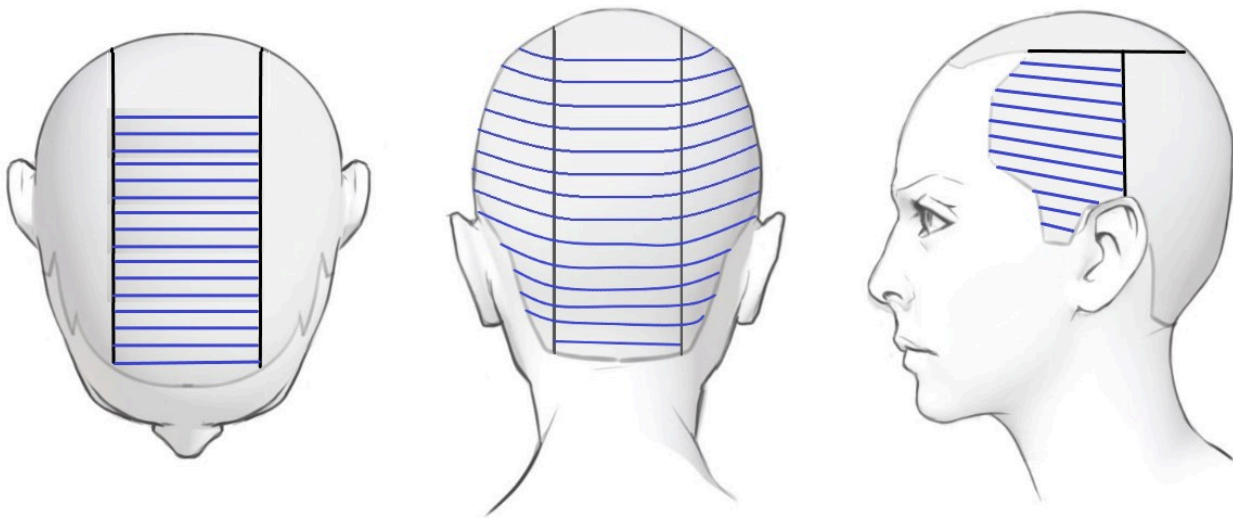


Vertical



Diagonal

In Hairstylist Foundations, you likely first learned a standard 6-section, weaved horizontal foil placement:



This was a great way to learn as the horizontal placement is the easiest to apply and it allows you to focus on your weaves, tight foil placement, and application of product. But let's take it further and discuss how the angle of your foil placement affects your results, and how the direction of the hair fall should actually determine the angle at which you place your foils.

A horizontal placement creates a diffused and blended result. Think of it as a veil of colour.



Fine slice, horizontal placement.

A vertical placement creates a defined streak of colour.



Fine slice, vertical placement.

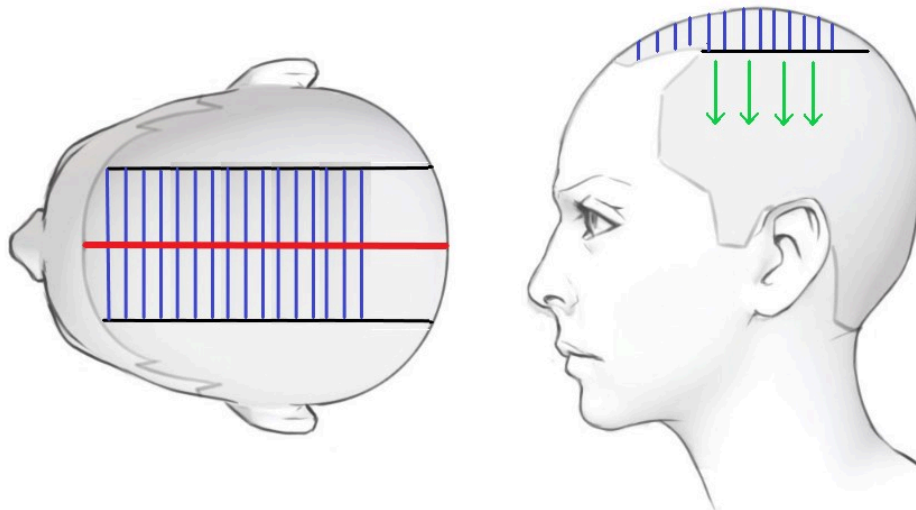
A diagonal placement will give you a result that is somewhere in between horizontal and vertical.



Fine slice, diagonal forward placement.

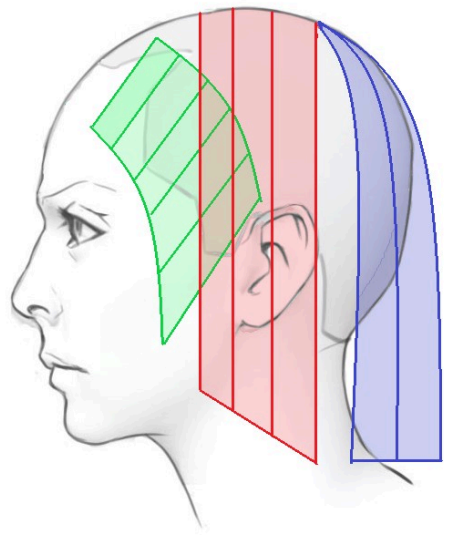
Pretty straightforward, right? So why did our horizontal mohawk placement above always turn out as defined streaks of colour? Because you must think of the angle of your foil in relation to the head shape and *direction of the hair fall*.

If you look at the mohawk section again, but in relation to the hair falling straight down from the part, you will see that these foils were in fact placed vertically!

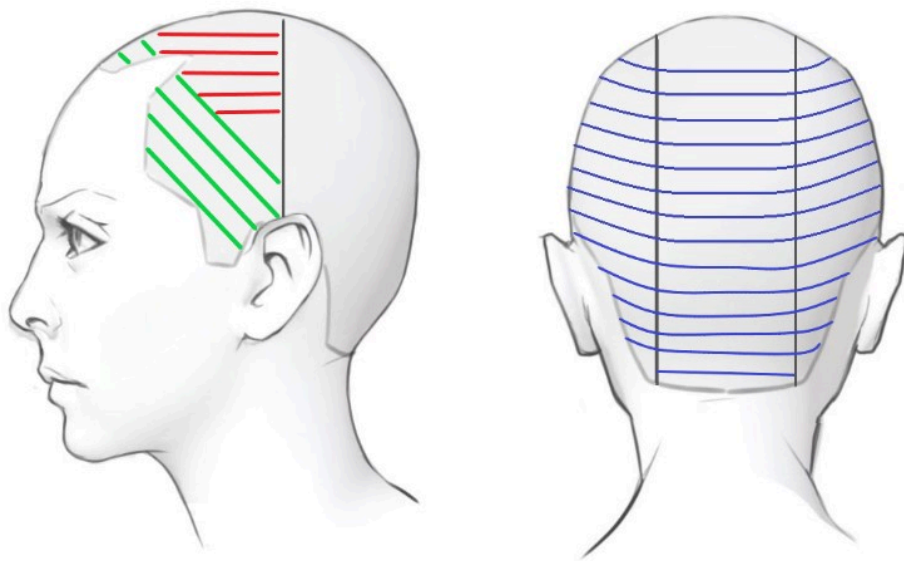


Anytime that you are placing foils, no matter the angle, you must remember that you are working on a round surface. The hair will fall differently depending on the area of the head and the natural growth of the hair.

For example:



The hairline in this example falls slightly towards the face, while the hair that falls from the crown curves around the back of the head. So what would a true horizontal placement look like in this case?



You can see how the foil placement follows the curve of the head and the foils are now placed horizontal to the hair fall.

There is no one-size-fits-all foil placement that will be perfect for every client. This is because every client has a unique growth pattern. Discuss the desired results during the consultation with your client and plan your sections and angles according to the direction of the hair fall and in relation to the desired result.

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5.3 Additional Considerations

When applying foils, there are certain areas of the head that may require additional attention to detail. This includes the hairline, growth patterns, the nape, and the part.

Hairline

When foiling, the hairline around the face should in most cases be looked at as its own section, especially in cases where there is a distinct growth pattern present. You must also consider the texture of the hair around the face in relation to the rest of the hair. Generally the hair will be a finer texture and have less density, which may warrant using a gentler product. In cases where you are using bleach, earlier removal of the foils may be required.

Fine, Wispy Hairline

If your client has finer, less density hair around their face, you must take care to not create a blocky or stripy appearance around the hairline with your foils. If your client would like a lot of brightness around the face, it is best to do many baby fine weaves closer together, rather than trying to save time with less foils and a thicker weave.

Stylist tip: To get right up to the hairline when you are working with wispy low density, place your foils diagonal forward in the side, as it can be difficult to create a clean section when placing them diagonal back, and you may miss the hairline altogether.

Video: Diagonal Forward Hairline Placement (https://viuvideos.viu.ca/media/Diagonal+Forward+Hairline+Application/0_y5iu84m9)

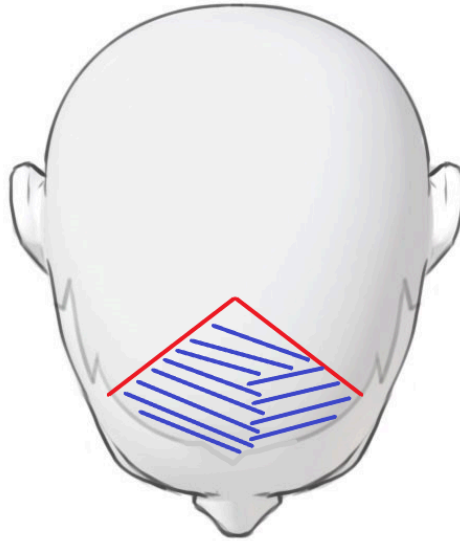
Note: Video has no sound.



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Widow's Peak or High Recession

When working around a widow's peak or a higher recession area, here are some foil placements that work well to ensure that there are no resulting bare spots:



Widow's peak.

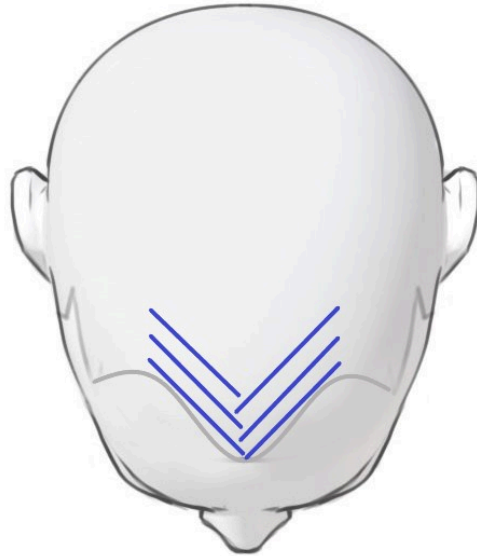
When working around a **widow's peak**, create a fringe section, and place your foils according to the direction of hair growth. By overlapping your weaves at the back, you create a blended result, no matter how the hair flips or settles into place.

Video: Widow's Peak Application (https://viuvideos.viu.ca/media/Widow%27s+Peak+Application.mp4/0_5d7raxdg)

Note: Video has no sound.



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Hairline recession.

With a recession area, working along the line of the recession is important. If you were to place your foils horizontally, you would be left with an untouched section right in front, which would not be ideal if the client were to pull their hair back.

Split Crowns and Whorls

Split Crown

If your client has a strong growth pattern that causes the hair to split in the **crown** area, be sure to weave carefully across the split, which may take you slightly off course from your mohawk section.



Split crown.

Video: Split Crown Application (https://viuvideos.viu.ca/media/Split+Crown+Application/0_zw48el4x)

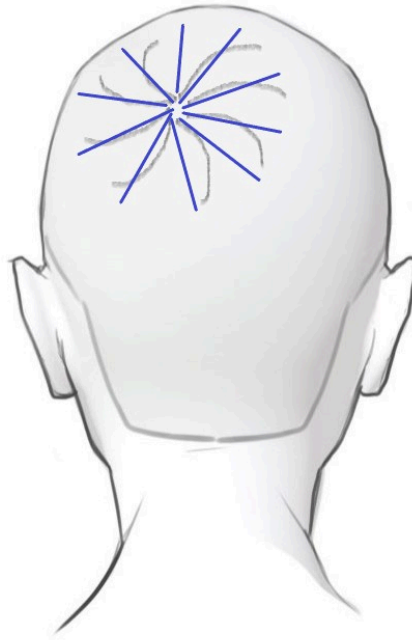
Note: Video has no sound.



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Whorl

If there is a strong **whorl**, you may choose to place your foils in a circular pattern so as to follow the direction of hair growth. This will also prevent over-directing of the hair, which may cause the foils to bleed.



Whorl.

Nape

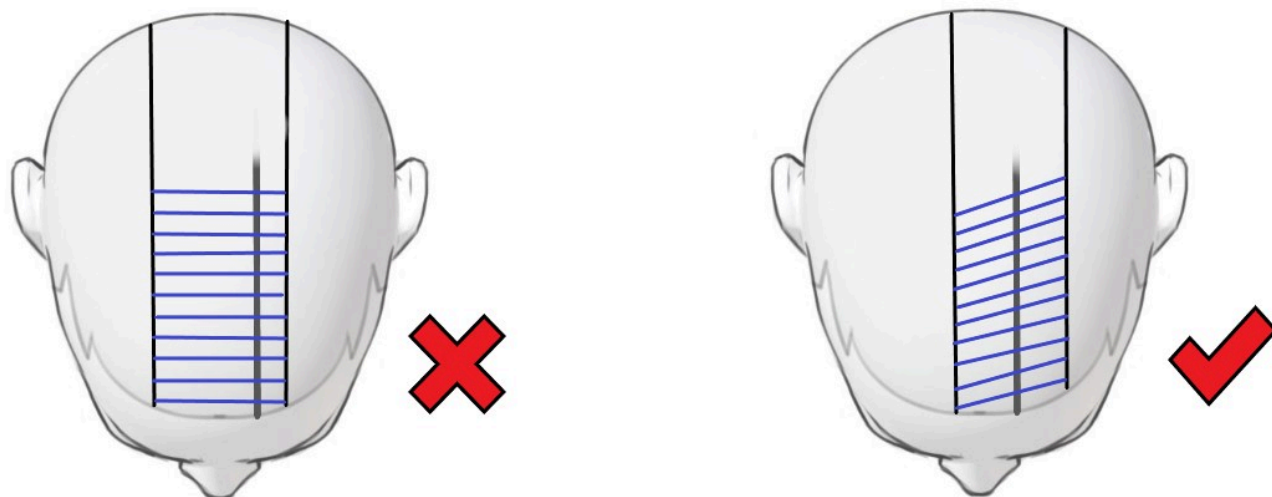
The nape, like the front hairline, has the tendency to have finer, wispy hair with less density. When fine, less density hair is combined with the strong curve of the head as it narrows into the nape, it can make it tricky to get your foils snug to the root. Using a foiling board to apply the first few foils in the nape is a great way to add stability until the stacked foils provide a stable enough base to support your foils as you move up the head.



A foiling board helps to keep foils snug in the nape.

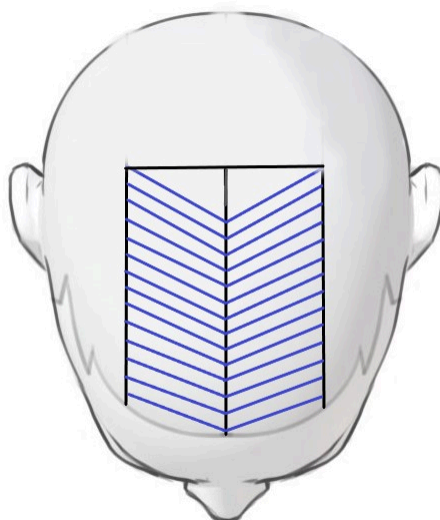
Part

Your client's part should also be taken into consideration. Whether they wear their hair down the middle or to one side, be sure that you are applying their colour equally to both sides of the part line. For example, if your client wears their hair parted to one side, using a centre mohawk section will place too much colour on the heavy side of the part, and not enough on the lighter side, as seen below:



Moving your mohawk section to accommodate the part, and by placing the foils on an angle that follows the way the hair falls towards the heavy side, will give a much more balanced result.

What if your client likes to move their part around? A great option for this client is the herringbone foil placement:



When the foils are placed diagonally on either side of a middle part line, this mimics the side part

placement above, but allows the part to be on either side. When the hair is parted down the middle, you will get a balanced, blended appearance.

Note: If your client prefers to see a defined highlight in their part line rather than a soft, blended result, you can return to your foundation horizontal mohawk placement and use slices, or a combination of slices and thick weaves.

Remember that consultation and hair analysis are key to a successful foil application! Use what you've learned to create a customized foil placement for each of your clients, and you will have a very satisfied clientele!

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5.4 Toning Techniques

A shadow root and drop root are **toning** techniques that are especially useful when the client likes the look of highlights but wants them to look more natural with less upkeep as they grow out.

Note: These techniques may also be used to soften the result on a client with a global blonde.

Shadow Root

A shadow root, also known as a “root tap,” is a toning technique in which fresh highlights are toned with two different levels of toner, with a darker tone applied within **zone 1** and the lighter tone applied to the rest of the hair. Generally, the two toners will vary by 1–2 levels in order to mimic a natural shadow at the regrowth.

Example:

Natural level 6, client is lifted to a level 9.

- Level 7 formula: Applied to first $\frac{3}{4}$ inch–1 inch at regrowth.
- Level 9 formula: Applied to remainder of hair.

On freshly highlighted hair, the level 7 serves to deepen the highlights at the regrowth enough to blend with the natural **level**, while allowing the highlights to show through and appear freshly done.

You can imagine that this also serves the purpose of softening the contrast as the highlights grow out between appointments. This is also a useful technique to make a global lightening application appear more natural.

Video: Shadow Root Application (https://viuvideos.viu.ca/media/Shadow+Root+Application/0_34qiow8p)

Note: Video has no sound.



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Drop Root

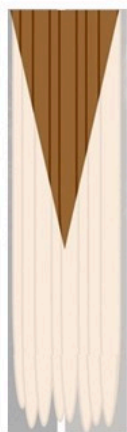
A drop root is a toning technique that is useful in the following circumstances:

- The client has been getting highlights to the root or a global lightening service and would like to change the look of their blonding to something that is a more lived-in technique, such as a balayage or ombré.
- The client would like highlights but would like a base level that is darker than their natural level to create more contrast.

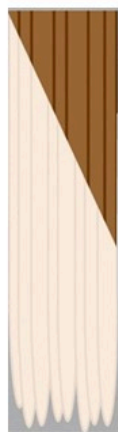
Changing Technique

In the first scenario, when a client would like to change up their blonding technique from highlights or global blonde to a more lived-in look, a drop root can be done to soften and blend the existing blonde into the natural root colour. For this technique, it is optimal to match your formula as closely to their natural colour as possible.

Apply to the **line of demarcation**, and blend downwards with one or a combination of the following application methods:



V-Shape



1/2 V



Smudge

To create the most seamless result, consider mixing two different formulas: One to match the regrowth, and one to apply to the mid-lengths and ends, such as a lighter level toner or a clear gloss. This allows you to blend the two formulas where they meet. Using the two formulas with a combination of techniques and angles of application will create the most blended result.

Example: In the following video, two formulas were used. A level 5 mahogany for the drop root and a level 8 copper gold for the ends. Both formulas were applied and blended simultaneously.

Drop Root Application Process

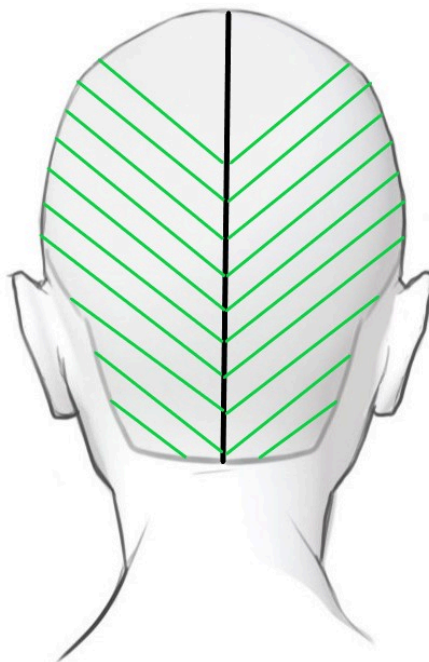
Tools Required

- Colour-safe gloves
- Colour cape
- Towels
- Hair clips
- Wide-tooth comb
- Colour bowl or bottle
- Weigh scale
- Tint brush – 2-inch or 4-inch standard or feather tipped
- Hair separator of your choice

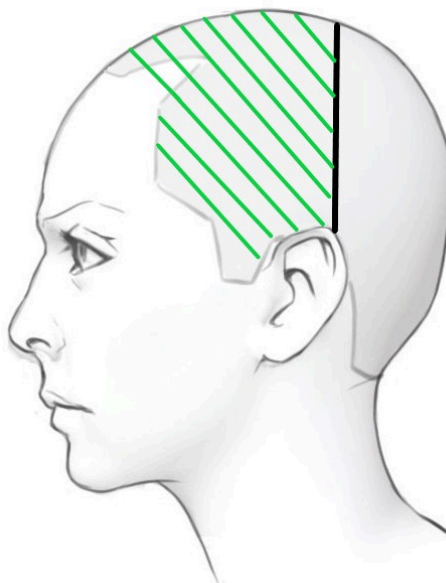
Note: The following is just one method of application. Always consider your client's hair texture and density, unique growth patterns, and desired result.

Steps

1. Section your client's hair into 4 quadrants: section nose to nape and ear to ear.
2. In the back, using ¼-inch subsections and diagonal back partings, work from the nape upwards. The diagonal partings will create a better blend, as you will not be creating any horizontal lines within the hair.



3. Alternate application methods, varying your angle of application as you work.
4. Separate your subsections, if you choose, with the hair separator of your choice, such as meche or foils.
5. When you reach the crown, increase your angle of application to avoid creating a visible horizontal transition line.
6. In the sides, continue working from the bottom up in diagonal back subsections. Continue to vary your angle of application, while using primarily $\frac{1}{2}$ -V placements to maintain lightness around the face.



7. Separate your subsections, if you choose, with the hair separator of your choice.
8. When you reach the top of the section, once again increase your angle of application to avoid

creating a visible horizontal transition line.

9. Process and rinse according to manufacturers guidelines.

Video: Drop Root Application (https://viuvideos.viu.ca/media/Drop+Root+Application+/0_9qm9n2ft)

Note: Video has no sound.



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Darkening the Base

In the second scenario, in which the client would like to deepen their natural level while maintaining the look of highlights to the root, *after applying the foils*, you would mix and apply the drop root formula in between the foils, varying your methods of application as above. This leaves the highlights bright and fresh to the root but allows you to deepen the natural level by 1–3 levels.

When darkening the natural level, it's important to inform your client of the maintenance involved. If using a permanent or demi-permanent, they will need to keep up with their root retouches as well as their highlights. Using a semi-permanent allows the colour to fade off gradually, allowing for a more subtle grow out with less maintenance.

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Chapter 6 - Hair Painting

Learning Objectives

- Determine the appropriateness of these three techniques: Free-hand painting, balayage, and ombré, and perform accordingly
- Select and perform appropriate blending techniques
- Perform the appropriate steps of a hair painting service

Hair painting is a popular application trend, and the techniques that are used to create beautiful blend and dimension can be applied to other colour services as well.




In this chapter, we will look at three different low-maintenance organic colour results that your clients will love to wear.

6.1 Hair Painting Methods

Hair painting is a very organic, visual technique in which the stylist customizes the colour placement to enhance the client’s facial features and natural hair colour and texture. The three most popular hair painting techniques today are free-hand, balayage, and ombré. These terms are sometimes used interchangeably by clients and stylists, but each has its own unique application process, and each can be done alone or combined with other techniques for a truly unique result.

So, what are the distinguishing factors of each technique?

Hair Painting Techniques

	Free-Hand Painting	Balayage	Ombré
Images			
Sectioning	<ul style="list-style-type: none"> • Panels • Triangles 	<ul style="list-style-type: none"> • Thin Panels/ Subsections 	<ul style="list-style-type: none"> • Horizontal or diagonal slices/ Subsections
Application	<ul style="list-style-type: none"> • Selected strands are well saturated • Vertical brush strokes 	<ul style="list-style-type: none"> • Product is lightly swept over the surface of the hair • Vertical brush strokes 	<ul style="list-style-type: none"> • Hair is fully saturated at the mid-lengths to ends
Separation Tools	<ul style="list-style-type: none"> • Open-air processing • Foils, meches, thermal papers 	<ul style="list-style-type: none"> • Open-air processing • Cotton 	<ul style="list-style-type: none"> • Open-air processing • Foils, meches, thermal papers
Final Result	<ul style="list-style-type: none"> • Ribbons of blonde or colour against deeper dimension • High contrast 	<ul style="list-style-type: none"> • Natural • Subtle blend • Sun-kissed 	<ul style="list-style-type: none"> • Progressive blend of dark root to lighter ends • Medium – high contrast

All of these hair painting techniques will give you a lived-in look that requires minimal maintenance, yet, each one requires a specific skill set and a deeper understanding of the intended outcomes. Before you can select the correct procedure for your client, let's go into each technique a little further.

Free-Hand Hair Painting

Free-hand hair painting vs Balayage: Are they the same?

Free-hand hair painting is often referred to as Balayage, or vice versa. Balayage is in fact *a method* of free-hand hair painting, but the distinction between the two is in the application.

With classic free-hand painting, strategic pieces of hair are saturated through with colour or lightener for a pop of contrast. It is a more organic alternative to foils, since the product is placed while the hair is at its natural fall.

As seen in the images below, the colour or lightener can applied as:



Note: A ½ V-shape is a popular application to use on the sides, as it focuses the pop of colour around the face.

Balayage

With balayage, the colour or lightener is swept lightly over the surface of the section, with the **saturation** through the section focused more towards the ends (if desired), as seen below:



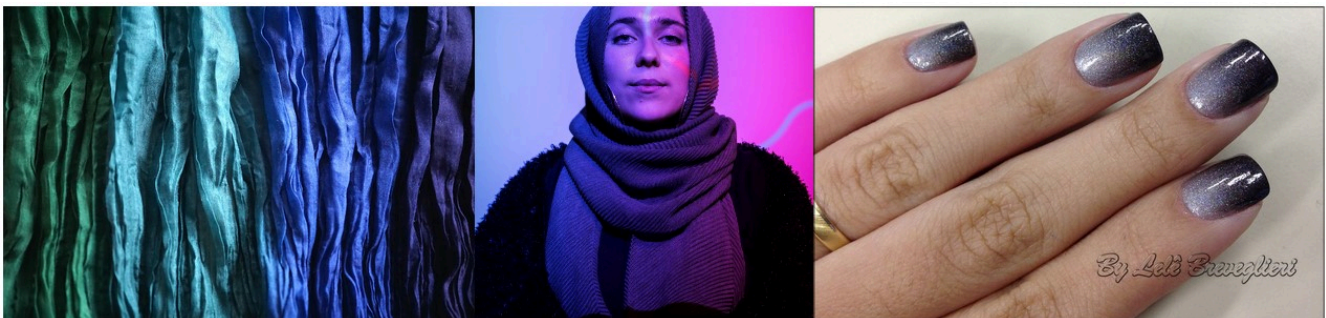
Balayage is literally translated as “to sweep,” so light brush pressure and surface-only saturation are key. Generally, this technique is processed in open-air for subtle lift and a more natural “sun-kissed” result.

The photo below illustrates how much depth is left underneath your lightly painted sections. This is what results in a natural, subtle result.



Ombré

Alternately, Ombré is a look of gradation of colour used in everything from home décor, to fashion, to nails.



When it comes to hair, ombré is not a *technique* of hair painting, as balayage is, but rather a *look* or result.

To achieve an ombré effect on hair, the colour or lightener is applied in more of a horizontal placement, with full saturation. Generally the regrowth area is darker and the ends are lighter, with a transition in the mid-strands.

This look can be achieved on virgin hair by blending progressing levels of different colour formulas down the hair strand, or on virgin or coloured hair using lightener to lift, and toners to achieve the blended transition.



Ombré hair colour.

All three techniques can be used to achieve beautiful, low maintenance results. Next we will explore how to create a seamless blend in whichever method of hair painting you choose to use.

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6.2 Blending Techniques

Whichever hair-painting technique you choose to use on your client, chances are you are aiming to achieve a blended transition from the root to where the colour or lightener begins. Most clients who want this technique would like a low-maintenance colour that can last a few months or more before they must have it touched up.

So what can you do to make sure the result is as seamless as possible? Use any or a combination of:

- Angles
- Projection
- Saturation
- Backcombing

Angles

Think back to Chapter 5.2 where we discussed angle of foil placement. A vertical placement will be most defined, horizontal will be diffused, and diagonal will be somewhere in between. But also keep in mind how section size and saturation play a role.

With foils, it is best to use thin subsections to get maximum saturation of product in each foil, and you will generally be applying the product up to the regrowth.

With hair painting, the subsections and saturation can vary in size depending on what kind of result the client would like, and you will typically leave some natural hair in-between the lightened sections and at the root for depth and contrast.

So why is this distinction important? A horizontal placement will only be diffused if it is a thin layer with light saturation, such as surface balayage, and a vertical placement will only be defined if it is wide enough to provide contrast, such as a ribbon effect achieved with classic hair painting.

When painting hair, because section sizes vary throughout the head, a diagonal placement is your safest go-to for the best of both worlds. You can saturate with product for a defined pop of colour without a harsh line of demarcation.

Diagonal placement can be determined by the actual partings in the hair, or by the angle of application, as seen below:

Angled Parting



Angled Application

For optimal diffusion, you can combine the two by using a diagonal parting with a diagonal colour application.

Projection

Anytime that you move the hair out of its natural fall, you are creating projection. Just as projection can be used with hair cutting to create an increase in lengths or a soft layer, **projection** can be used in hair painting to create a soft colour line.

For example:



Note how if the hair were to be projected straight up and painted in a straight line, the angle of the line would change dramatically as the hair fell back into natural fall. This is diffusion from projection, and

although you will likely not project the hair this dramatically while hair painting, the same principle can be applied at a lower angle of projection, combined with a diagonal application, as seen below.



The hair that is not painted on the bottom of your section becomes the depth that makes the colour pop.

Saturation

If you are in a position where you cannot easily project the hair to create diffusion (if you want to put the hair in foils for maximum lift, for instance), you can also use brush pressure and saturation to create a seamless blend:

When you are lightening hair, ***more saturation = better lift.***

So, how can that principle be applied to creating a diffused result in hair painting? Increasing brush pressure and saturation as you move down the hair strand will create more lift towards the ends!



Keep in mind that using this method may not be ideal if your goal is a neutral or cool result. The hair that is less saturated will not lift as far, which means the hair will have more underlying pigment and more warmth in those areas! This is also why you must make sure your saturation is even. A blotchy and uneven saturation will result in a blotchy and uneven lift!

Backcombing

Backcombing, when done correctly, is a great method for creating a blended and diffused line of colour.

Backcombing should be done by holding the strands loosely between thumb and forefinger, while a comb is used to *push* the hair from midway down the hair up to the root in one sweeping motion. This gently moves the hair behind the teeth of the comb up towards the scalp, as portrayed in the image below:



You can see how the hair has been evenly moved by the reduction in density in the ends. Painting straight across the backcombed section would now result in a beautifully diffused colour line:



Your chosen method of hair painting, and method of diffusion will change from client to client (and sometimes section by section!) depending on the client's hair and their desired result. Don't be afraid to switch up your application methods, because with hair painting, as with anything else, practice and experience is what will make you a master at your craft!

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6.3 Application Process: Freehand Hair Painting Service

Tools and Supplies Required

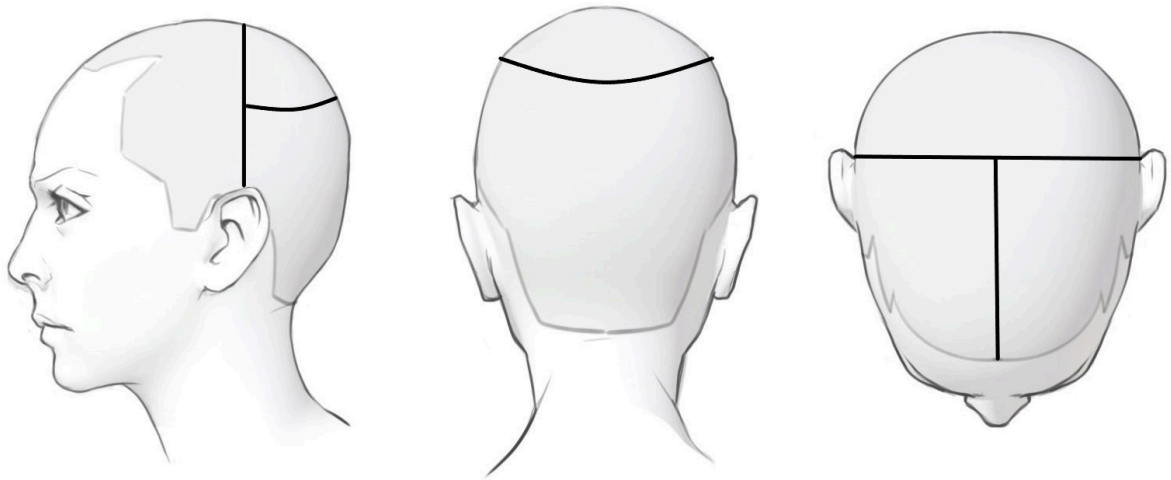
- Gloves
- Colour bowl
- Whisk
- Weigh scale
- Colour cape
- Towels
- Comb
- Balayage board (optional)
- Hair clips
- Feather soft tint brush and/or balayage brush
- Meche strips or separators of your choice
- Lightening product*

Note: For this example, an off-the-scalp clay lightener will be used, eliminating the need for hair separator tools. Always choose your product based on your hair and scalp analysis.

Application

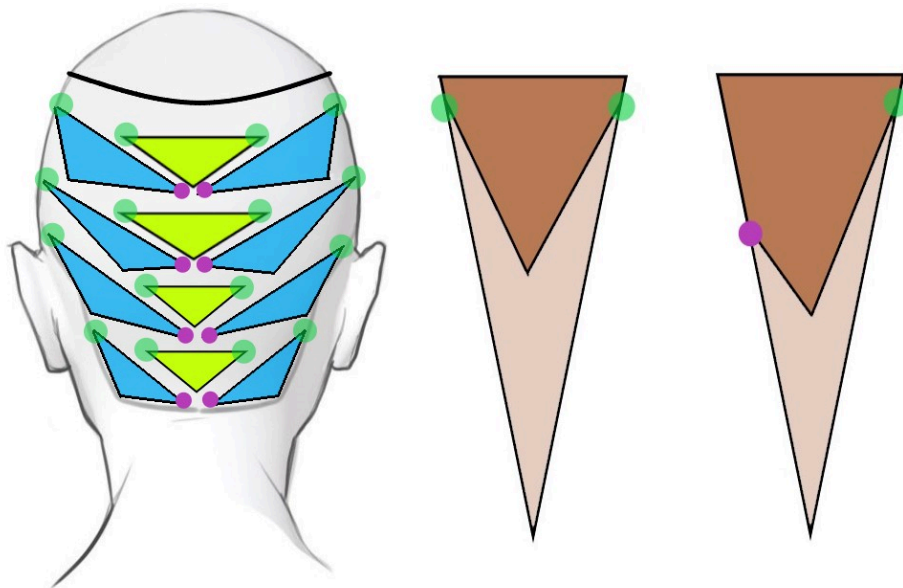
Prepare your client for their balayage service by performing the following procedure:

1. Drape a towel around your clients shoulders, and secure the colour cape around their neck.
2. Ensure that the hair is fully dry.
3. Brush through the hair gently to remove tangles.
4. Section the hair into four sections, using your clips to secure the hair. For this example, a middle part will be used. However, you should work along your client's preferred part line, whether that is centred or off to one side. If the client likes to change their part day to day, work off of the centre.



Once you have prepared your client for the hair painting service, gathered your tools and supplies, and mix up your bleaching product.

1. Don your gloves
2. Begin your application in the back section, starting at the nape and working up towards the crown section, using the following sectioning pattern and application:
 - Sectioning: Triangles.
 - Application: V-shaped application, with the product applied on the top side of the triangle section. The centre sections are an even V application, while the side sections have an uneven V, with a higher application/more brightness towards the sides.



Note: It is best to start in the back when you are first practicing this technique. This allows you to focus on application, rather than speed. Don't worry if the back is processed before the sides. It is a simple process to lean your client back into the sink to rinse once the product is ready. With care, this can be done without disturbing the sides while you wait for the processing to finish.

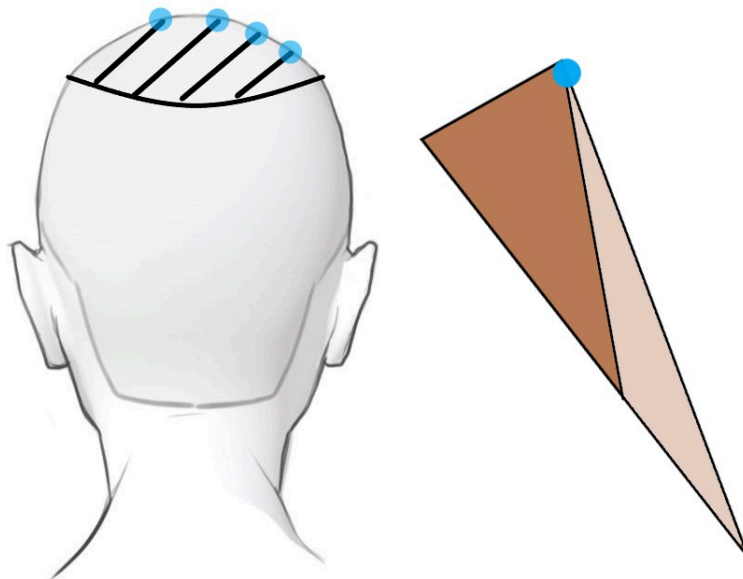
Video: Hair Painting Application – Back Section (https://viuvideos.viu.ca/media/Hair+Painting+ApplicationA+Back+Section/0_q7loa7rc)

Note: Video has no sound.



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3. Once the back is applied, move into the crown section, using the following sectioning pattern and application.
 - Sectioning: Diagonal slices, approximately 1 inch apart.
 - Application: ½ V-shaped application, with the product applied higher towards the top of the head on each slice.



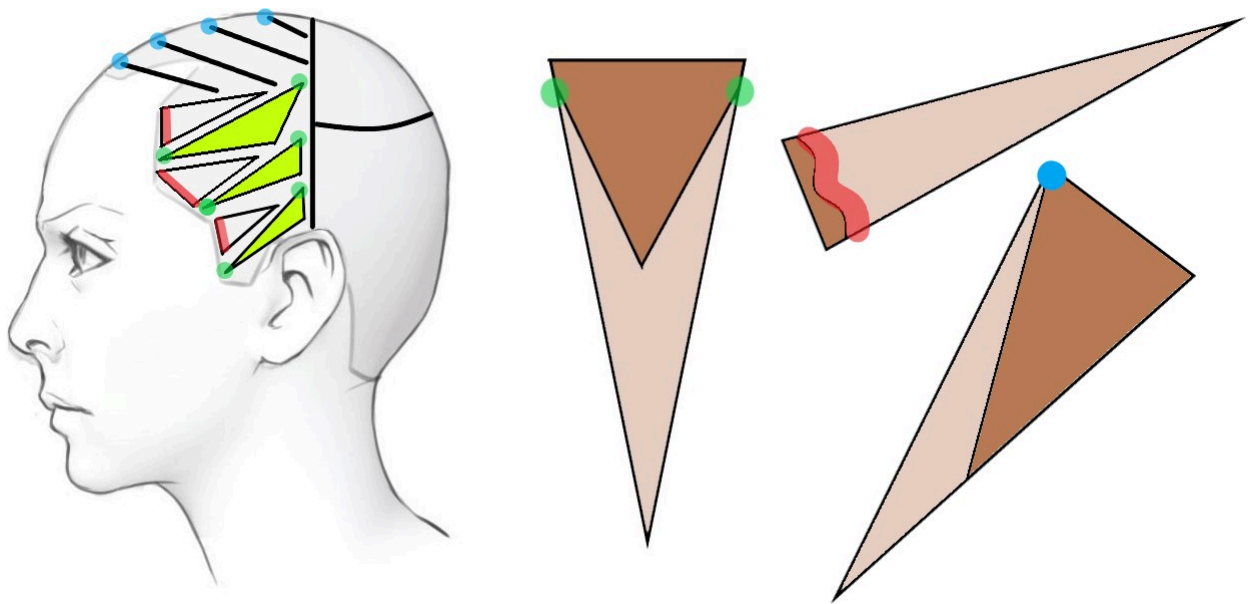
Video: Hair Painting Application – Crown (https://viuvideos.viu.ca/media/Hair+Painting+ApplicationA+Crown/0_s0u25l23)

Note: Video has no sound.



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4. Once the crown section has been applied, move into the side sections, using the following sectioning pattern and application.
 - Sectioning: Triangular sections from the ear to the crest. Diagonal back slices, approximately 1 inch apart, in the area from the crest up to the part line.
 - Application: From the ear to the crest – alternate between:
 - V shaped application on the top side of the triangle section
 - Full application on the front side of the triangle section, closest to the face. When working on these face-framing front sections, use a feather light pressure to create a soft, blended highlight around the face when the hair is pulled back.
 - Application: From the crest to the part line – ½ V-shaped application, with the product applied higher towards the face on each slice.



Video: Hair Painting Application – Side Section (https://viuvideos.viu.ca/media/Hair+Painting+ApplicationA+Side+Section/0_25q0bpvf)

Note: Video has no sound.



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Final Results

Here are the final results of this application:



This hair-painting method is a basic one that allows you to practice three simple application techniques, and it is one that will work on most hair types and textures. There are many ways to paint and balayage hair, so be sure to seek out and practice different techniques in order to build your repertoire and become a master at creating beautiful, low-maintenance looks for your clients!

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Chapter 7 - Corrective Colour

Learning Objectives

- Recommend and perform a corrective colour service
- Determine the appropriate uses of a tint-back and a decolorization service
- Determine and perform the sequential steps of a corrective colour service

Anytime a stylist needs to correct an undesirable outcome from a previous colour service, this is known as a corrective colour service.

In this chapter we will cover the basics of colour correction, including:

- Hair analysis
- Determining the appropriate process
- Determining the appropriate sequence of services
- Tint-back service
- Decolorization sequence

7.1 Hair Analysis

As with any service in the salon, a colour correction begins with a thorough consultation and hair analysis to determine:

- Existing **level** and **tone**
- Target level and tone
- **Texture, porosity, and elasticity**

When performing a consultation for a colour correction, we must also determine:

- What is the client's detailed colour history?
- Is the current colour **oxidative** or **non-oxidative**?
- Is the current colour professional-salon colour or box colour?

Knowing the client's colour history will allow you to determine how many layers of colour are present and what is hiding underneath. As you can imagine, one layer of professional dark colour over previous blonde will be much easier to remove than multiple layers of dark box colour.

Speaking of box colour, stylists have many opinions on the disadvantages, but is it actually so “bad”?

When you look on the side of a box of permanent drug store colour, you will see that it shows the results at multiple levels. This indicates that it is formulated to lift *and* deposit on various levels, making it a one-size-fits-all solution. For a product to have this range of results means it is higher in alkalinity than a professional colour line. Those who purchase box colour wishing only to go darker likely do not understand that this high ammonia colour is causing unnecessary damage to their hair strand.

Many box colours also contain progressive dyes. This means with every layer, the colour will become increasingly darker and harder to remove, resulting in a reverse ombré effect, where the roots may be a medium brown, but the ends have taken on a dull, almost black appearance.

Box colours also typically contain additives, such as metallic salts and sometimes even henna, that bond to the keratin in the cortex and are likely to chemically react with professional hair colour products and/or wreak havoc on the hair.

The hair analysis and consultation will also help to determine whether we will be performing a tint-back, or a decolourization service. When we talk about corrective colour services, we must consider both sides of the spectrum. Is the hair too light or too dark? In the next section we will cover both extremes, beginning with what to do if the hair is too light and/or an undesirable tone.

7.2 Tint Back

A tint-back service is the process of returning pre-lightened hair to a darker shade with the help of a filler. A tint-back process is necessary when the hair is being coloured three or more levels darker or when the pre-lightened hair requires a filler to correct an unwanted blue or violet muddy tone.

Filler

A filler is used to:

- Equalize the **porosity** of prelightened hair.
- Replace the missing **underlying pigment** that was removed during the lightening process.

There are two types of fillers. One is applied and fully processed prior to the target colour application and can be either non-oxidative or oxidative, depending on hair texture and integrity. The second type of filler is a liquid tint that is applied to the hair, with the final colour formula applied directly over it.

A filler is a useful tool in equalizing the porosity of pre-lightened hair before the final colour service. Porous hair accepts colour more easily, but also tends to lose it more quickly. Additionally, if hair has unequal porosity from roots to ends, the resulting colour will be uneven.

When hair is lightened, we know that the bleach product will diffuse the natural **melanin** in the **cortex** and remove it, exposing the **warm** underlying pigment in our ten levels.



For example, if the hair is lifted from a level 4 to a level 8, all red and orange underlying pigment is removed, and we are left with yellow.

Now imagine that we want to reverse the process and perform a tint back to bring that level 8 hair to a level 4. We must add back that missing pigment in order to create the most balanced result.

Using the above scenario, let's suppose the client would like a **neutral-cool** toned level 4 result. What would happen if you simply applied a blue-based level 4 onto the pre-lightened yellow hair?

Think back to the colour wheel: Blue + Yellow = Green... Not a very attractive result!

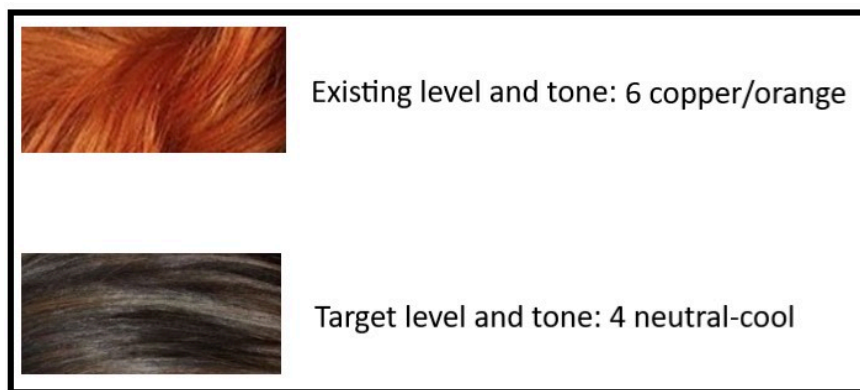
So how do we formulate our filler?

Generally, we want to fill to two levels lighter than our target end result. Consider the examples below:



If the hair is filled to 2 levels lighter than the target of level 4, you will need to add back the underlying pigment at a level 6, which is orange. Let's say for this scenario that you decide to use a semi-permanent filler, for example a level 6 copper. You will apply this filler to the pre-lightened hair, process fully, then remove.

So now, after the filler process, you have a level 6 copper/orange:



If you refer back to the colour wheel, you see that orange and blue are complimentary colours. Therefore, you can now apply a level 4 ash colour to create a neutral-cool result!

Will you always need to **neutralize** your filler tone? Generally a neutral or natural-warm result will not require neutralization, but a cool tone will.



Tint-back process

As mentioned above, a filler is also helpful when a client wants to go darker, but has pre-lightened hair that is over-toned and has a muddy blue/purple cast to their blonde hair. In this case, the filler also acts as a correcting tone.

For example:

	Existing level and tone: 9 violet/over-toned
	Target level and tone: 5 neutral
	Filler: level 7 underlying pigment - yellow/orange

In this case, the filler tones would neutralize the unwanted violet tones in the pre-lightened hair, allowing us to apply the level 5 final formula over an already neutral base.

To review:

- Assess existing level and tone.

- Determine target level and tone.
- Fill with the underlying pigment 2 levels lighter than your target level.
- The choice of filler (fluid, non-oxidative, or oxidative) will depend on hair texture and porosity considerations (refer back to Chapter 2.2 Hair and Scalp Assessment).
- A neutral or warm target colour generally will not require the filler to be neutralized with the final colour formula, but a cool target colour will.

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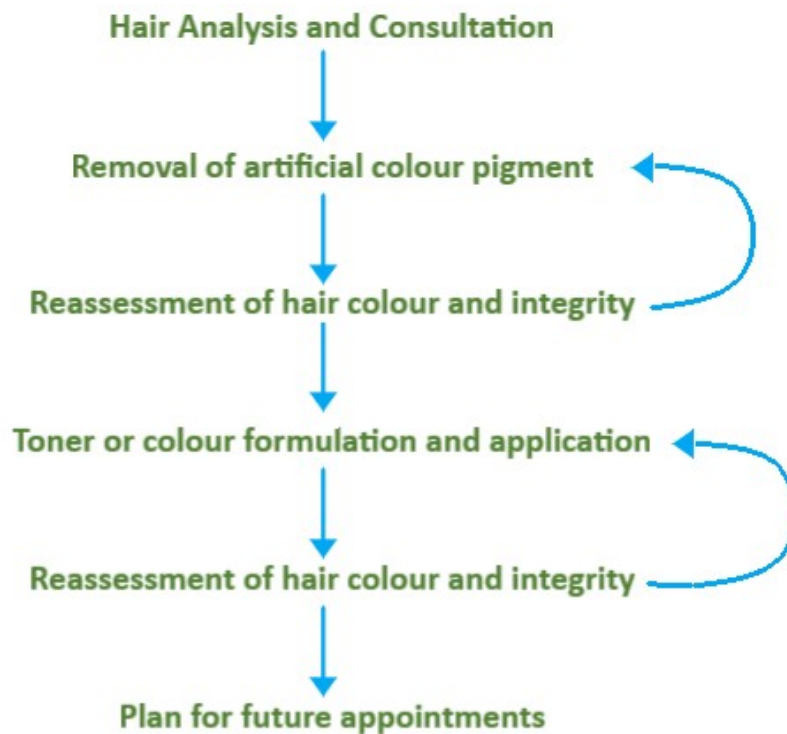
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7.3 Decolourization and Toning

A decolorization service is required when a client's coloured hair is darker than their target level, and **artificial pigment** must be removed in order to achieve their desired outcome.

There are many factors to be considered when performing a **decolorization** service, and it is important to remember that multiple steps and multiple appointments may be required. It is crucial to educate the client and set realistic expectations *prior to* beginning the service.

A decolourization service involves many steps, some of which may need to be repeated more than once.



Step 1: Determine the Type of Colour You Will be Removing

The first step to a decolorization service is the consultation and hair analysis, in which you must determine whether the artificial colour present on the hair is non-oxidative or oxidative dyes. As you learned in Chapter 1, these dyes work very differently.

Non-oxidative direct dyes or semi-permanent colour products contain large colour molecules that either stain the **cuticle** or sit within the cuticle layers. They do not form molecular links.

Oxidative demi-permanent or permanent colour products contain a combination of large and small

colour molecules. The smaller colour molecules enter the cortex and form molecular links, which hold them in place.

This is an important distinction as the two types of colour products must be removed differently.

Step 2: Remove Artificial Colour

There are several ways to remove artificial colour, depending on the type of colour product, the hair integrity, and the hair texture. The methods covered in this chapter are:

1. Colour removers
2. Shampoo cocktail/ bleach bath
3. Bleach application

Colour Removers: Non-oxidative Direct Dyes and Semi-Permanent Colouring Products

As previously mentioned, direct dyes and semi-permanent colour products have large colour molecules that stain, or sit in, the cuticle layer only. So it would make sense that they would be easiest to remove, right? Unfortunately, this is not always the case, and one must be cautious. The best place to start with these types of colour products is with a colour remover that is specifically meant to remove these types of dyes. Most colour lines will include such removal products specific to their brand.

The problem with reaching for bleach in this case is that the lightening product will open up the cuticle and often drive the colour molecules deeper into the cortex, thus making them even more difficult to remove. You will most likely end up with a different shade of the colour that you are attempting to remove.

When using an appropriate removal product, take care to apply it only to the areas of the hair where the artificial colour is visible, as these products will also affect the natural melanin in virgin hair.

A few examples of appropriate direct dye and semi-permanent colour removal products are Joico Colour Eraser, Pulp Riot Blank Canvas, and Malibu DDL.

Colour Removers for Oxidative Colouring Products

When removing oxidative colour, a permanent colour remover has its pros and cons. It is gentler on the hair than bleach and does not affect the natural melanin. The downside is that after you use one, you may need to wait 1–2 weeks before you move into the next step of your colour correction.

The reason for this is related to how these products work. Oxidative colour removers work by entering the cortex, shrinking the colour molecules, and dissolving the molecular links, thus allowing the molecules to simply be rinsed from the hair. BUT, if the hair is not rinsed enough to remove all of the artificial pigments, as soon as you move on to your next step in the corrective colour process (whether that is bleach or colour application), the **developer** in your formula will reactivate the remaining colour molecules, returning the hair to a form of its previously coloured state. This is why it is especially

important to be absolutely sure the colour removal product is 100% rinsed from the hair before proceeding.

Porosity plays a big part in this process, as hair that is more porous will generally release the colour molecules more easily. In such a case, it is possible for the artificial colour to be removed in one appointment. Just one more reason why hair analysis is such an important part of your consultation!

Note: You can check the success of the removal process by applying 20-volume developer to a test strand of hair. If the strand shows signs of re-colourization, the hair is not yet entirely rinsed.

Permanent colour removers are a great gentle option in the right circumstances. But keep in mind their limitations. For example, if both non-oxidative and oxidative colour products are present in the hair, these removal products will not work on their own.

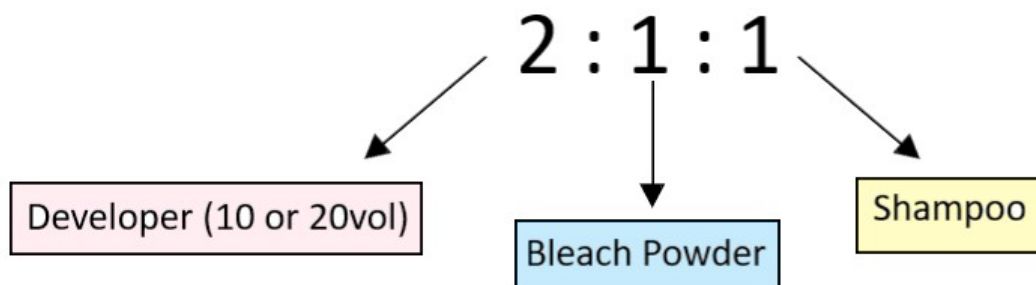
They also do not have the ability to restore the hair to its natural state once its been bleached. Bleach destroys melanin, and once that has been done, there's no way to reverse the process.

Shampoo Cocktail/ Bleach Bath

A shampoo cocktail is a process that is gentler on the hair than bleach, and is a great option under the following conditions:

- The hair does NOT contain non-oxidative direct dyes or temporary colour products
- The colour only needs 1–2 levels of lift
- The client has pre-lightened hair that has been over-toned
- The hair is too fragile to use a full-strength bleach product

The mixing ratio for a shampoo cocktail is:



**This ratio may vary depending on product line used*

To perform a shampoo cocktail:

1. Shampoo the hair well to remove any residue. Do not condition.
2. Towel dry the hair. It should be damp, but not dripping.
3. Don gloves.
4. Apply the mixture to the artificially coloured hair.
5. Allow to process for 10–30 minutes while monitoring the lift. You may need to emulsify continuously for optimal results.
6. Rinse thoroughly and shampoo.
7. Reassess and reapply a fresh mixture if more lift is needed and the hair integrity will allow it.

It is important to note that this solution will be quite thin and runny. Take care to avoid any virgin hair, as the solution will lift and expose the underlying pigment.

Note: A shampoo cocktail is also useful in correcting over-toned pre-lightened hair.

Bleach Application

The final method of decolourization is a bleach application.

What is the first step of this method? You guessed it! Hair analysis and consultation.

Any time you are using a bleach product, you must consider the hair integrity and texture, as well as determining how many layers of colour you will need to remove.

If you have ruled out a colour remover and a shampoo cocktail, your next step is to do a test strand in preparation for a bleach application. A test strand will tell you how the hair will lift and whether the hair can handle it. It will also alert you if you are dealing with multiple zones of various colour, and whether you may end up with multiple shades of underlying pigment, as seen below:



It is much better to know in advance the result from using bleach as a colour remover, so that you can prepare your plan and formulate accordingly. You will likely require multiple formulas of lightener.

Remember that hair texture always plays a part, but it is a much different process to lift through artificial pigment than virgin hair. You will not get predictable lift, and the exposed colour will be a mixture of underlying pigment and artificial pigment, leaving you with a darker, stronger warm tone to deal with.

Step 3: Reassess Hair Colour and Integrity

You've completed your first decolorization process, and now you must reassess the hair in front of you.

Is the hair still too dark?

If the hair integrity is good, you may choose to go ahead with a second de-colourization service. This does not mean you will necessarily do the same removal method twice. If your first service consisted of using an oxidative colour remover, you may now opt to use a bleach application to achieve better lift. If you started with a bleach application and did not quite make it to the target level, you may choose to use a lower developer and milder bleach product for your second process to lift the last 1–2 levels more gently. Alternately, perhaps only the mid-strands need more lift to achieve an even result. Always do the minimum necessary to achieve an even result. This includes using the gentlest product necessary, which will vary by hair texture. Keep in mind that every subsequent decolorization service contributes to a weakened hair strand. You must reassess after each decolorization.

If the hair integrity is poor after the first decolorization, you may need to stop here and make a decision with your client. Perhaps you can only achieve a couple of levels of lift this appointment, and decide to

tone what you've got and set your client up with strengthening treatments to do at home before they come back in a few weeks for their second appointment. Or, they may be happy with the amount of lift achieved and decide to wait the full 4–6 weeks before their next appointment.

Is the hair colour even? Is it at the desired level?

Great! You may now move onto the toner application! But first, be sure to assess hair texture and integrity, as these factors will affect your formulations.

Step 4: Formulate and Apply Toner

Formulating to tone after a decolorization service follows many of the same guidelines as formulating to tone after a virgin lightening service (refer to Chapter 4.7), however there are some unique considerations that you should prepare for.

When lifting through layers of artificial colour, you will likely end up with varying degrees of lightness and tone from root to ends, and the hair may not have the strength and integrity to endure a second decolorization process to even things out. In this instance, you will not only have to consider uneven porosity when formulating, but also variations in underlying pigment.

If you have uneven levels of lift throughout the hair, let's look at how to determine the next procedure, and formulate the appropriate toners.

Firstly, you should assess each area and zone individually to record the level, exposed underlying pigment, and levels of porosity. Next, determine which area or zone is the darkest, and decide whether you will enhance or neutralize the existing tone. Formulate accordingly.

In a case where further lightening is not an option, you will need to tone to the darkest level achieved. The darkest area will have the strongest underlying warm pigments and thus will need the most neutralization if a neutral result is desired. Formulating for this area first allows you to more easily determine the tones required to achieve an even colour result throughout the hair.



For optimal results, tone to the darkest level.

While this may feel counterproductive to darken the lighter areas, remember that attempting to tone to the lighter levels of lift will be ineffective on the darker areas, and you will be left with horizontal lines of demarcation. An even level 6 result is great progress if you started with a level 3 or 4, and you can assure your client that further lift may be achieved in future appointments, but only if the hair integrity allows.

If subsequent lifting appointments are planned, consider using a semi-permanent toner for gentler deposit and to allow for fading and easier lift with further decolorization in the future. It is also worth considering that a neutral or warm tone will appear lighter than a cool tone. So, keep this in mind, even if the ultimate end goal is a cool result, because you're better off to keep the tone on the warmer side at this stage, or your client will likely leave with something that looks closer to a level 5 and will probably feel as though not much progress was made after much time and effort!

Example

Let's look at some example formulations for the lightening result above.

Existing level, tone and porosity:

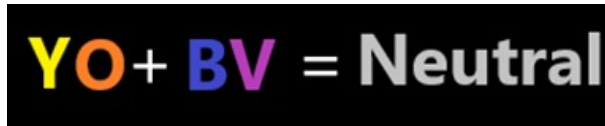
- Area 1, regrowth: 8/9 pale yellow, average porosity
- Area 2/ midstrands: 6/7 yellow orange, average porosity
- Area 3, ends: 9/10 palest yellow, high porosity

Target level and tone, *based on darkest area of lift achieved:*

- 6 neutral/warm

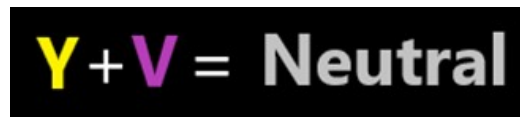
Formulate for area 2 first

To neutralize the yellow-orange tones, use a violet-blue toner. Porosity is average, so we do not need to worry about over-toning.



Formulate for area 1 (next darkest area)

In this area, we need to neutralize pale yellow tones, as well as darken the hair by 2 levels.



Example: 40g semi activator + 20g 6 NV

The natural in our formula allows us to darken the level without over-toning.

Formulate for area 3 (lightest area)

For this area, we must account for the high porosity and remember that highly porous hair tends to more readily absorb cool tones. Because we are darkening, there is no need for a neutralizing tone. In fact, we should add some warmth to avoid a dull or muddy result. As well, we should formulate at a level lighter than our target level, based on the porosity.

Example: 40g semi activator + 15g 7N + 5g 7 gold

Note: If subsequent lightening appointments are planned, consider leaving the lightness through the ends, to avoid the need for further lifting on already compromised and porous hair. In this case, you could mix a level 9 toner to achieve a similar tone to the rest of the hair without adding depth.

Apply your three different toners in order of darkest to lightest area of lift, as the darker areas will require more neutralization, and the lighter porous ends will deposit and process the fastest.

With corrective colour, every toning scenario will be different, so remember to assess each area of lift individually, then work towards an even result. As always, a test strand is your best friend! Applying your formulas to one small section to ensure effectiveness will allow you to reformulate as needed for the best final result!

For toner removal guidelines, refer to Chapter 4.7 Application Process: Global Toning Service.

Step 5: Reassess Hair Colour and Integrity

Once the toner has been processed and removed, dry a section of hair and assess once again. You may need to return to step 4 for a subsequent toner application on one or all areas if a satisfactory result has not been achieved. Corrective colour is not a predictable process, so be patient with the process.

If you are satisfied with the result, proceed to step 6.

Step 6: Plan and Schedule Subsequent Appointments

Once the colour correction process is completed, create a subsequent appointment plan.

Include in your plan:

- Number of appointments estimated to reach desired result.
- Hair integrity. Are at-home strengthening treatments required prior to further lightening?
- Time between appointments. Allow time for the hair to regain strength and **elasticity** if needed.
- Budget. Colour correction can be an expensive process. Clearly communicate future costs to your client.

Creating a clear plan with instructions for at-home care will reassure your client that their wishes have been heard, especially if they are still a few levels away from their goal. As the professional, it is your job to clearly explain the process. Remember, even if you managed to achieve the target level, the client may need subsequent toning appointments and/or treatments for compromised hair!

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Glossary

artificial colour

Oxidative or non-oxidative colour products that are added to the hair in order to change its hue, level, or intensity.

average porosity

Hair absorbs moisture and chemical products at a common rate. Cuticle scales are intact and slightly raised.

colour wheel

A tool used by stylists for hair colour assessment and formulating

complementary colours

Colours which sit across from each other on the colour wheel, and when mixed, cancel each other out to create a grey/brown neutral colour.

cool colours

Colours that reflect blue, violet, or green.

cortex

The second layer of a hair strand, which provides hair with its strength and elasticity.

crown

The area of the head located between the apex and the occipital bone.

cuticle

The outer layer of a hair strand made up of overlapping scales.

decolorization

The removal of pigment from the hair.

density

The amount of hair on the head.

developer

An acidic product that is mixed with oxidative colour in order to oxidize and produce colour molecules.

elasticity

The hair's ability to stretch and return to its original shape without snapping.

enhance

To add to the intensity or vibrance of a colour.

existing colour

The hue, level, and intensity that exists in a client's hair prior to a colour service. This could refer to natural colour or previous artificial colour.

extreme porosity

Hair readily absorbs moisture and chemical products. Cuticle scales are lifted and/or damaged.

head lice

A condition in which the head hair and the scalp is infected by the head louse. (Pediculosis Capitis)

hue

A colour or shade.

intensity

The strength or saturation of colour.

level

The darkness or lightness of colour in relationship to other colours.

line of demarcation

The line where the natural regrowth meets the previously coloured hair.

medulla

The inner core of a hair strand, which gives hair its structure. Often missing from very fine hair.

melanin

Pigment that resides in the hair's cortex which gives hair its hue.

neutral

Colour that does not predominantly reflect a warm or cool tone.

neutralize

To counteract or drab the intensity or hue of a colour.

non-oxidative colour

Colouring products that do not require the use or mixing of a developing agent such as hydrogen peroxide.

oxidation

The process in which a developing agent combines with an oxidative colouring product to turn colourless molecules into coloured molecules for the purpose of hair colouring.

oxidative colour

Colouring products that require a developing agent, such as hydrogen peroxide, to oxidize and introduce colour molecules into the hair strand.

patch test

The intended colour product is applied to the inside of the elbow and behind the ear to determine if there are any sensitivities or allergies.

pH scale

A scale from 0 to 14 that is used to determine the acidity or alkalinity of various substances.

porosity

The hair's ability to absorb moisture or chemicals.

primary colours

"Pure" colours that cannot be created by mixing. They are red, blue, and yellow.

projection

The degree to which the hair is lifted off the curve of the head.

psoriasis

A chronic skin disease that results in scaly, often itchy areas in patches on the body and scalp.

resistant porosity

Hair that does not readily absorb moisture or chemical products. Cuticle scales are tightly packed and smooth.

ringworm

Ringworm of the scalp (tinea capitis) is a fungal infection of the scalp and hair shafts.

saturation

The amount of colour or lightener that is applied to a section of hair.

scabies

A condition caused by a tiny bug called the human itch mite. If these mites burrow into your scalp, your scalp can become quite itchy.

secondary colours

Colours created by mixing two primary colours. These are orange, green, and violet.

strand test

The intended colour formula is applied to a strand of hair to help determine end result.

tertiary colours

Colours created by mixing a primary colour with its neighboring secondary colour. They are yellow-orange, red-orange, red-violet, blue-violet, blue-green, and yellow-green.

texture

The diameter of the hair strand. Texture can be described as fine, medium, or coarse.

tone

The shade or hue.

toning

The application of colour over pre-lightened hair.

underlying pigment

Any pigments that are exposed as hair is lightened through the 10 levels of lift.

uneven porosity

Hair that displays one or more types of porosity at different areas among the hair.

virgin hair

Hair that has not been altered with a chemical product, such as colour or a perm.

warm

Colours that reflect red, orange, or yellow.

whorl

A growth pattern that results in circular hair growth. Generally found in the crown.

widow's peak

A growth pattern at the front hairline that results in a pointed hairline and a strong directional hair fall.

zone 1

The first ½-inch to ¾-inches of hair growth.

Versioning History

This page provides a record of edits and changes made to this book since its initial publication in the B.C. Open Textbook Collection (<https://open.bccampus.ca/>). Whenever edits or updates are made in the text, we provide a record and description of those changes here. If the change is minor, the version number increases by 0.01. If the edits involve substantial updates, the version number increases to the next full number.

The files posted by this book always reflect the most recent version. If you find an error in this book, please fill out the Report an Open Textbook Error (<https://open.bccampus.ca/reporting-an-open-textbook-error/>) form.

Version	Date	Change	Details
1.01	February 19, 2021	Added to the B.C. Open Textbook Collection.	