Hair and Beauty

Knowledge Organiser

City and Guilds (3038-24)
Level 2 Technical Award in Hair and Beauty Studies

Unit 202 – Science of hair and beauty

Miss Carter

Unit 202 – Science of hair and beauty

1.1 – The effects of acids and alkalis on hair and skin
1.2 – The scientific principles of ingredients in hair and beauty products
1.3 – Ingredients in hair and beauty products
1.4 – Ethical consideration for testing cosmetics

2.1 – Anatomy and physiology terminology of hair skin and nails
2.2 – Hair, skin and nail conditions and how they can affect or limit treatments and services

Working practices influencing businesses

Examples of health and safety within the salon

Sterilisation

- TOTAL destruction of micro - organisms
- Glass bead steriliser
- Usually a heat treatment
- Kills the spores too

Sanitisation

- Hand sanitiser
- Does not kill the spores
- Kills micro organisms to a safe level

Disinfection

- Cleaning something to remove bacteria
- Products mild enough to use on the skin
- Gently reduces number of organisms
- May be in the form of a surface spray

Hygiene procedures

- Washing hands
- Dispose of waste
- Being clean and sanitary
- Personal hygiene

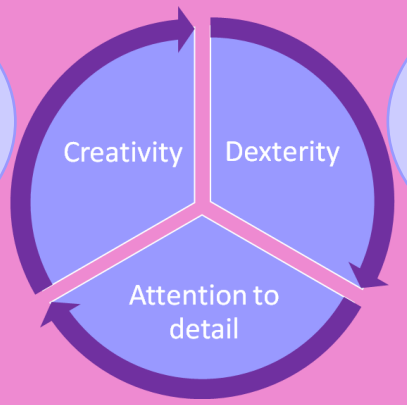
Skills and attributes required by industry professionals

Customer service	Good customer service should ensure that the customer is satisfied with every aspect of their interaction with a business. Opportunities to ensure that customers are consistently satisfied are increased when industry professionals demonstrate the following skills and attributes: good communication skills, high levels of professional conduct, discretion and confidentiality.
Communication skills	• Ensure all written information is clear and legible. • Avoid using text and slang language in professional documentation. • Verbal communication is enhanced with positive body language and facial expressions. • Good eye contact should be maintained during face to face communication.
Professional conduct	• Always demonstrate the highest possible standards in work. • Continue with ongoing training to update and maintain your skill level. • Ensure client expectation and needs are met in an open and honest way. • Ensure that relationships with clients and other professionals are appropriate. • Comply with all legal requirements. • Maintain high levels of health and safety in the work place. • Promote equality and diversity.
Discretion	• Make sure any conversation with a client is about appropriate content that will not cause offence.
Confidentiality	• Follow the Data Protection regulations to ensure the clients information is used, held and disposed of securely. • Never discuss clients' personal information or conversations with a third party.

Glossary
Integrity
Honesty
Reliability
Punctuality
Positive attitude
Initiative
Team work

- **Communication skills**: Communication is the activity of conveying information through the exchange of thoughts, messages, or information, by speech, body language, facial expressions, signals, writing, or behaviour. It is the meaningful exchange of information between two or more people.
- **Professional conduct**: To behave in a way that meets industry expectations in the workplace, in order to uphold the high standards and reputation of a professional business.
- **Discretion**: The ability of behaving or speaking in such a way as to avoid causing offence or social embarrassment or revealing confidential information.
- **Confidentiality**: Keeping information, written or verbal, secret or private.

Consideration given to the choice of colour and blending to achieve an eye-catching design. Highlighting with white and line work in black carefully applied to produce an effective and desirable result.



Steady hand during brush work to ensure neat lines. Pinching sponge to create a neater edge around application.

Design was symmetrical. Every attempt to make all details of the design coordinate and produce an authentic butterfly pattern. The addition of lipstick and glitter to add final touches to the design.

Creativity: To generate new and worthwhile ideas and concepts using your imagination.

Dexterity: Skill in performing tasks, especially with the hands.

Attention to detail: Achieves thoroughness and accuracy when accomplishing a task through concern for all the areas involved.

The effects of acids and alkalis

pH stands for potential hydrogen

It measures the acidity or alkalinity of a water based substance.

The pH scale ranges from 0 (acidic) through to 7 (neutral) to 14 (very alkaline).

pH values of skin products

- Soap pH 9-10
- Shower gel pH 9-10
- SPF pH 5-7.5
- Cleansers pH 4.5-7
- Toners pH 5-7
- Moisturisers pH 5-7
- Exfoliators pH 3-4
- Shaving products pH 7+
- Depilatory products pH 10-12.5

pH values of nail products

- Cuticle remover pH 11-13
- Nail polish remover pH 2-4
- Cuticle creams pH 5-9

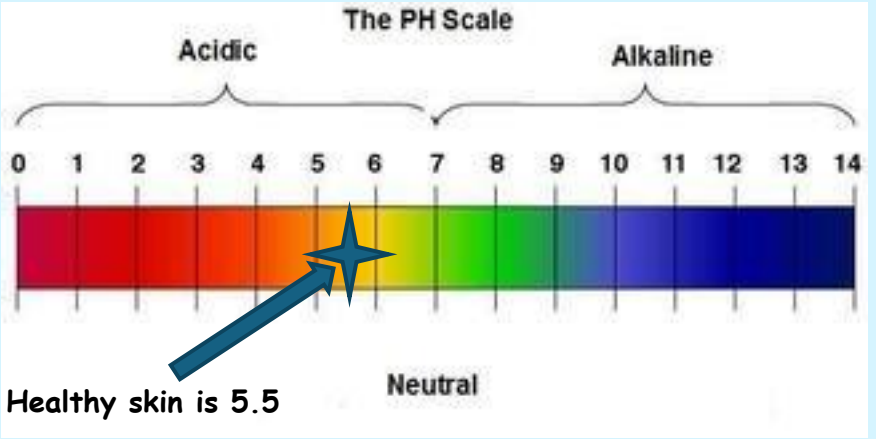
pH values of hair products

- Shampoos pH 6-7
- Lightening products pH 8.5-10.5
- Hydrogen peroxide pH 3-6
- Perm lotion pH 6-7
- Hair relaxing agents pH 9-14
- Surface and treatment conditioners pH 3-7

Litmus paper	Universal indicator paper
Litmus paper will only tell you if the substance is acidic or alkaline, not the strength of the pH. Red litmus will change colour when placed in a product that is alkaline. Blue litmus will change colour when placed in a product that is acidic.	When a universal indicator is used, it shows different colours for different pH values in a rainbow pattern from pH0 (red) to pH14 (purple). The indicator comes in solution or paper forms. It tells us how acidic or alkaline a product is.

Our skin has a protective layer called the acid mantle, which is made up of sweat and sebum. The acid mantle helps to slow down the growth of bacteria and other harmful substances.

Our skin on average ranges between pH 4.5 to pH 5.5



PH balanced products are close to the skins natural pH levels (being slightly acidic) and do not disturb the natural protective barrier, known as the acid mantle.

Numbers lower than a pH7 identify the strength of an acid, with pH0 being the strongest acid. The closer you get to pH7, the weaker the acid level.

Numbers higher than a 7 identify the strength of an alkaline with pH14 being the strongest alkaline, the closer you get to 7 the weaker the alkaline level.

Effects of acids

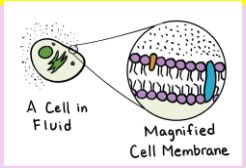
HAIR – Weak acids close cuticle scales and help protect and smooth the hair.
SKIN – Strong acids cause skin burns, limiting its protective function. Weak acids are soothing to skin.

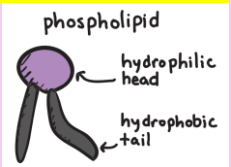
Effects of alkalis

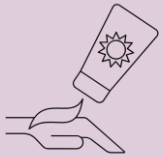
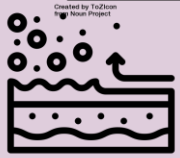
HAIR – Strong alkalis swell the hair and have a depilatory action.
SKIN – Strong alkalis break down skin cells and have exfoliating properties.

The scientific principles of ingredients in hair and beauty products

Hydrophilic head loves water. Hydrophobic tail bonds with oil/fat. Break down (Hydro) (phobic).
Fluid mosaic model: cell membranes article (article) | Khan Academy





Product	Image	Effects
Shampoo/ detergents		Wetting, suspending, emulsifying: keep oil and water (immiscible) from separating. Hydrophilic head breaks waters surface tension, hydrophobic tail bonds with oil or fat molecules.
Hair conditioners		Moisturising, closing hair cuticle scales and restructuring bonds in the hair's cortex.
Skin sun protection creams		Absorbs or reflects UV rays. Can get mineral or chemical versions.
Skin cleansers		Surfactants (ingredients that reduce surface tension) and emollients (moisturising treatment) lower surface tension, remove dirt and sebum (oil).
Exfoliators		Beta and Alpha hydroxides (BHA, AHA) soften and remove dead skin cells, encourage cell regeneration and brighten skin tone. Bead exfoliators remove dead skin cells, can cause irritation.
Cuticle remover		Reduction of keratin to remove dead skin cells to clear the nail plate.

Ethical consideration for testing cosmetics

Animal testing BANNED in the UK and EU (since 1998)

Using animals to test cosmetics products OR their ingredients is banned in the UK and all other member states of the European Union. Since March 2013, it has also been ILLEGAL TO SELL cosmetics products within the EU which have been, or which contain ingredients, newly tested on animals.

A number of countries outside the EU are also now seeking to adopt similar bans. However, in others - including China and the United States of America - animals are still used to test cosmetics ingredients and products.

City & Guilds Level 2 Technical Award in Hair and Beauty Studies (3038-24)

Why products are tested…

- **For safety** - Cosmetics Products (Safety) Regulations
- **To fit its description, be fit for purpose and satisfactory quality** – Trades Descriptions Act, Sale of Goods Act

Sale of Goods Act	Goods must be as described; they must be of merchantable quality and fit for their intended purpose.
Trades Description Act (1972)	Any information, whether written or verbal, given when selling a product or service should be accurate and fit its description.
Cosmetic Products (Safety) Regulations	It is an offence to supply products that will harm human health. Details prohibited and restricted ingredients. Precautions on packaging. Ingredients list in order of volume contained.

It is illegal to test cosmetics on animals due to legislation and pressure from other supportive organisations for the prevention of animal testing of cosmetic products:

People for the Ethical Treatment of Animals (PETA)
"Dedicated to establishing and protecting the rights of all animals". They educate the public and policy makers about cruelty to animals.

Royal Society for the Prevention of Cruelty to Animals
"We exist to inspire everyone to create a better world for every animal". They campaign to change animal welfare laws and educate people about animal welfare.

https://www.peta.org.uk/about/ https://www.rspca.org.uk/whatwedo/whoweare

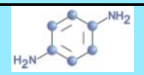
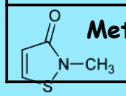
Ethical consideration for testing cosmetics

A complete ban on the sale of cosmetics developed through animal testing has taken effect in the EU. Alternative methods of skin testing are now commonly carried out on hair and beauty products, including:

- Use of humans - Research with the help of human volunteers
- Scientific research:
- In vitro testing - use of reconstructed tissue eg Episkin.
- In silico testing (using computer modelling techniques)

Ingredients in hair and beauty products

Ingredients which commonly cause allergic reactions/skin sensitivities in hair and beauty products:

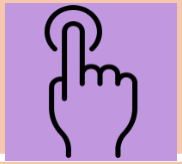
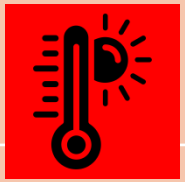
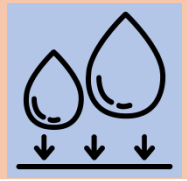
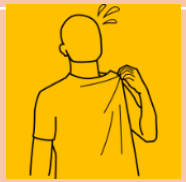
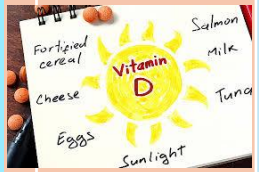
Para dyes 	Paraphenylenediamine (PPD) and para-toluenediamine sulfate are chemicals used in hair dyes and henna tattoos.
Detergents	Water soluble cleaning agents that combine with dirt and impurities to make them more soluble.
Oils	Examples include use of aromatherapy oils, like tea tree oil, which have a variety of functions such as anti oxidants, antiseptic and antibacterial.
 **Methylisothiazoline (MI)**	Preservative that prolongs shelf life. Clear colourless liquid. Water soluble.

Common signs of allergic reaction/skin sensitivities:

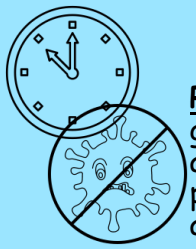
Anaphylactic shock - Occurs when you are exposed to something you are allergic to, such as food/insect sting/medicine. It is a life-threatening allergic reaction. Some of the symptoms include: difficulty breathing, swelling of the throat and tongue, wheezing and coughing.

Dermatitis - The symptoms can range from dry and flaking, mild redness and swelling or itchiness of the skin, to skin that becomes cracked, filled with fluid, extremely itchy and has a stinging sensation. Lighter skin can become red, and darker skin can become dark brown, purple or grey.

Functions of the skin/hair/nails

	S	**Sensation** (Touch)	Respond to sensation on the surface of the skin, via the nerve endings – mainly in dermis.
	H	**Heat** (Regulate temp)	Sweating and goosebumps. Subcutaneous layer insulates the body. Vasoconstriction - Blood vessels constrict/close to keep heat near essential organs. Vasodilation - Blood vessels dilate/open to allow heat to escape away from the body.
	A	**Absorption** (moisture)	Skin is not totally waterproof and allows certain substances to be absorbed. The substances are absorbed: between cells of epidermis, through hair shafts and through sweat glands. The skin is designed to protect itself from penetration by harmful substances. Skin can absorb water and fat-soluble substances such as oil.
	P	**Protection** (Bacteria and UV rays)	Defense against chemicals, dehydration and damage. The acid mantle keeps it waterproof, supple and flexible. The subcutaneous layer cushions underlying bones & organs. The dermis & hypodermis protect against temperature change. The skin protects the body from potential harm. The surface of the skin is bactericidal – helping to prevent growth of harmful micro-organisms.
	E	**Elimination** (Excrete waste)	Process to get rid of waste. Skin excretes sweat, salt and waste from the body. Helps to remove toxins and regulate temperature. Small amounts of certain waste products are removed from our bodies via sweat. Sweat glands excrete sweat onto the skin's surface through a pore.
	S	**Secretion** (Oil and water)	Skin secretes sebum – Keeps hair and skin soft and flexible . Sebum combines with moisture from sweat glands to create the acid mantle (protective layer).
	V	**Vitamin D** (production)	Produced in skin as response to ultraviolet B radiation (sunlight). Vitamin D is necessary for healthy teeth; growth and maintenance of bones. Blocking UV rays prevents production of vitamin D. Vitamin D is created as a positive side effe ct of sun exposure to UV rays. We can also obtain Vitamin D through our diet.

Ingredients in hair and beauty products



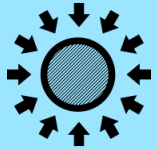
Preservatives – Keep products free from micro-organisms, such as germs/microorganisms, yeast or fungi. These microorganisms can cause a product to break down, become unfit for use or cause infection. They prolong the shelf life of a product. (Parabens, Formaldehyde, Citric acid)

Antioxidants - Help the body to fight free radical (unstable atoms that damage cells) damage. Prevent products degrading through exposure to oxygen. Also, preservatives that prevent fats from spoiling. (Vitamin E, Aloe Vera, Plant extracts)

Soothing agents - Improve signs of sensitivity. Calms to diminish signs of sensitivity such as erythema and blotchy skin. (Aloe Vera, Allantoin)

Stimulating agents - Boosts circulation, leaving a slight redness called erythema. Deep cleansing to remove impurities and waste from the skin. (Peptides boost collagen production, have wound healing benefits, reduce inflammation and encourage healthy cell repair and production. Retinoids, AHA's and BHA's)

Antiseptic – Inhibits the growth of micro organisms. Safe to use on the skin. (Aloe Vera, Isopropyl alcohol, Hydrogen peroxide). Prevents skin infection from bacteria.



Astringent – Water based solution that, when applied to the skin, works to shrink or constrict the skin. Can have a drying effect. Constricts pores and helps reduce the secretion of sebum. (Isopropyl alcohol, Witch Hazel, Zinc oxide)

Humectants – Substances that attract moisture, used in creams and lotions to aid hydration of the skin and keeps products moist. They have the ability to attract moisture and retain it. (Glycerine, Urea, Collagen, AHA's)

Emulsifiers – Added to oil and water emulsions to prevent them from separating. Keep the product stable. (Lanolin, Xanthan gum)

Emollients – These come in a large variety of compounds including fats, oils and waxes. They soften and smooth the skin and hair and reduce water loss from the skin surface. (Glycerine, Lanolin, Squalene, Vegetable oils such as castor and avocado, Dimethicone). Smooths flaky skin cells, improving appearance of skin.

Oxidising agents – Ingredients that activate the oxidation process in colouring, lightening and neutralising products to allow the chemicals to open the hair cuticle layer and process. (Hydrogen Peroxide, Benzoyl peroxide).

Stabilisers – These are ranges of ingredients which act as stabilisers to control the pH levels, hold emulsions together and ensure ingredients retain their individual properties. (Cetearyl alcohol, Cetyl alcohol, Stearyl alcohol). Maintain shelf life.

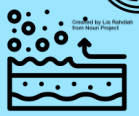
Pigments– Ingredients that add colour to a variety of products from foundations to eyeshadows. Iron oxides provide three different colours used in foundations.

UV filters – Provide protection from ultra violet light by either blocking or absorbing harmful rays and preventing damage to the dermis of the skin. Physical filter, zinc oxide – absorbs and blocks UVA and UBV rays. Chemical filter, Cinoxate or octocrylene absorbs UV rays.

Parabens – Preservatives used to keep products free from most micro-organisms. Parabens are widely used in cosmetics, are safe to use and largely non irritating. Common types are methylparaben, propylparaben and butylparaben. Antifungal, bactericidal and fungicidal.

Dihydroxyacetone (DHA) – Colour additive that darkens the skin by reacting with amino acids in the skins surface. Used as an ingredient in sunless tanning products.

Mineral oils – Found in skin care, hair care and makeup. Have multiple benefits such as softening, soothing and moisturizing. It is also known to be healing and prevent water loss. Provides barrier to skin/hair moisture loss.



Exfoliators – Remove dead skin cells form the surface of the skin, leaving you with brighter, healthier looking skin. Exfoliating also clears the pores preventing breakouts and aiding better absorption of mositurisers.

Hydrating – To add moisture. Useful for dry/dehydrated/damaged skin and hair types.

Non comedogenic – Minimises clogged pores. Anti acne.

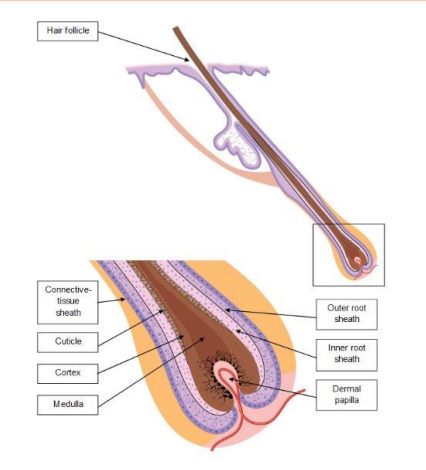
Regenerating – Encourages cell renewal. Great for dull or mature skin types wanting to achieve a healthy glow.

Hypo allergenic – Tested to reduce allergic reactions. For sensitive skin.

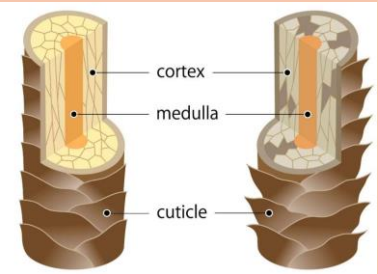
Depilatory – Depilatory creams remove unwanted hair by dissolving them beneath the surface of the skin.

Paraphenylenediamine (PPDA) – Pigment used in permanent hair colours. A chemical that can be sensitizing and cause allergies.

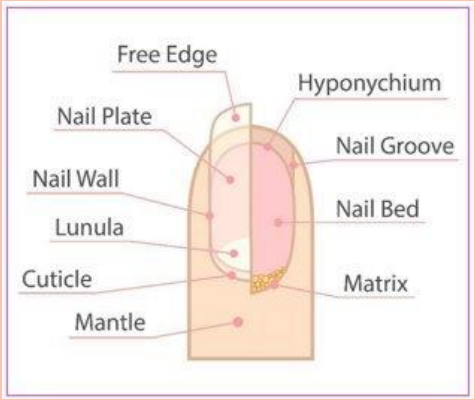
Anatomy and physiology of hair

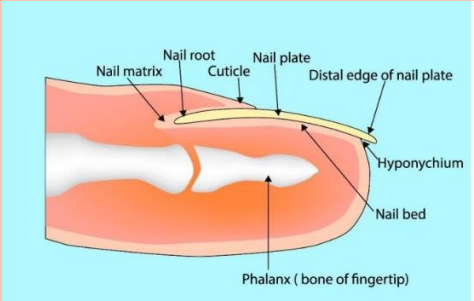


- **Hair follicle** – The follicle anchors each hair into the skin, providing protection.
- **Inner and outer root sheath** – A wall of cells that surround and protects the growing hair.
- **Hair shaft** –The visible part of the hair that extends beyond the skins surface.
- **Cuticle** - The outer layer of hair which protects the cortex. Has overlapping scales.
- **Cortex** - Provides the hair's strength, determines hair colour and texture.
- **Medulla** - Inner most layer, not always present. Thicker hair is more likely to have a medulla than people with thin hair



Anatomy and physiology of nails





- **Nail plate** - The visible part of the nail. Protects the nail bed and has no bloody supply or nerves.
- **Nail bed** - Area on which the nail body rests; provides the blood supply and therefore nourishment.
- **Nail cuticle** - Overlapping dead tissue around the nail. Protects the matrix from bacteria.
- **Matrix** - The area of the nail with active tissue. Responsible for producing cells that become the nail plate
- **Lunula** - The half moon shaped area at the base of the nail. The visible part of the nail root.
- **Hyponychium** - Living tissue underneath the free edge of nail. Works as a seal to protect the nail bed.
- **Free edge** - Part of nail that extends beyond finger or toe. Protects fingertips.
- **Nerve endings** - Provides sensation such as hot/cold and sharp/blunt.

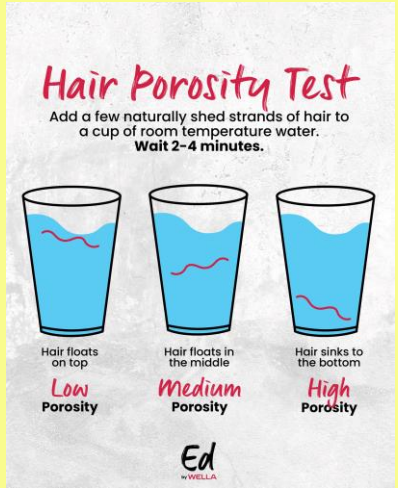
Tests to understand hair strength and condition in the context of limiting treatments / services:

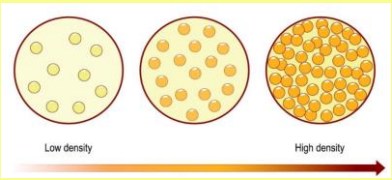
- **Elasticity-** hair in good condition can stretch up to a third of its length and recoil to its original length

- **Porosity** - Hair with low porosity is harder to process, and is resistant to chemicals, hair with high porosity readily absorbs and releases moisture easily.

- **Density** - The main consideration of hair density in styling.

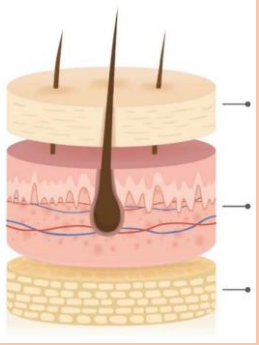
- **Hair pull test** – To determine if there is excessive hair loss.





Anatomy and physiology of skin

The skin has three main layers:

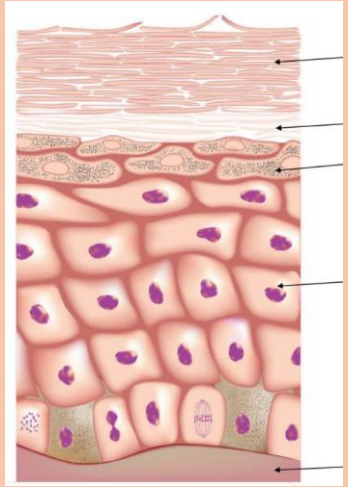


Epidermis
The outermost layer of the skin. Provides protection. It has 5 sublayers.

Dermis
The living layer, also called the true skin. Found between the epidermis and the hypodermis. It consists of 2 layers.

Hypodermis (aka subcutaneous)
The bottom layer of the skin, found under the dermis. It is made of adipose (fatty) tissue for protection and support to internal structures.

Layers of the epidermis



Horny layer (Stratum corneum)
The layer you can see – outer layer of epidermis. Made of dead, flat keratinized cells. Shed to prevent dehydration.

Clear layer (Stratum lucidium)
Above granular layer. Clear cells. Soles and palms only.

Granular layer (Stratum Granulosum)
Above prickle cell layer. Where keratinization takes place.

Prickle layer (Stratum Spinosum)
Above basal layer. Spiny, irregularly shaped cells. Keratin is produced and injected into cells.

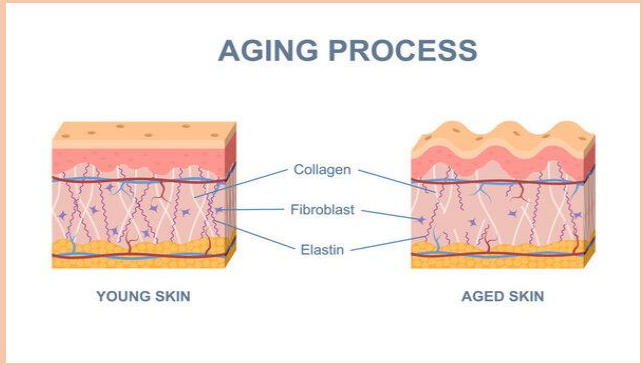
Basal layer (Stratum Germinativum)
Bottom layer of cells in the epidermis. Cell growth

Location and main function of the dermis structures

Collagen
Structural protein fibres that add strength and support to the dermis

Elastin
Elastic protein fibres allow the skin to stretch and recoil, providing the skin's elasticity.

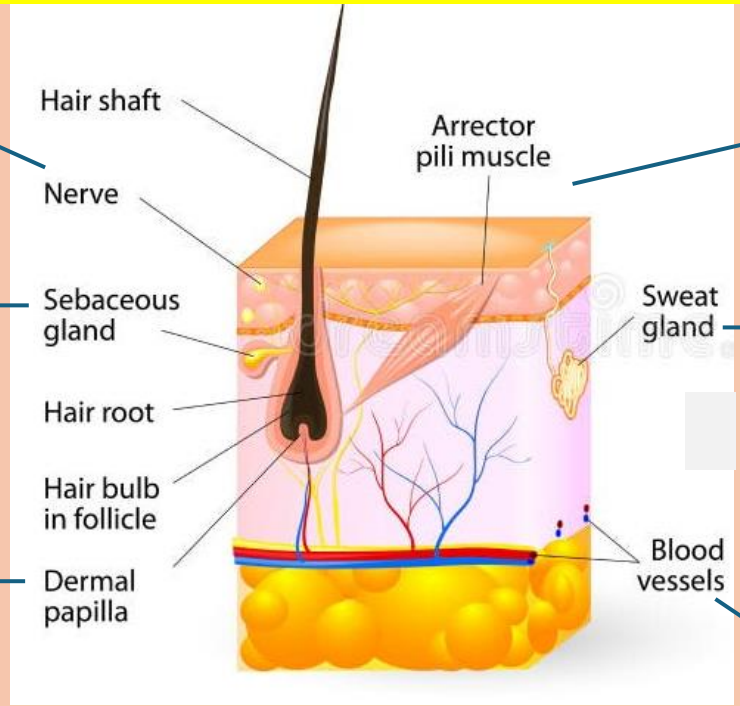
Fibroblast
Cells responsible for generating connective tissue and wound healing



Sensory nerve endings are the end organs for pain, touch, heat, cold and pressure sensations.

Attached to hair follicles creating sebum

Contains nerve endings and blood capillaries to help nourish the hair



Reacts to cold and heat. Traps warm air in the body keeping in heat.

Excretes watery substances onto the skins surface.

Provide nutrients to the skin and help regulate body temperature

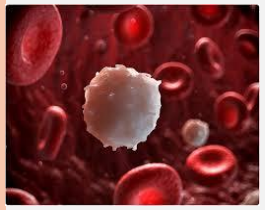
Created by Muh Syafri from Noun Project

Pathogens

Pathogens are disease-causing micro-organisms. The human body is defended against pathogens in the following ways:

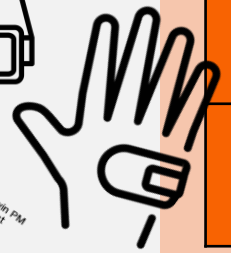
Internal defence:
- o Skin forms a protective barrier
- o White blood cells surround the pathogen to fight against disease
- o Histamine a natural immune response.
- o Skin's acid mantle creates a natural barrier to bacteria

External defence
- o Protective face masks – to prevent inhalation through mouth and nose when in contact with chemicals
- o Eye protection wear– to prevent absorption through the eye
- o Dressing to cover open cuts – to prevent passage through the skin.



Created by Halogenz from Noun Project

Created by Firza Alamsyah from Noun Project



Created by Edwin PM from Noun Project

Pathogens and contagious disorders

Type of infection	Name	Image	Explanation
Bacterial infections	**Impetigo**		Starts with red sores or blisters. They quickly burst and leave crusty, golden-brown patches. These can look a bit like cornflakes. They can be itchy and painful.
Bacterial infections	**Carbuncles**		When lots of boils form together it is called a carbuncle. They mostly affect middle aged men. A collection of hard painful lumps that fill with pus. Most go away on their own but they can be drained by a GP.
Bacterial infections	**Folliculitis**		Folliculitis can be caused by a number of things: bacteria, fungi, irritation and skin conditions. Small red bumps appear, sometimes filled with pus. Can be itchy and painful.
Fungal infections	**Ringworm (Tinea capitis – scalp Tinea pedis – feet Tinea unguium - nails)**		Common fungal infection. Not caused by worms. Red/silver rash which is scaly, dry, swollen or itchy. Can appear anywhere on the body. With Tinea unguium (nail fungus) your nail becomes thick and yellow and may show white spots or streaks.
Viral infections	**Herpes simplex (Cold sores)**		Starts with tingling/itchy/burning sensation. Small blisters appear which then crust and turn into a scab. Can be irritating and painful. Triggered by illness/sunshine.
Viral infections	**Warts**		Small skin coloured lumps. Feel firm and rough. They appear on the palms, knuckles, knees and fingers. Usually go away on their own but may take months.
Infestations	**Pediculosis capitis (head lice) Humanus (body lice),**		Small insects up to 3mm long. Very common in young children. Picked up from head to head contact. Head feels itchy. Have to use a fine tooth comb to get rid of them.
Infestations	**Scabies (Sarcoptes scabei - itch mite)**		Intense itching, especially at night. Mites lay eggs under the skin. A rash then appears and spreads over the entire body. Looks like tiny red spots to begin with

Hair, skin and nail conditions

Non-contagious disorders

Damaged cuticle
Raised cuticles feel rough to touch. Hair is porous and the shaft looks dull. Tangles and becomes knotty very easily.

Trichorrhexis nodosa
Defect of the hair shaft. Cause is similar to split ends. Symptoms are swelling of the nodules on the hair shaft which contain areas of splitting hair. Hair breaks at the nodules, producing very dry split ends.

Monilethrix (beaded hair disorder)
A rare genetic disease that causes the hair to thin and have a beaded appearance which results in sparse/blading hair. The hair is fragile and breaks easily.

Fragilitas crinium (split ends)
Split, dry ends of hair that cannot be repaired using conditioners. The only effective treatment is to cut them off.

Seborrhoea (oily scalp)
Found on the scalp. hair looks greasy/wet, scalp can have spots present.

Pityriasis Capitis (Dandruff) CHRONIC:
Chronic: excessive flaking, itchy, tight and irritated scalp.
Pityriasis Capitis (Dandruff) SIMPLEX:
White or grey flakes of skin present on scalp and in the hair, resulting in itchy, red scalp with oily patches.

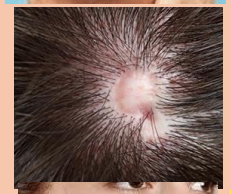
In-growing hair
The skin can grow over the hair shaft, resulting in a raised red bump which is often itchy. Pus may be present if infected.

Alopecia Totalis
Total hair loss. Small patches can join to form larger patches until the whole head is bald.

Traction alopecia
Result from frequent traction or pulling. It causes hair breakage or loosening of the hair in the follicle. With continuous tight ponytails, plaiting or braiding the front hairline may recede.

Alopecia areata
Bald patches found on the scalp. Patchy growth. Not infectious.

Androgenic baldness
Male pattern baldness that occurs in both men and women. Can be caused by genetics or hormones. Thinning and loss of hair.



Cicatrical (scarring) alopecia
Permanent hair loss due to follicle destruction, usually from an auto immune disorder/injuries/burns/medical treatment. Rare.

Acne Vulgaris - Spots, oily skin. Sometimes skin is hot or painful to touch. Caused by various factors such as stress, hormones, genetics and diet. Spots called pustules, papules and commedones are present.

Dermatitis - The symptoms range from dry, mild redness and itchiness of the skin, to skin that becomes cracked, filled with fluid, extremely itchy and has a stinging sensation.

Eczema - Causes the skin to become itchy, dry, cracked and sore. Some people only have small patches of dry skin, but others may experience widespread inflamed skin all over the body. Although it can affect any part of the body, it most often affects the hands, insides of the elbows, backs of the knees and the face and scalp in children.

Psoriasis - Flaky patches of skin which form scales. The patches can look pink or red, and the scales white or silvery. These patches normally appear on your elbows, knees, scalp and lower back, but can appear anywhere on your body.

Keloid scars- A thick raised, hard smooth, shiny scar that occurs after injury/burns. Usually occurs on earlobes, shoulders, cheeks or chest. The scar keeps growing as a result of too much collagen in the skin

City and Guilds knowledge organiser

Unit 203 – Design in the hair and beauty sector

LO1 – Understand the use of design in business

LO3 – Plan, create and evaluate an image for business use

1.1

Understand the use of design in business

1.2

Purpose of using design in business

Marketing tool - to launch or strengthen a new or existing business brand
Boost sales - and illustrate examples of services or products provided within the business
New products – Design is used during the design and development phase of bringing new products to market.

How design is commonly used

- Product or equipment packaging
- Brand logos
- Salon interiors (retail stands, décor, window displays)
- Web pages
- Promotional materials (information leaflets, business cards, signage, window displays, product displays, newspaper / magazines, email, social media, and television).

What impacts the planning process?

- The **purpose** of the design (see range of purposes on the left)
- **Target** audiences/customer requirements/expectations (gender appeal, age, pricing)
- Relevant **legal requirements** (The Equality Act 2010, Health and Safety at Work Act, Trades Descriptions Act)
- **Resources required** to create the design (people, specialist products/equipment, budget, location, timescales, ICT).

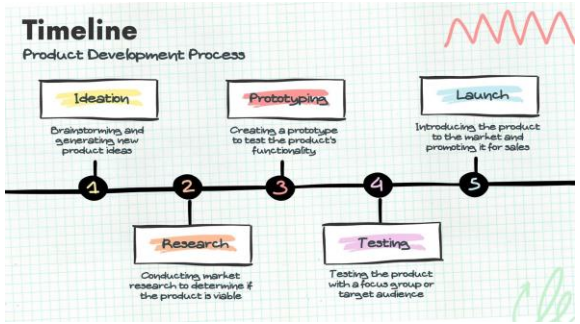
Topic 3.1
Planning for design images

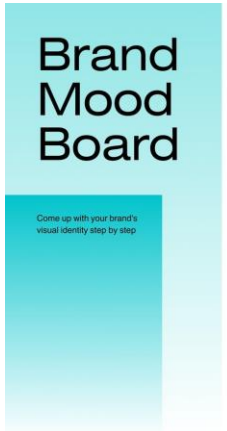
Planning can be <u>presented</u> in any of the following ways:

- Notes from market research conducted by interview, questionnaire or visits, or from secondary research.
- Mood boards containing 2D/3D displays, photographs, plans, sketches, diagrams, accessories, nail art, hair pieces, makeup, clothing
- Story board/timeline showing the chronological process of the design image idea, through to its completion
- Presentation slides including images of the design process and any other relevant data
- Action plans.

Consider these factors before presenting your planning:

- The **purpose** of the design
- Target audiences
* Customer requirements/expectations (gender appeal, age, pricing)
- Relevant legal requirements (The Equality Act 2010, Health and Safety at Work Act, Trades Descriptions Act)
- **Resources** required to create the design (people, specialist products/equipment, budget, location, timescales, ICT).





Topic 3.2
How to follow a design plan

If you are required to create an image for packaging, logos, salon interiors, web pages or promotional materials, you will need to follow a design plan. Here are some tips on how to do so:

1. Analyze the Design Plan

•Read the brief carefully

•Highlight design requirements
(e.g., logo must use pastel tones and feel "luxurious")

•Identify consistent elements to be used across all materials

Thinking points:

•Who are your target audience?
•What design elements are required?
•What are the limitations?
•How will you maintain consistency across platforms?

Guidelines:

• Must reflect brand tone and colour scheme

• Use elements from the design plan

• Prepare to explain your choices

2. Translate into Designs

Consider the following when creating visuals for different outputs using the same design plan:

•**Logo**: Based on the brand personality

•**Packaging**: Consider shape, space, and consumer appeal

•**Salon Interior**: Style, mood, textures, and client experience

•**Web Page**: Digital design, layout, responsiveness

•**Promotional Material**: Posters, flyers, social media posts with call-to-action

Tips:

•Start with the logo or primary visual identity
•Use consistent fonts/colors/images
•Always refer back to the design plan for decisions

Assessment:

- Understanding of design plan interpretation
- Consistency across formats
- Creativity within guidelines
- Presentation and justification of decisions