
Unit Specification

iUHB317 – Create a variety of permed effects

Unit reference number: T/617/8100

Level: 3

Guided Learning (GL) hours: 90

Overview

The aim of this unit is to develop learners' knowledge, understanding and skills to create a variety of permed effects. The learner will combine, adapt and personalise a range of sectioning and winding techniques to achieve a variety of creative permed effects.

Learners will be able to use these creative permed effects to include root lifted, waved, corkscrewed and textured curls and be able to work on sensitised hair.

Learners will need to maintain a high level of health, safety and hygiene throughout the unit.

Additionally, learners must reflect the hairdressing industry in their personal appearance and demonstrate effective communication skills.

Learning outcomes

On completion of this unit, learners will:

LO1 Be able to carry out a variety of creative perming services

LO2 Understand how health and safety policies and procedures affect creative perming services

LO3 Understand the factors that influence the variety of permed effects services

LO4 Understand the science of the creative perming and neutralising services

LO5 Understand the products, tools, equipment and techniques used for creative perming services

Unit content

LO1 Be able to carry out a variety of creative perming services

Prepare for creative perming services

Taught content to include

- Preparation of learners should include:
 - Personal image, ensuring industry standards of dress
 - Clean and hygienic appearance, e.g. avoidance of overpowering odours – tobacco, heavy perfume/aftershave
 - Good communication and listening skills
 - Correct posture with weight evenly balanced
 - Correct personal protective equipment worn
- Preparation of the working area to include:
 - Chair and work area to be clean before the client arrives
 - Chair is positioned correctly, including height
 - Adequate work area to allow safe use of electrical equipment, e.g. if using accelerator for processing perm
 - Products on display to be clean of dust and hair
 - Tools and equipment to be clean and sterilised
 - Dispose of waste hygienically and appropriately
 - Electrical equipment to be visually checked before use, e.g. for centres within the United Kingdom portable appliance testing (PAT) may be required when using electrical equipment
 - All tools and equipment to be positioned for ease of use
- Preparation of the client to include:
 - Clean protective garments for the client
 - Visual checks of client's scalp for signs of cuts, sores, abrasions or infections; check the hair for infestations and suitability of service
 - Removal of obstructive jewellery
 - Check the client record card (where appropriate) for previous services and client history
 - Check all tests have been undertaken prior to and during the creative perming and neutralising services

Apply safe and hygienic methods of working throughout services

Taught content to include

- Ensure there is sufficient stock, which is used appropriately to minimise the wastage of products
- Ensure resources are clean and all hygienic precautions are followed to minimise the risk of cross-infection
- Cleansing/sterilising tools and equipment
- Working safely throughout the service to minimise risk, harm or injury to self or others
- Ensure stylist maintains good posture throughout the service
- Ensuring the client maintains the correct posture and is comfortable throughout the service to avoid a hazard or a risk, e.g. when applying perm lotion and neutraliser, the client may be required to tilt the head forwards or backwards
- Ensure the correct storage and handling of all products, tools and equipment
- Safely mix and apply and follow manufacturers' instructions when using products
- Ensure relevant tests are conducted where appropriate
- Ensure own correct personal protection equipment (PPE) garments are used
- Ensure client has correct personal protective garments
- Minimise the risk of damage to tools and equipment
- Ensure that materials are disposed of hygienically and appropriately
- Ensure any drips and/or spillages that fall onto the client's skin are immediately cleaned up
- Minimise the risk of harm or injury to themselves and others when using chemical products and electrical equipment
- Ensure hygienic working practices throughout the service including own personal hygiene, e.g. eliminating offensive body odour or strong smell of tobacco
- Make effective use of their working time, e.g. ensuring the processing time is correctly adhered to according to manufacturers' instructions

Consult with clients about services and outcomes of tests

Taught content to include

- Undertaking appropriate tests and recording outcomes to include:
 - Skin/sensitivity test (if previous allergic reaction to perm lotion)
 - Elasticity test
 - Porosity test
 - Incompatibility test
 - Test cutting/perm test
 - Development test curl
 - Pull test
- Assess the hair conditions for contra-indications and suitability for relaxing services to include:
 - Hair classification
 - Hair characteristics
 - Hair elasticity, porosity, texture, density, condition, growth patterns and hair length
- Assess the scalp condition to assess for contra-indications and the suitability of the relaxing service to include:
 - Cuts, sores and abrasions
- Consulting and confirming with the client before styling commences to agree the chosen style, desired look, curl result and finished creative perm hairstyle
- Explaining each stage of the perming service to the client
- Agreeing products, process and possible equipment to be used
- Checking throughout the service to meet the client's needs
- Use visual aids where appropriate, e.g. photos (style book), internet search for images of curl effects

Confirm with clients the desired effect

Taught content to include

- Discussing client's needs and requirements, e.g. if the desired curl effect is achievable
- Discussing limitations or adaptations that may be required, e.g. a cutting/restyle service to enhance the permed effect
- The importance of informing the client of the likely cost, duration and expected outcome of the service, e.g. the possibility of remedial colouring fading during the perming process

Carry out a suitable questioning process with the client for the service

Taught content to include

- Understanding the client's requirements and expectations of the chosen creative permed effect
- The costs related to maintenance of the creative permed hairstyle (conditioning treatments and regrowth perming services required)
- To ensure the client understands the process
- To provide the client the opportunity to ask questions (where necessary)
- To ensure the client is comfortable
- To gain information on how they maintain their hair, lifestyle and commitment to the permed effect
- To ensure and confirm that the client's expectations are met for the creative permed effect
- The legal significance of client questioning and the recording of client's responses to questioning
- The importance of informing the client of the likely cost, duration and expected outcome of the service
- The importance of confirming client's satisfaction

Select suitable products, tools and equipment for creative perming services

Taught content to include

- Products and materials
 - Preparing products in advance (where applicable), e.g. alkaline or acid perms
 - Preparing the appropriate materials required, e.g. perm/end papers, perm rods, cotton wool, plastic cap
 - Barrier cream (where required)
- Tools
 - Personal protective equipment (PPE) to include protective garments, e.g. perming cape for client and towels, gloves and apron for learner
 - Combs, sectioning clips, brushes, bowls and applicators
- Equipment
 - Timer
 - Electrical equipment (if used), e.g. accelerator

Carry out creative perming services

Taught content to include

Winding technique	Effect	Method
Basic wind/ 9 section wind	Creates an even amount of movement from roots to points all over the head	- Sections are taken by measuring the length and thickness to match the selected perming rod - The wound rod sits directly on top of the section created on the head, this is referred to as winding 'on base' - Tension – a firm, even tension is placed on the hair while winding the perming rod to the base to smooth natural movement - Depending on the hair type/condition, all lotion types are suitable for this technique
Spiral (vertical) curl movement	- Vertical cascading, corkscrew shaped curls with uniform diameter - Performed on longer hair that is one length or has long layers to create a spiral, corkscrew effect	- Uses square or rectangular sections that are measured according to the diameter of the perming rod and the area of the former that is wound to the scalp - Can be wound from root to point or point to root depending on the curl former - Winding tension – must be firm without undue tension - Formers, perming rods, spiral rods or foam-covered flexible wavers - Alkaline perm will give firmer curl results if hair condition allows
Root perm	Creates movement, lift and volume at the root area of the hair	- Performed on layered or graduated hair - If hair is too long, the weight of the hair may pull down the root lift and the effect will be lost - The points must be covered with a suitable barrier, e.g. conditioner and/or foil wraps
Piggyback winding	Creates a textured curl of varying diameters with softly waved roots and tighter, curlier ends	- Different winding methods can apply, however the principle is that one wound rod sits upon another, leaving the root softly waved or unprocessed - Root movement can be achieved by not winding the ends

		• Formers or conventional perming rods of two different sizes, one small and one large • A normal size section is wound from the middle onto a large perming rod, down to the head • The ends are then wound from the points onto a smaller perming rod that is wound down to sit in place on top of the large roller • Chose perming lotions which are suitable to hair classification
Weaving	• Creates a soft textured movement with stronger movement at the ends	• A normal shaped section is divided in two along the thickness of the section • The hair is woven and a large perming rod is used to wind the upper subsection and a smaller one is used for the lower subsection • This produces two different curl sizes giving volume without tight curls • A variation of this method is to leave one subsection unwound; this will give volume and a textured effect • Chose perming lotions which are suitable to hair classification
Hopscotch	• Creates a multi-textured finish with volume and varying curls • It is used to enhance layers and graduation and create movement	• Conventional perming rods, using either the same size or different sizes depending on the required permed effect • The first layer of perm rods are wound leaving narrow sections between each rod. These narrow sections are wound in the opposite direction and stacked on top of the initial perm rods • Chose perming lotions which are suitable to hair classification
Double wind	• Produces a varied curl effect with volume and lift at the root area	• Conventional rods, one large, one small • A normal sized section is wound partway down, then another equally sized or smaller rod is placed underneath and both rods are wound down to the head • Choose perming lotions which are suitable to hair classification

- Pre-dampening:
 - Can be used if the hair condition allows and the stylists winding speed is quick
 - Long hair is usually pre-dampened to ensure the perm lotion penetrates all parts of the hair
 - Processing time is calculated within the winding time
 - The considerations for pre-dampening are the time it takes to wind the perm. If winding speed is slow, the perm may over-process
 - To wear non-latex gloves when pre-dampening
 - Some acid perms recommend pre-dampening
 - Pre-dampening is advised when perming resistant hair
 - Resistant areas such as the nape hair should be wound first as they take longer to process
 - The top section of hair should be wound last as this processes the fastest
- Post dampening is the most commonly used for shorter hair lengths:
 - May be a disadvantage for winding methods that are intricate or involve more than one roller, e.g. piggyback or hopscotch wind. The perming product may not penetrate to the inner of the rod/former
 - May not be suitable for longer hair lengths as the lotion penetration from outside of the rod/former to the inner centre is difficult and may result in an uneven curl result or straight ends
 - The time taken in winding does not affect the overall processing time
 - The overall processing time will be longer than with pre-dampening
 - Gloves need not be worn for winding the perm but should be used when applying the perm lotion
 - Post-dampening is advantageous for alternative winding methods that are intricate or take additional time
 - Post-dampening is most suitable for alkaline and root perms

Carry out correct procedures for rectifying problems and apply solutions that may occur when creatively perming hair

Taught content to include

Perming problem	Possible cause	Solution(s)	How to avoid
Hair/scalp damage, breakage of hair	• Hair wound with too much tension • Bands (fasteners on perm rods) placed too tightly or too close to the root • Hair over-processed or incorrect perm lotion applied for hair type • Overlapping perm lotion on previously processed hair	• Apply restructuring or remedial conditioning treatment	• Wind with less tension • Secure bands across the top of the wound rod • Monitor processing time closely • Select lotion that is suitable for the hair type and condition • Undertake further appropriate tests on the hair • Ensure perming products do not overlap previously processed hair
Pull burn	• Perm lotion entering the hair follicle due to excessive tension or incomplete rinsing of perming lotion from the hair	• First aid assistance for chemical burns • If necessary, refer for medical assistance	• Use less tension when winding and take smaller sections to avoid pulling the root area of the hair
Sore hairline or skin irritation	• Perming products in contact with the skin or barrier cotton wool soaked in perming lotion • Incorrect use of barrier cream	• Ensure the lotion does not saturate the scalp. Renew cotton wool after dampening to ensure the perm lotion does not come in contact with the skin • First aid assistance for chemical burns • If necessary, refer for medical assistance	• Ensure processes for hygienic and safe working practices are adhered to • Consult with client to ascertain possible allergic reaction to other chemicals

Straight frizz	• Perming products too strong or over-processing • Too much tension/incorrect winding techniques used	• Apply restructuring or remedial conditioning treatment • Cut the ends to reduce frizz	• Select lotion that is suitable for the hair type and condition • Monitor processing time closely • Rectify poor winding technique • Wind with less tension
Permed effect too curly	• Perm rods/formers too small or perming product too strong	• If hair condition allows, reduce the curl by relaxing	• Ensure appropriate perming rods are used • Use appropriate perming product for hair type and condition
No permed result	• Perming product too weak for the hair type and condition • Perm rods too large • Incorrect neutralising • Hair under-processed	• If condition allows, re-perm with suitable perming products	• Check the perming processes used • Use appropriate perming product and perm rods • Process perm and neutralise in line with manufacturers' instructions
Fish-hooked ends	• Hair points incorrectly wrapped around the perm rod • Hair points not enclosed in end paper	• Remove fish-hooks by cutting	• Rectify winding techniques used
Perm weakens or 'drops'	• Incorrect neutralising • Hair overstretched when styling the finished effect	• If condition allows, re-perm with suitable perming products	• Neutralise in line with manufacturers' instructions • Ensure styling methods used do not overstretch the hair

Hair has good movement when wet, poor when dry	• Incorrect neutralising • Hair stretched when styling the finished effect • Over-processed	• If condition allows (other than over-processed hair), re-perm with suitable perming products • Use restructuring or remedial conditioning treatment	• Neutralise in line with manufacturers' instructions • Ensure styling methods used do not overstretch the hair
Uneven curl	• Uneven winding techniques • Uneven winding tension • Lotion application is uneven • Incorrect neutralising	• If condition allows, re-perm affected areas with suitable perming products	• Rectify winding techniques used • Check perm lotion application during processing before neutralising
Straight pieces	• Lotion application uneven • Perm rods too large • Hair detaches from the rod	• If condition allows, re-perm affected areas with suitable perming products	• Ensure lotion application is even • Check winding and perming rods used before applying the perming products
Band marks or buckling	• Perm bands incorrectly placed or too tight when fastening the perm rod	• Use restructuring or remedial conditioning treatment	• Ensure correct placement of the band • Use spacers between the bands of the perm rods to reduce tension on the hair

Provide clients with advice and recommendations on the service(s) provided and products available

Taught content to include

- Provide aftercare advice regarding the service including potential costs of further services or products, e.g. suitable shampoo and conditioners which are sulphate free and pH balanced and styling products to achieve curl results, e.g. curl activators, mousse, serums
- The products that may be used by clients, including the benefits and effects to maintain the new target permed effect, e.g. specific shampoos and conditioners to maintain the curl and/or condition of the hair
- To ensure the client feels valued and that the permed effect service was specifically tailored to their individual needs, e.g. using a specific salon range of perming products
- To ensure the client expectations can be met and, where applicable, offer other services, e.g. advising the client how a conditioning service could enhance the overall condition of their hair
- To advise on home care products to help the longevity of the permed effect, e.g. the use of salon retail shampoo and conditioning products for clients to maintain their hair condition with products that will not weigh down the permed style
- Special precautions, e.g. not to use products incompatible with perming; when swimming, use a swimming cap or a chlorine safe shampoo
- The needs and requirements of the client for future services, e.g. guidance on timing of when to return to the salon for upkeep of perm, e.g. where possible advise client to return to the salon, usually a week later, to check the curls are even and the client is managing the style
- Avoidance of excessive heated styling equipment, e.g. using tongs continuously will affect the overall condition of the hair
- Advice from manufacturers' instructions – follow manufacturers' advice on maintenance at home, e.g. when to shampoo the hair after perming, usually 24-48 hours
- Other services, offers or promotions, for example discount incentives tailored to permed effects when using a salon loyalty card
- Reputation and walking advertisement for the salon

LO2 Understand how health and safety policies and procedures affect creative perming services

The responsibilities for health and safety in own role

Taught content to include

- Relevant legislation for consultation, client care, confidentiality and consumer/retail, for the country the qualification is taken, which includes: General Data Protection Regulation (GDPR), consumer rights, health and safety, equality. Health and safety regulations for the country where the qualification is taken, examples within the United Kingdom would include:
 - The Health and Safety at Work Act
 - The Management of Health and Safety at Work Regulations
 - Provision and Use of Work Equipment Regulations
 - Personal Protective Equipment at Work Regulations
 - Electricity at Work Regulations
 - Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
 - The Consumer Protection Act
 - The Trade Descriptions Act
 - Control of Substances Hazardous to Health Regulations (COSHH)
 - Salon insurance requirements, employers liability, public liability, professional indemnity
- Responsibilities for health and safety to include:
 - The reasons why all staff working in the salon have a responsibility for the health and safety of themselves and others
 - The salon safety regulations to ensure their actions do not put others at risk, which includes all staff, clients and visitors
- Additional factors will include:
 - The reasons why it is important to describe accurately the features and benefits of products and services
 - The reasons and importance for gaining client consent
 - The maintenance of the salon environment including:
 - The comfort of the salon
 - Cleanliness of the salon to prevent cross-infections via direct or indirect contact
 - Provisions and use of workplace equipment – using only products, tools and equipment that are fit for purpose
 - Reasons for personal protective equipment (PPE), e.g. using protective gloves to prevent contact dermatitis when using perming and neutralising products
 - Making visual checks on all electrical equipment and reporting faults/isolating power
 - Ensuring manufacturers' instructions are always followed when using products and equipment, e.g. incorrect neutralising/normalising development time may result in uneven/straight perming outcome
 - Responsibilities of reporting certain work-related incidents or accidents, diseases and dangerous occurrences to appropriate person

- Ensuring the public are protected from unsafe goods or misleading price indications
- Prevent a false trade description of any goods that are supplied or offered, or making a false statement about the provision of any service
- Ensure that all personal client data records remain safe and confidential
- Update client records following service
- Hazards associated when creatively perming and neutralising hair
- Risks associated to creatively perming and neutralising hair

The potential hazards and possible risks that may occur in the workplace and affect services

Taught content to include

- The importance of ensuring that all chemicals related to creative perming services are stored, handled and used in accordance to salon policy, local bylaws and manufacturers' instructions
- The potential hazards and risks associated with not completing appropriate tests on the client and the hair
- Hazards – anything that has the potential to cause harm, e.g. incorrect application of product causing spillage onto the client's skin
- Risks – a chance, high or low, that harm caused by the hazard may occur, e.g. potential for spillage to cause a skin burn, sensitivity or damage to scalp
- Working safely throughout the service, an example may include ensuring there is adequate room around the client and no obstructions
- Ensuring use and maintenance of any equipment is monitored, e.g. conduct visual checks
- Ensuring the client is comfortable and free from harm throughout the service, e.g. removing jewellery that may obstruct the use of products and tools when creatively perming
- Disposing of waste appropriately to minimise risk of cross-infection and ensure there is no unnecessary risk to the environment, e.g. the safe disposal of the perming and neutralising products following salon guidelines
- The Control of Substances Hazardous to Health (COSHH), or legislation relevant to the country, including handling and storage of all products, tools and equipment
- The course of action to be taken for a minor burn or skin irritation when using perming and neutralising products:
 - Cool the skin. Apply a cold compress to the affected area immediately
 - Cover if possible
 - Avoid touching the area
 - If burn is severe refer for medical attention
- The importance of ensuring a thorough visual check of the hair and scalp is performed prior to the service to prevent cross-infection, e.g. ensuring the scalp is not tender when combing hair for sectioning prior to and after the perming service
- Risk of electric shock when using electrical equipment to enhance the service to include potential hazards of trailing wires, e.g. if used to style the hair after the creative perming service
- The need to ensure personal protective equipment (PPE) requirements are followed for both client and stylist, e.g. the use of gloves when applying post perming products and neutralisers
- Fire – the salon's policy in the outcome of a fire and where the assembly point is

The safe and hygienic working methods and practices that must be followed throughout the services

Taught content to include

- Use of clean towels, gowns and protective garments for all clients
- The importance of providing personal protective equipment (PPE) for both client and stylist e.g. prevention of damage to client's clothing
- Use of clean and sterile tools and equipment for all clients
- Barrier cream for client hairline, ears and neck where required
- Sectioning hair appropriately for the creative perming service, e.g. to prevent overlap of product or product touching the client's skin
- Apply appropriate techniques for the creative perming service, e.g. if volume is required apply weaving wind
- Control of accelerator/electrical equipment (if used)
- Organisation of working area
- Avoid trailing wires and spillages from products on the floor, e.g. dripping perm lotion may cause a potential slippage
- The precautions that must be taken when using the chemicals for the creative perming services, e.g. perming solution/lotion and neutraliser/normaliser

Contact dermatitis and how it can be prevented

Taught content to include

- Recognising contact dermatitis symptoms
- Contact dermatitis – is a rash caused by the skin reacting to a substance it has come into contact with, e.g. chemicals; symptoms can be varied and include:
 - Skin redness
 - Extreme itching
 - Oozing or blisters, may make skin swell
 - Skin that appears darkened or hard/leathery to touch that may become dry or flaky
 - Sensitive to products and sunlight
- Preventative measures include:
 - Wearing gloves (recommended) when applying perming solution and neutralising/normalising the hair
 - Rinsing and drying hands thoroughly
 - Use of moisturisers or barrier creams
- Following Control of Substances Hazardous to Health (COSHH) regulations or legislation of the country when using and storing perming products
- Following and adhering to manufacturers' instructions when using products to perm hair creatively

LO3 Understand the factors that influence the variety of permed effects services

The factors that may influence services provided

Taught content to include

- Hair classification

Hair classifications table			
Type 1: Straight hair	1A - Fine/thin	1B - Medium	1C - Coarse
	Straight	Straight with volume	Straight difficult hair
Type 2: Wavy hair	2A - Fine/thin	2B - Medium	2C - Coarse
	'S' pattern	Frizzy 'S' pattern	Very frizzy 'S' pattern
Type 3: Curly hair	3A - Fine/thin	3B - Medium	3C - Coarse
	Soft curl	Loose curl	Tight curl
Type 4: Very curly hair	4A - Fine/thin	4B - Medium	4C - Coarse
	Tight coiled curl pattern	'Z' pattern and spring curl	Tight 'Z' pattern

- In judging where the application of a variety of relaxing products, tools and equipment is required, the factors that must be taken into account include:
 - Density – this is defined as the number of hairs on the scalp and will affect the tools, techniques and products used and the duration of the service
 - Texture – the circumference of an individual strand of hair. Hair can be fine, medium or coarse. Coarse hair has the largest circumference and fine hair the smallest
 - Porosity – this relates to the condition of the cuticle. Porosity levels are caused by both chemical and physical damage. Cuticles which are raised and feel rough may tangle easily with an uneven curl result
 - Elasticity – this relates to the condition of the cortex layer of the hair. Elasticity levels are affected by how the treated and the condition it is in. Hair should stretch and return to its normal size, this indicates the hair is in good condition hair with no damage to the cortex. If hair stretches and snaps or does not return to its original length, this indicates internal damage to the cortex
 - Growth patterns – this relates to the direction in which the hair grows from the scalp and will need to be factored into the winding technique used when perming the hair
 - Head and face shape and size – this relates to the overall shape and size of the client's head and includes any specific features
 - Lifestyle – this is about the client's everyday activities and working patterns
 - Hair length – this will affect the general condition of the hair
 - The current style hair or haircut, e.g. adaptations may be required to achieve the client expectations
 - Temperature and humidity of salon – will affect the hair's processing ability and development time
 - Existing chemical services – this can impact on the client's desired result; selection of and application of the perming products may vary according to the existing chemicals

- Percentage of white hair – this can cause a resistance to perm, lotions and become very difficult to perm
- Test results – these test results will establish what is possible to achieve with the planned perming service
- Strength of perm lotion – this helps to determine the degree of required curl
- Time interval from last chemical service – recorded for existing client, established by questioning new client
- Recent removal of hair extensions/previous services – this should be considered as fallen hair can occur after hair extension removal, and the scalp and hair could be sensitised after this service, e.g. check for small patches of baldness
- Use of electrical equipment/accelerators – these can speed up the development of perms; some perms require heat to activate
- The chosen permed effect – whether the desired result is a firm curl, soft waves or root lift. Alkaline will give firmer results than an Acid wave
- Virgin hair – hair that has not been treated with chemicals. Select according to condition, texture and desired result

The ways of dealing with any influencing factors

Taught content to include

- How these may influence the relaxing services to include:
 - Density
 - This is defined as the number of hairs on the scalp and will affect the choice of tools and products used and the time of the service, e.g. to achieve soft curl on thick, dense, coarse hair avoid using small perm rods that increase the volume of the hair, unless this is the desired effect. Care must be taken to prevent making sections that are too large for the perm rod on hair that has very low density; this may cause undue tension and breakage at the root area
 - Texture
 - The circumference of an individual strand of hair. Hair can be fine, medium or coarse. Coarse hair has the largest circumference, and fine hair the smallest. Texture may affect the porosity of the hair. In perming the use of pre-perm treatments will help even out the porosity of the hair. Select perming products according to hair texture and hair classification. Fine, medium or coarse hair all require matching to the relevant strength of perming products within a brand
 - Porosity
 - This relates to the condition of the cuticle. Porosity levels are caused by both chemical and physical damage. Cuticles that are raised and feel rough are known as porous and will absorb water and perming products more easily and unevenly. Suitable pre-treatment products will be required if hair is porous
 - Elasticity

- This relates to the inner strength of the hair's cortex. It is an indicator of the internal condition of the hair's bonded structure and its ability to retain moisture. The hair's elasticity will influence the selection of perming products and may indicate whether services may be limited or affected
- Hair condition
 - Hair that is in good condition will be shiny, smooth, with good porosity (flat cuticle scales) and good elasticity (good moisture levels). Hair that is in poor condition will be dull, may have split ends or torn cuticle, be over-elastic and have signs of breakage with dry, porous ends or lengths. Hair condition will influence the selection of perming products and may indicate whether services may be limited or affected. Carry out tests to confirm the condition of the hair to determine the most suitable product to apply
- Hygroscopic
 - Hair has the ability to absorb moisture into the cortex and this is called hygroscopic. The properties are changed when it has been shampooed or becomes wet by breaking down weaker hydrogen bonds and in its natural state hair is known as Alpha keratin. This allows the hair to be stretched using heat and brushes in blow-drying. Once hair is stretched and dried into a new shape it becomes known as beta-keratin state. When finishing the permed effect, it is important that the hair is thoroughly dried and correct tension is applied to reform the hair whichever service is used to create the finished style
- Growth patterns
 - This concerns the direction in which the hair grows from the scalp and may influence the desired finish. Selection of sectioning and winding patterns may help overcome a difficult growth pattern
- Head and face shape and size
 - This relates to the overall shape and size of the client's head and includes any specific features. When finishing the permed effect it is important to ensure that the client has a style they can manage and which suits their overall appearance. The head size influences sectioning and the amount of perming rods to be used.
- Lifestyle
 - The need to ensure the client is advised regarding return visits and costs required for maintenance, also the client's everyday activities and working patterns, e.g. a client who lives an active lifestyle will require an easy to maintain style
- Hair length
 - This will affect the general condition of the hair. If the hair is long, the ends will have been shampooed many times and physical or chemical processes may affect the condition. The length of the hair may affect perming
 - Timings for perm winding – long hair will take longer to wind than short hair
 - The current style hair or haircut, e.g. adaptations may be required to achieve the client expectations

- Temperature and humidity of the salon
 - These will be influencing factors when creative perming and neutralising, both the inside and outside temperatures. A salon that has poor ventilation may produce a damp and humid atmosphere, affecting service, e.g. if outside weather conditions are very hot and sunny, the heat will accelerate the processing time. Temperature control within the salon must be adjusted with either additional heating, ventilation or assisted fanning devices
- Test results
 - These should be recorded and are available whenever perming services are undertaken
- Pre-dampening and post-dampening
 - When to use pre-dampening and post-dampening product application
- Application of product
 - To ensure sufficient perm lotion is applied throughout the lengths of the hair without saturating the scalp
- Perming rod size
 - For example, the weight of long, heavy hair may pull on the required formation of curl or wave pattern if incorrect size of perming rod is used
- Direction of movement required
 - The degree of perm movement is determined by the angle at which the perm rods are wound and the size and direction of the section. Ensure correct sectioning and winding techniques to create the desired direction for the creative permed effect
- Services prior to perming and neutralising
 - Other services offered prior to perming and neutralising may influence the selection of products or contra-indicate the service
- Length of re-growth
 - A re-growth is a demarcation between natural hair growth from the root area and the line where a previous chemical service has grown out
 - Assess the suitability of hair with a regrowth for perming services
- Haircut
 - Select sectioning and winding patterns that complement the haircut
- Degree of existing curl
 - How the existing curl influences, winding techniques, winding tension and rod/former size
- Recent removal of hair extensions/previous services
 - The application of perming and neutralising products may not be suitable for a sensitised scalp
- Use of electrical equipment/accelerators (if required)
 - use only according to manufacturers' instructions

Contra-indications and how they affect perming services

Taught content to include

- Contra-indications to perming services to include, bacterial, viral or fungal infections.
Contagious conditions to include:
 - Bacterial infection examples:
 - Impetigo – begins as blisters that itch, then fill with a yellowish-brown fluid, that once ruptured become a flat crust
 - Folliculitis – infection of the hair follicle, causes bumps with pus. May be painful, itchy, sore or swollen
 - Viral infection examples:
 - Herpes simplex - a raised red blister full of fluid. It will usually be painful and tender to the touch
 - Warts - small, fleshy, grainy bumps usually flesh-coloured, white, pink or tan. Rough to the touch and can be sprinkled with black pinpoints, which are small, clotted blood vessels
 - Fungal infection examples:
 - Ringworm – depends where it appears but may be red, itchy, scaly, or raised patches that develop blisters or begin to ooze. Patches that may be redder on the outside edges creating a 'ring' effect
 - Infestation/parasites examples:
 - Head lice – are tiny grey/brown insects. Head lice cling to hairs but stay close to the scalp which they feed off. Head lice lay eggs which hatch after 7 to 10 days. It takes about 7 to 10 days for a newly hatched louse to grow into an adult and start to lay eggs known as nits. Nits are the empty yellow-white eggshells which are left when the lice hatch. Nits look like dandruff but stick strongly to hair
 - Scabies – itchy skin condition causing a rash which may cause tiny blisters or sores where mites have burrowed into the skin
- Hair defects, contra-indication examples:
 - Trichorrhexis nodosa – hair which breaks easily. Symptoms can include patches of hair loss or extremely short hair that appears not to grow. The hair shaft has thickened or thinned areas or has excessively split ends with discolouration. If a hair defect is suspected the client should be referred for medical attention or advice and a colouring and/or lightening service should not be performed
- History of previous allergic reaction
- Conditions which may be contra-indicated, prevent or restrict the relaxing service
 - Scalp sensitivity – an inflamed, sore and red scalp may prevent service where direct heat, perming and neutralising solutions might overheat or seep onto the scalp
 - Sebaceous cyst – lump on top or under scalp/head
 - Psoriasis – dry silvery scales of skin, can become inflamed when chemicals are applied to the scalp area
 - Contact dermatitis – dry, red, sore, itchy and may be weeping
 - Recent scar/tissue injury, may be tender when using tension to apply the perm rods, combs, brushes or heat
 - Hair loss, possible after hair extension removal, medication, stress or trauma (alopecia), use tools and equipment carefully to avoid damage to hair or skin

- The course of action to be taken if contra-indications are suspected to include:
 - Not to offer diagnosis
 - Which conditions need reporting and when
 - Who to report to and where to record the findings
 - Referral for medical attention or advice

The importance of preventing cross-infection and cross-infestation

Taught content to include

- How to avoid cross-contamination, cross-infection or infestation – use of correct sterilising and disinfecting methods for all tools and equipment
- Ensuring the client's scalp and hair are checked prior to the creative perming service
- Avoidance of cross-contamination, e.g. using unclean tools or protective garments from one client could contaminate the next client's hair or scalp
- Ensure the professional salon image is maintained

The importance of tests to the hair and scalp prior to and during the creative perming services

Taught content to include

- To understand the reasons why tests are carried out, e.g. not undertaking an elasticity test may result in uneven curl and deterioration of hair
- The importance of following manufacturers' instructions for skin/sensitivity tests and the potential consequences of failing to carry out these tests
- To ensure that all tests are collated, dated and are stored and recorded for future reference
- To ensure there is a history of all test results
- To ensure that the records have full and accurate information including additional comments relating to the tests
- To prevent possible legal action
- To ensure the creative permed finished results are as expected
- To ensure the creative perming and neutralising/normalising service finished result meets the client requirements

When and how perming tests are carried out

Taught content to include

- Skin/sensitivity test – this may be necessary for those clients who have a history of allergic reactions to other products or generalised skin sensitivity. A positive reaction would prevent the perming service going ahead. Refer always to the manufacturers' instructions for skin/sensitivity testing requirements, as an example guide:
 - Clean a small area of skin behind the ear
 - Refer always to manufacturers' instructions, as an example:
 - Clean an area behind the ear with clean damp cotton wool
 - Apply a small amount of perm solution to the prepared area
 - Advise client to leave on for time specified by manufacturer unless there is irritation, in which case the client should wash it off immediately. Symptoms of a positive reaction would be redness, itching, soreness, swelling or inflammation
- Elasticity test – may prevent or restrict application of perming products if the hair is stretched and does not go back to its original state
 - On wet hair, take individual strand of hair from 3-4 areas of the head – if hair is dry then dampen thoroughly
 - Hold one single hair securely and pull it – if the hair stretches and return to its original length without breaking – it has normal elasticity. If hair breaks or fails to return to its original length it has low or no elasticity
- Porosity test – the hair's ability to retain moisture. Where hair is porous it may prevent or restrict the perming service. Porous hair tends to process chemical reactions quickly and can therefore over-process easily. Additional advice to client may include hair treatments, restyle or cut
 - To determine the external strength of cuticle – take a few strands of hair slide down towards the scalp using one finger and one thumb
 - The more resistance felt, the more porous the hair
- Incompatibility test – to check for the presence of metallic salts in the hair. If present, it will result in the hair becoming discoloured or dissolving and result in a positive reaction. This will prevent the perming service
 - Take a small cutting from the client's hair and place it in a solution of 20mls 6% hydrogen peroxide and 1ml of perm solution in a non-metallic bowl. Leave up to 30 minutes to check for a reaction. Signs of a positive reaction are bubbling, fizzing, discolouration or the solution may give off heat. These signs indicate that metallic salts are present in the hair
- Test cutting/pre-perm test curl undertaken prior to service to check if desired curl is achievable
 - Take a few cuttings from various parts of the head. Using an end paper, wind around rod (usually the size according to desired curl result)
 - Process as per manufacturers' instructions
 - Rinse and remove the perm
 - Neutralise as per manufacturer's instructions and assess the results

- Development test curl – during the perming service
 - To monitor processing of the perm lotion
 - Take 1 rod (if different rod sizes used test a few) from anywhere on the head, unwind gently ensuring no tension is applied. Push gently forwards looking for an 'S' shape. If an 'S' shape is present the perm is developed
 - When using alternative perm rods e.g. formers such as 'U' sticks or chopsticks, unravel the hair partially from the former and check that the degree of movement mirrors the dimensions of the formers used
 - When using alternative formers, more emphasis is paid to development timing according to manufacturers' instructions for the hair type and condition
- Pull test
 - To assess potential hair loss after recent removal of hair extension or plaits, and the hair's ability to sustain weight and increased tension
 - Gently pull small sections of hair whilst sliding the fingers from root to point on at least three areas of the scalp (approximately 30-60 hairs). Firmly pull hairs from the scalp. If more than 10 percent of hairs are pulled out this may indicate active shedding and extreme care in handling the hair is required, along with advice and guidance to the client

How test results influence the creative perming service(s)

Taught content to include

- The importance of ensuring that test results are recorded and stored accurately so that a history of results can be reviewed, e.g. test cuttings to review for future creative perming services
- Skin/sensitivity test – positive and negative reactions, e.g. a negative reaction means the service can continue
- Elasticity test – influences the product choice, application and final required result, e.g. a poor elasticity outcome may require the application of a sensitised perming lotion with advice on further treatment services to improve the overall condition of the hair
- Porosity test – may restrict or prevent chemical service – product choice, need to take into account the differences in hair structure and may affect final result in unevenness of curl and finished effect
- Incompatibility test – prevents a chemical service. There is a presence of metallic salts in the hair and if chemicals are added it may result in the hair destruction. Alternative services may be permitted – undertake a test cutting to establish suitability
- Test Cutting/pre-perm test curl – to check if final curl is achievable, e.g. how the end result may look and if the hair will accept perming solutions
- Development test curl – to check the processing and timing of the creative perming service. If not undertaken this may result in under or over-processing of the service. Follow manufacturers' instructions for development times.

LO4 Understand the science of the creative perming and neutralising services

The chemical composition of a variety of perming and neutralising products

Taught content to include

- Alkaline (cold) wave perming solution:
 - Contain ammonium thioglycolate and ammonium hydroxide
 - Has a pH rating of between 9.0 and 9.6
 - Don not require heat to process – hence called ‘cold waves’
 - Used for coarse, resistant or virgin hair types
- Acid wave perming solution:
 - Contain glyceryl monothioglycolate
 - Has a pH rating between 4.5 and 7.0
 - Usually require heat to process
 - Do not produce as firm a curl as an alkaline solution
 - Used for finer texture, damaged or previously chemically treated hair
- Neutralising/normalising agents – hydrogen peroxide and sodium bromate
 - Re-joins/fixing process of the bonds into the new curl position
- pH variations in the differing strengths of cold wave lotions, e.g. pH is strongest in perms for resistant hair and lower in perms for coloured hair
- The difference between and alkaline and acid perming solution:
 - their pH values
 - effects on the hair structure between and alkaline and acid perming solution

The effects of creative perming on previously sensitised hair

Taught content to include

- Sensitised hair – hair that has a fragile internal structure naturally or caused by mechanical, chemical and or environmental factors
 - Hair lacks natural moisture and is susceptible to over-processing
- Analyse hair for sensitivity
 - Complete hair analysis by undertaking all tests, e.g. elasticity, porosity, incompatibility or pull test
 - Record test results, e.g. positive and/or negative results
- Choose the most suitable product, e.g. acid wave for coloured hair or combination coloured types
- Importance of accurate timing of perming process
- Importance of taking frequent test curls to ensure hair doesn't over-develop/process to quick

The effects on the hair structure when using perm lotions and neutralisers

Taught content to include

- Disulphide bonds found in the cortex, made of amino acids called cysteine
 - Strong bonds that are broken by the perming solution (reducing agent)
 - The solution add hydrogen to the disulphide bonds to form a new amino acid called cysteine
- Different types of perming lotions have different pH strengths. The higher the pH the more disulphide bonds are broken
- The perming process has three stages:
 - Softening (reduction) stage – perm lotion enters the cuticle, swells the hair shaft and disulphide bonds begin to break
 - Moulding stage – hair takes on the shape of the perming rod or former
 - Fixing or oxidation stage – disulphide bonds re-join in the newly formed position by the addition of oxygen, during neutralising/normalising

The effects of pre and post perming treatments on the hair structure

Taught content to include

- Pre-perm treatments:
 - Even out porosity
 - Smooth the cuticle
 - Helps to restore the hairs natural pH
- The reasons why pre-perming treatments are applied, e.g. to ensure hair is protected and restored before, during and after processing
- Post perm treatments:
 - To return the hair to its natural pH value
 - Close and smooth the cuticle scales
 - Prevents the perming chemicals working any further, e.g. stops creeping oxidation
 - Used as a reconstructing conditioner to repair hair if tests confirm hair cannot withstand perming, e.g. advise a treatment plan before perming to help restore condition
- The reasons why failing to apply treatments can have adverse consequences:
 - Hair can break due to over-processing
 - If pre-treatments are not applied the result can be uneven

The effects that temperature has on the creative perming process

Taught content to include

- Warm temperature
 - The perm will process readily and take frequent test curls to assess curl development
 - Do not use an additional heat source if the perm is readily processing unless stated in the manufacturers' instruction, e.g. an acid perm requires an additional heat source regardless of the ambient temperature in the working environment
- Cool temperature
 - The perm may process slowly and take frequent test-curls to assess curl development
 - Assess the curl development. If the test shows slow curl development in relation to time, then allow longer processing time or decide whether to use an additional heat source to speed the curl development
 - Only use additional heat sources if the manufacturers' instructions recommend it
- Body/head temperature
 - May affect the processing of the perming solution, e.g. a client who is extremely hot may radiate additional heat source

LO5 Understand the products, tools, equipment and techniques used for creative perming services

The range of products, tools and equipment available and the effects they achieve

Taught content to include

- Products – to include the type of product, their features, when and how to apply and suitability when creatively perming hair

Type of perming product	Product features	When to apply/ Pre or Post damping	How to apply	Special features/ suitable hair types
Barrier cream	• Cream used to protect the skin around the hairline from perm lotion	• Apply to the hairline after the client is gowned	• Apply with a suitable tool, e.g. cotton bud, avoid contact with the hair	• N/A
Pre-perm shampoo	• Shampoo that removes product build-up and has no conditioning agents that would cause a barrier to perming	• After the consultation, before winding. Use with tepid water to avoid sensitising the scalp	• Shampoo the hair according to the manufacturers' instructions	• Some shampoo brands are mildly alkaline to prepare the cuticle for the perming service
Pre-perm treatments	• Products which help to improve the overall hair condition and protect the hair	• Apply to hair prior to winding	• Usually a spray or lotion • Apply to shampooed hair	• Porous or colour treated hair
Cold wave	• Alkaline perm with a pH of around 9.5 • Use for all hair types • Produces firm curl with long lasting effects • Suitable for all winding techniques • Lotion ready to use straight from the bottle	• Most appropriate for post-dampening Pre-dampen according to hair length, resistant areas and where winding speed is quick	• Either directly from the applicator bottle or decanted into a bowl and applied with cotton wool, sponge or a brush	• Most brands have varying strengths for differing hair types, typically for normal, coloured and resistant hair • Additional heat is normally not required

Acid wave	• Acid perm with a pH of around 6-7 • Use for fine, delicate, porous hair or sensitised hair • Softer curl effect • Two part lotion that needs to be mixed to activate immediately prior to its application	• Most suitable for post dampening	• Either directly from the applicator bottle or decanted into a bowl and applied with cotton wool, sponge or a brush • Discard any remaining lotion • Loses strength once mixed and left	• Some brands have a combination of strengths for sensitised hair types • Longer processing time than alkaline perm • Requires the use of additional heat
Exothermic	• Self- heating perm • Lotion heats once the reagents are mixed together • Suitable for all hair types • Two part lotion that needs to be mixed to activate, immediately prior to application • Can produce firm curl results	• Post-damp	• Directly from the applicator bottle • Discard any remaining lotion • Loses strength once mixed and left	• Manufacturers may produce lotions which can contain a mixture of acid and alkaline or just an acid or alkaline base • Check before use • Most brands have varying strengths for differing hair types, typically for normal, coloured and resistant hair • Self-heating
Semi or demi wave	• Weak form of lotion provides effects lasting 6-8 weeks after • Used to give body to the hair rather than curl	• As per manufacturers' instructions	• Either directly from the applicator bottle or decanted into a bowl and applied with cotton wool, sponge or a brush	• Most brands have two strengths that can be used on either normal or coloured hair • Liquid packaged ready to use

Root-perm gel	- Alkaline perm with a pH of around 9.5 gel, cream or paste - Thick consistency for direct application to the root area	Post-dampening	Gel is applied with a brush directly to the root area	- Different strengths available for hair type - Consistency of product prevents seepage through to the inner wound lengths - No additional heat required
Normalisers/neutralisers	- Cream, foam or liquid products packaged either ready to use or will require dilution - Refer to manufacturers' instructions for use, especially for dilution and timings	- Applied after perm lotion has been rinsed away and blotted dry - Applied to wound rods/formers	- Application varies according to brand - Typically, ready to use neutraliser is brought to a foam-like consistency by using a sponge and applied to wound rods/formers	Timings for the development vary according to the product, e.g. ready to use or 'instant fix' requiring dilution.
Post-perm conditioner	pH balanced to close the cuticle to retain the strength of the hair after perming services	Apply to the lengths of the hair once all traces of neutraliser have been rinsed away and excess water has been squeezed from the hair	Apply from the palms of the hands	Has an antioxidant action to halt the oxidation process of the neutraliser

- Tools to include:
 - Pin-tail comb – the narrow pin-tail is used for precise and accurate sectioning when using the post-dampening method
 - End papers – made of fibre or fine paper. Used to wrap and enclose the points of the hair enabling the points to be wound smoothly around the rod/former. Some end papers are non-permeable and once wound serve to protect the ends and lengths from absorption of the perming product. They are used specifically for root perming
 - Perming rods – made of plastic and are narrower in the middle to help to guide the hair evenly along the length of the rod when winding. Rods are colour-coded according to size. The larger the diameter of the rod, the bigger the curl effect produced
 - Spacers – thin stick-like pieces of plastic. They are used to slip underneath the fastened bands on wound rods to prevent band marks caused by the pressure of the band across the hair

- Foam covered flexible wavers – foam covered wire formers. Colour-coded according to size. Used for alternative winding techniques such as spiral winding. The flexibility allows the former to be bent to secure the hair
- 'U' Sticks or chopsticks – a 'U' shaped stick or chopsticks are used for alternative winding techniques and create a wide wave pattern. Hair is wound in a figure of eight around the stick and processed in the normal way
- Conventional setting rollers – smooth setting rollers can be used to give body to the hair when used as perming formers. They are larger than conventional rods and produce a larger softer curl movement and give volume
- Non-metallic sectioning clips and non-metallic bowl – used during perming procedures. Metallic items react adversely when in contact with perming lotions
- Cotton wool strip – used dampened with water and placed around the hairline to protect the client from drips of perming product
- Application brush or comb with a sponge attached – angled plastic brushes, similar to tint brushes are used to apply perming products. Most effective for applying thicker consistency products such as root perming gel, cream or paste. Specially adapted plastic tail combs have small pieces of sponge inserted to use for perming lotion application
- Plastic head cap – polythene caps used to place over the wound perm to retain moisture, heat and aid processing
- Neutralising sponge – specially designed sponge with a grooved surface used to foam neutraliser and to apply neutraliser to wound rods/formers
- Equipment to include:
 - Gloves – to protect hands
 - Gowns – to protect client's clothes
 - Plastic cape – provides a plastic layer to avoid seepage occurring and damp
 - Towels – placed on top of gown to protect the client
 - Timers – to ensure precise timings for service
 - Heat accelerators – electrical appliances that deliver a heat source suitable for accelerating the processing time for perms. To be used only if stated in the manufacturers' instructions for perming products and to be used in accordance with the manufacturers' instructions for the appliance

The importance of following salon and manufacturers' instructions during creative perming services

Taught content to include

- To ensure the perm/degree of curl result is achieved
- The importance of ensuring there is adequate ventilation when applying perm lotions to minimise unnecessary inhalation of product
- To prevent hazards, e.g. when applying the perm lotion ensuring spillages are wiped up if dropped onto the client's skin
- To minimise risks, e.g. the risk of an allergic reaction to the product irritating or burning the client's skin
- To produce satisfactory results, e.g. incorrect development timings could result in hair deterioration or areas of unwanted straight hair
- To avoid problems or mistakes, e.g. incorrect neutralisation process performed
- To avoid legal action, e.g. failure to undertake the appropriate tests before perming services

The importance of using products cost effectively

Taught content to include

- Applying products in a logical sequence
- Applying products evenly to minimise wastage, e.g. opening new lotion only if necessary
- The effect on the hair and/or scalp if excessive products are used, i.e. saturating fine hair could result in over processing
- Following manufacturer's instructions to ensure correct application of perming and neutralising products and prevent wastage
- Effects on the environment to include:
 - The application of products in a well-ventilated area – away from others
 - The safe disposing of unwanted perm lotion and neutralising materials
- Following salon and organisation policy when using perming and neutralising products

Assessment requirements

Learners must complete all assessment requirements related to this unit:

1. Service portfolio
2. Theory examination

1. Service portfolio

Learners must produce a service portfolio which is required to be completed under supervision of a lecturer who must monitor the quality of the services performed throughout the learners' training

The performance of learning outcome 1 must be demonstrated as part of all technical observations and will be recorded on **at least 3 occasions**. This should be conducted on a range of new and existing clients.

The service portfolio must be completed and marked prior to the learner completing the theory examination.

2. Theory examination

Learners must complete a theory examination for this unit. This will consist of a multiple choice question paper.

The theory examination will test knowledge and understanding from across learning outcomes 2, 3, 4 and 5. Learners should use the unit content sections of this unit to aid revision.

Document History

Version	Issue Date	Changes	Role
1.0	02/09/19	Published	Head of Qualifications and Processing
2.0	23/06/2026	Rebranding	Development Administrator