



Unit 202 – Science Hair & Beauty

How does this unit link to prior learning?

Links to H&B careers, the training and education to be qualified. You will understand the structure of the hair, skin and nails. You will learn the laws and regulations to bring new products and services to the market, animal testing and its alternatives.

What will you be learning about?

The purpose of this unit is to encourage learners to explore the relevance of the associated sciences in hair and beauty and how science influences the development of products in the hairdressing and cosmetic industry. The study of the application of science in the hairdressing and cosmetic industry should promote an understanding of the commercial application of science and how it may affect personal decisions that are not solely related to hair and beauty.

Key Focus

- 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
- 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 cosmetic

Topic 2.1

The anatomy of hair and beauty will be explored giving the learner a greater understanding of their physiology

Topic 2.2

Learners will know that pathogens are disease-causing micro-organisms. Learners will understand how the human body is defended against pathogens

Topic 1.1

Acids and alkalis are present in the human body and are essential for continued life, however if the normal balance of these chemicals are tilted, the body may not be able to function normally.

Topic 1.2

Identifying the effect of cosmetic products on hair and skin will further enable learners understanding of their appropriate use.



Topic 1.3

Learners will understand the main ingredients, properties and functions of substances used in hair and beauty products

Topic 1.4

The use of animals to test cosmetics products or their ingredients is banned in the UK and all other member states of the European Union.

Year 11 - In year 11 you will start the year by completing the mock synoptic assignment which is split into three tasks. This unit is designed to help you understand task 2 which is to plan a design image (hairstyle, makeup & nail look) to use on your promotional material as an image. In Jan 2026 they will start their actual assignment, scenario and era is set by City & Guilds

Beyond Lode Heath You will gain an understanding and knowledge of the hair, skin and nails giving you a head start if you are going to pursue a career in this industry. You can go on to compete a NVQ to become a qualified hairdresser or beauty therapist at college or go for an apprenticeship where you would work and train in a salon and attend college once a week.

How can you help?

Encourage pupils to make use of resources that are uploaded onto teams channel.
Encourage pupils to listen to the ingredient's song (on teams channel with lyrics)
Encourage them to make revision guides at the end of the topic and fully revise for assessment tests.
You can help them by ensuring their homework is completed on time. Supporting them with their written work and encouraging them to research and then reduce and summarise information rather than copying from the internet.
Encourage them to read out their work to you and explain it in their own words to ensure that they understand it. Get them to check through their work and correct errors with spellings and presentation.
Encourage them to practice their practical skills like blow-drying, makeup application and nail painting.

Key Vocabulary

Epidermis Dermis Hypodermis Cortex Medulla Cuticle Hyponychium

Nail plate Nail bed Lunula Free Edge Matrix Mantle

Acids Alkalis Ingredients Animal Testing Effects Function

Laws & Regulations

Hair Testing