At-a-glance unit content, assessment criteria and guidance

To help you with assignment writing as well as assessing assignments, this table maps the Unit 7 content against the Unit 7 assessment criteria and assessment guidance, taken from the specification. For further advice and help on writing and assessing assignments please contact TeachingScience@pearson.com.

Unit 7 Learning Aim A – Investigate factors that contribute to healthy living

Unit content	Assessment criteria	Assessment guidance
		Learning aim A of this unit requires the learner to investigate a range of factors that can contribute to healthy living. Learners should be able to identify the main food groups (proteins, carbohydrates, fats, vitamins and minerals) and the functions of each group. Consideration should be given to the effects of over- and under-eating and there is a clear opportunity for learners to enter into discussions of eating disorders. The positive and potential negative effects of exercise should also be covered and learners should be encouraged to take part in practical work where possible. Learners may carry out investigations into the effects of exercise on the circulatory and respiratory systems. Learners will also need to consider lifestyle and the health of the population.
A.1 Principles, characteristics and the concept of a healthy balanced diet including recommended daily intake of all food groups, and how dietary	**1A.1** Explain the importance of a balanced diet and exercise. **1A.2** Identify a balanced diet for teenagers.	For **1A.1** and **1A.2**, learners should be able to **explain** the importance of a healthy balanced diet and exercise to enable them to **identify** the ingredients of a balanced diet and exercise plan for teenagers. This could be done in the form of a table.

imbalance may lead to disorder in the human body, to include: a. under-eating and over-eating b. age and level of activity. **A.2** The impact of exercise on the health of the human body, to include: a. physical effects of exercise (stress, cardiovascular health) b. weight-related issues c. physical mobility issues.	**2A.P1** Describe the possible effects of diet and exercise on the functioning of the human body. **2A.P2** Develop a diet and exercise plan based on level and type of exercise and appropriate nutritional balance, to promote healthy living for an individual.	For **2A.P1** and **2A.P2**, learners need to provide evidence of a basic knowledge of the possible effects of diet and exercise on the functioning of the human body, to enable them to develop a diet and exercise plan for an individual, which covers the following: balanced food groups (fats, carbohydrates, protein, vitamins and minerals); recommended daily intake; exercise (frequency, type and appropriate level to life stage).
	2A.M1 Explain how the diet and exercise plan will affect the functioning of the human body.	For **2A.M1**, learners need to develop their understanding of diet and health to **explain** how the diet and exercise plan will affect the functioning of the body.
	2A.D1 Evaluate the diet and exercise plan, and justify the menus and activities chosen	This will be followed, for **2A.D1**, by the learner justifying the food choices for the diet plan and justifying the activities chosen for the exercise plan. This will allow learners to link age and lifestyle to the choices given.
A.3 Measures taken to improve the health of the population, in relation to unhealthy eating, smoking and alcohol intake.	**1A.3** Identify measures taken to improve the health of the population.	For **1A.3**, learners need to **identify** measures taken by relevant bodies to educate in order to improve the health of the population.
	2A.P3 Describe the ways in which health improvement measures are intended to improve the health of the population.	For **2A.P3**, learners need to **describe** and link specific health improvement measures to how they may reduce the rates of non-infectious disease.
	2A.M2 Analyse rates of disease in the population in relation to lifestyle choices.	For **2A.M2**, learners could investigate and **analyse** the rates of disease in the population in relation to lifestyle choices; this could be done from a case study or information given to learners by the teacher.
	2A.D2 Evaluate measures taken to improve the health of the	For **2A.D2**, learners need to **evaluate** measures taken to improve the health of the population by looking at different

	population.	lifestyle choices, including alcohol intake, smoking and unhealthy eating and the measures taken to counteract (or cut out) these choices, for example, eating freshly prepared foods rather than consuming convenient fast foods.

Unit 7 Learning Aim B – Know how preventative measures can be used to support healthy living

Unit content	Assessment criteria	Assessment guidance
		Learning aim B requires learners to further their study of the immune system. This should lead on to consideration of immunisation programmes. The controversy over the MMR vaccine provides a good discussion point for learners to apply scientific principles, while taking into account public perceptions. After a brief introduction from the teacher, learners should research a selection of health screening programmes. It is expected that learners should then clearly identify the role that these programmes have in maintaining health.
B.1 Principles of the immune system and immune response as the human body's first line of defence, to include: a. physical barriers b. chemical defences c. non-specific responses (inflammation, phagocytosis) d. specific responses	**1B.4** Identify the role of the immune system in defending the body. **1B.5** Identify how a vaccine aids in defending the body.	For **1B.4**, **1B.5**, learners need to investigate and **identify** the role of the immune system and vaccinations in relation to the content in section B.1.
	2B.P4 Describe how the immune system defends the body in relation to specific and non-specific immune responses.	For **2B.P4**, and **2B.P5**, this needs to be extended to a **description** of the immune system and how it defends the body, and the effects of vaccinations on the human body.

(antibodies) e. potential advantages and disadvantages of vaccination.	**2B.P5** Describe the changes in the human body following vaccination.	
	2B.M3 Compare the different defence mechanisms the immune system uses to protect the human body.	For **2B.M3**, learners need to develop their understanding further by **comparing** specific and non-specific immune responses, physical barriers and chemical defences. Vaccines should be explained in order to identify the changes that result in the body following vaccination.
B.2 Screening programmes on the human body and their advantages and disadvantages, to include: a. screening programmes to detect cancer (breast and prostate) b. screening programmes for antenatal (Down's syndrome) c. screening programmes for the newborn (phenylketonuria (PKU)) d. vascular screening programmes (atherosclerosis).	**1B.6** Identify screening programmes.	For **1B.6**, learners need to investigate and **identify** the role screening programmes in relation to the content section B.2.
	2B.P6 Describe the role of specific health screening programmes.	For **2B.P6**, this needs to be extended to **descriptions** of the role of screening, the immune system and how it defends the body, and the effects of vaccinations on the human body.
	2B.M4 Discuss the advantages and disadvantages of a specific health screening programme.	For **2B.M4**, learners need to **discuss** health screening programmes as in content B.2, in the context of their advantages and disadvantages. This could be done in the form of a report or table.
B1 and **B2**	**2B.D3** Evaluate the effectiveness of human vaccination and screening programmes.	**2B.D3** should allow learners to **evaluate** the effectiveness of vaccination and screening programmes. Learners should evaluate at least three of the screening programmes identified in the learning aim.

Unit 7 Learning Aim C – Investigate how some treatments are used when illness occurs

Unit content	Assessment criteria	Assessment guidance
C.1 Principles, advantages/ disadvantages and the use/misuse of simple treatments of disorders, to include: a. antibiotics b. anti-fungal treatments c. antiviral treatments d. analgesics. **C.2** Principles and the uses of: a. blood grouping and blood transfusion b. organ donation c. stem cell therapy.	**1C.7** Describe how antibiotics are prescribed for use. **1C.8** Identify pathogens that cannot be treated by antibiotics. **1C.9** Identify the different blood groups. **2C.P7** Investigate the use and misuse of antibiotics using secondary data. **2C.P8** Describe the use of anti-fungal, antiviral and analgesic treatments. **2C.P9** Explain the importance of blood group matching in blood transfusions.	For **1.C7**, **1C.8**, **1C.9** and **2C.P7**, **2C.P8** and **2C.P9**, learners should consider some treatments that are available when the body ceases to be healthy. Learners should understand standard guidelines on treatment regimes and guidance to complete the course of antibiotics. When practical work is undertaken, health and safety issues relating to laboratory work in the centre or workplace must be emphasised. Risk assessments, the use of COSHH and other regulations in place in laboratories must be followed, and all practical work must be supervised by a teacher or a lab technician. Witness statements/observation records must be completed as evidence that practical work has been carried out safely and appropriately.
	2C.M5 Analyse the effectiveness of different kinds of medical treatment in health care using secondary data.	For **2C.M5**, learners could carry out a further investigation using the internet or other resources. Learners should appreciate that one factor influencing the increase in hospital-acquired infections is the overuse of antibiotics. **Learners will need to use their knowledge of genetics to investigate**

		the role of gene therapy as a treatment for certain conditions and diseases. The effectiveness of the treatments covered in the unit content can then be considered.
	2C.M6 Describe organ donation and approaches used to reduce rejection.	For **2C.M6**, learners need to give a **description** of the principles and uses of organ donation and the methods used to reduce organ rejection.
	2C.D4 Evaluate the use of different kinds of medical treatments, justifying your opinions.	For **2C.D4**, learners should **evaluate** different types of medical treatment investigated and justify the choice of treatment for different disorders.
	2C.D5 Evaluate the potential benefits of stem cell therapy.	For **2C.D5**, learners need to investigate stem cell therapy and **evaluate** the possible benefits, including current benefits and future potential benefits.