Learning Intention	Vocab	Concept	Retrieval	Success Criteria	Hinge Questions for this lesson	Red Zone
Week 9 Lesson 1 **Inset Day**						
Week 9 Lesson 2 **Assessment** **Marked piece 1**						
Week 9 Lesson 3 **Assessment Review**						
Week 10 Lesson 1 How do you prepare microscope slides? Preparing Slides.pptx	observation, specimen, stain	Cells and Systems	Y7 B1 - cells	1. Prepare a slide of animal and plant cells. 2. Write instructions of how to prepare a microscope slide. 3. Draw a biological diagram of cells.	Which step helps stop air bubbles occurring under a cover slip? A: Pressing down hard on the coverslip B: Lowering the coverslip slowly at an angle C: Adding extra water after placing the coverslip D: Using the highest magnification first Correct answer: B	Describe how to take a thin section of a root nodule and view under a microscope.
Week 10 Lesson 2 What types of cells are there? Specialised-Cells.pptx	specialised, palisade, root hair	Cells and Systems	Y7 B1 - cells	1. Describe how sperm cells are adapted to their function. 2. Describe how egg cells are adapted to their function. 3. Describe how ciliated epithelial cells are adapted to their function. 4. Draw conclusions about a	Which is an example of a specialised cell? A: Bone cell B: Muscle tissue C: Root hair cell D: Pancreas Correct answer: C	Explain how sperm cells, egg cells and ciliated epithelial cells are specialised for their function.

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				cell's function from its adaptations.		
Week 10 Lesson 3 What are organisms made of? Hierarchy of Organisms.pptx	tissue, organ, organ system, organism	Cells and Systems	Y7 B1 - cells	1. Define the keywords: organelle, cell, tissue, organ, organ system and organism. 2. Give examples of the above keywords. 3. Explain the hierarchy of organisation in multicellular organisms.	Which shows the correct order from smallest to largest? A: Organ -> tissue -> cell -> organsims B: Cell-> tissue -> organ -> organism C: Tissue -> cell -> organism -> organ D: Cell -> organ -> tissue -> organsim Correct answer: B	An alien has landed and has threatened to dissect lots of humans to gain an understanding of how the human body is organised! Your task is to write to him to explain how the human body is organised from an organelle up to a whole organism so that he doesn't feel the need to chop us all up!
Week 11 Lesson 1 What do organs do? Human organ systems - new.pptx	organ, intestine, stomach, brain	Cells and Systems	KS2 - internal organs (skeletal, muscular and digestive system), Y7 B1 - hierarchy of organisms	1. Label the important plant and animal organs 2. Locate the important organs in the body or plant 3. Describe the functions of each of the important organs	Why does the heart count as an organ? A: It is made of different tissues working together B: It protects the body C: It is made of one type of cell D: It is the largest structure in the body Correct answer: A	1. Match up the picture of the organ with its name and its job. 2. Describe the hierarchical organisation of the human digestive system.
Week 11 Lesson 2 How do scientists classify organisms?	classification, species, genus, kingdoms	Analysis and Evaluation	Y7 B1 - MRS GREN	1. Classify organisms into kingdoms based on characteristics. 2. Explain how organisms are classified, using smaller and smaller groupings of	Which is not a kingdom? (a) Animal (b) Water (c) Fungi	Read the passage below. The delicious monster plant is a flowering plant species that comes from Mexico. Its species (deliciosa) is one of about 60 species that belong to the genus

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1. Classification.pptx				shared characteristics. 3. Identify the genus and species names from a binomial name.		Monstera. It is a popular houseplant and has many other names, including Swiss cheese plant. Write out the scientific name for the plant in the passage.
Week 11 Lesson 3 What is a healthy diet? 8A Diets.pptx	balanced diet, carbohydrate, lipid, protein, vitamins	Biological molecules and processes, health, disease and body systems	food groups, healthy lifestyle	1. Interpret nutrition and Reference Intake information labels. 2. Use nutrition information labels to perform calculations relating to recommended daily intakes 3. Describe the uses of fibre and water by the body. 4. Describe the general uses of carbohydrates, fats (lipids), proteins, vitamins and minerals by the body.	What is the main function of proteins in the body? A. Provide energy B. Regulate body temperature C. Store vitamins D. Growth and repair ☑	A 13-year-old student eats lots of sweets and fizzy drinks but very little fruit, vegetables or protein-rich foods. Explain why this diet is unhealthy. In your answer, refer to carbohydrates, proteins, vitamins, minerals, fibre and water. (6 marks)
Week 12 Lesson 1 How can we measure the energy in food? 2 Energy from food.pptx	calories, combustion, energy, temperature change	Biological molecules and processes	food provides energy, fair testing, measurement	1. Explain why body mass changes if energy input into the body does not match energy output. 2. Carry out an experiment to measure the energy content of regular and low fat crisps/cereal. 3. Record information to a suitable number of decimal	What is likely to happen if a person takes in more energy than they use? A. Body mass decreases B. Body mass increases ☑ C. Height decreases D. Muscle mass disappears	A student finds that 20 g of crisps contains more energy than 20 g of low-fat crisps. Explain how eating more energy than you use affects body mass and describe how an experiment can be used to compare the energy content of the two foods. (6 marks)

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				places and consider resolution.		
Week 12 Lesson 2 How can we test for nutrients in our food? Testing for starch proteins and fats.pptx	Benedict's solution, Biuret test, iodine, nutrient	Biological molecules and processes	food groups, nutrients in food, simple investigations, predictions	1. Describe tests for fat, starch, proteins. 2. Carry out tests for fat, starch, proteins. 3. Interpret results from simple food tests	What colour change shows that starch is present when iodine solution is added? A. Blue-black ☑ B. Green C. Orange D. Purple	A food sample gives: a blue-black colour with iodine solution a purple colour with Biuret solution no translucent mark on paper Identify the nutrients present and explain how each food test works. (6 marks)
Week 12 Lesson 3 **Inset Day**						
Week 13 Lesson 1 **Inset Day**						
Week 13 Lesson 2 What are the effects of a poor diet? Balanced diets.ppt	deficiency, malnutrition, obesity	health, disease and body systems	healthy eating, exercise, obesity, tooth decay, balanced diet	1. Describe the effects of obesity on health. 2. Use dietary advice and nutrition information to design a healthy diet. 3. Explain the links between specific forms of malnutrition, diet and lifestyle.	What are the effects of a poor diet? Which health problem is most strongly linked to obesity? A. Broken bones B. Dehydration C. Heart disease ☑ D. Short-sightedness	A teenager rarely exercises and eats a diet high in fat and sugar. Explain how this lifestyle could affect their health and describe changes they could make to improve their diet. (6 marks)
Week 13 Lesson 3	digestive system, nutrients,	health, disease and body systems	digestive system, teeth,	1. Describe what happens during ingestion, absorption and egestion.	Which process moves food through the digestive system?	Describe what happens to a piece of bread as it travels through the

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How do we digest our food? 6 Marker - Marked piece 2 Digestion lesson NEW.pptx	oesophagus, stomach, hydrochloric acid		nutrients, organs	2. Explain how food is moved through the digestive system.	A. Diffusion B. Osmosis C. Peristalsis ☑ D. Respiration	digestive system from ingestion to egestion. (6 marks)
Week 14 Lesson 1 How do enzymes help digest our food? Enzymes lesson.pptx	amylase, enzyme, substrate	Biological molecules and processes, health, disease and body systems	digestion, breaking down food	1. Recall the definition of a catalyst 2. Recall the roles of enzymes as catalysts in digestion. 3. Use a model to describe basic enzyme action.	What is a catalyst? A. A substance that changes colour B. A substance that speeds up a reaction without being used up ☑ C. A substance that stops a reaction D. A type of nutrient	Explain how enzymes act as biological catalysts during digestion and use the lock-and-key model in your answer. (6 marks)
Week 14 Lesson 2 Practical: measure the rate of breakdown of starch by amylase **Breakdown of starch.pptx**	amylase, variable, iodine, starch, rate of reaction	Biological molecules and processes, health, disease and body systems	fair tests, variables, recording results, starch in foods	1. Prove that amylase breaks down starch 2. Recall the need for a control sample. 3. Recall the definition for rate of reaction.	Why is a control sample used in an experiment? A. To change the results B. To make the experiment faster C. To provide a comparison ☑ D. To reduce the amount of starch	A student mixes amylase and starch and tests the mixture with iodine every minute. Explain how the student can show that amylase breaks down starch and why a control sample is needed. (6 marks)

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Week 14 Lesson 3 How are nutrients absorbed in the small intestine? Small Intestine and Absorption.pptx	absorption, diffusion, nutrient, villi, surface area	Biological molecules and processes, health, disease and body systems	digestion, nutrients, blood, organs	1. Define diffusion in terms of movement of particles. 2. Explain how nutrients enter the blood from the small intestine.	Which statement best describes diffusion? A. Movement of particles from a high concentration to a low concentration ☑ B. Movement of particles from low concentration to high concentration C. Movement of water only D. Movement of water vapour	**Explain how glucose moves from the small intestine into the blood. Use the idea of diffusion in your answer. (4 marks)**
Week 15 Lesson 1 How is the small intestine adapted for absorption of nutrients? Diffusion and Absorption - needs finishing properly!.pptx	capillaries, villi, surface area to volume ratio	Biological molecules and processes, health, disease and body systems	organs, circulatory system (basic)	1. Explain how the structure of the small intestine allows efficient absorption of the soluble products of digestion. 2. Use a formula to calculate the area of a rectangle and cuboids.(SA:VOL) 3. Explain how the cells in the small intestine are adapted to absorb nutrients quickly.	Why are villi useful in the small intestine? A. They digest food B. They increase surface area for absorption ☑ C. They produce enzymes D. They store nutrients for later use	The small intestine absorbs large amounts of nutrients every day. Explain how the structure of the small intestine allows efficient absorption of digested food molecules. (6 marks)
Week 15 Lesson 2 How much energy does a	Calories, Metabolism, Activity level, Energy intake	Energy in Action	Basic understanding of what energy is and why the body needs it,	1. Explain the differing energy needs of people of different ages and activity levels. 2. Calculate the energy		You are a nutritionist working with a diverse group of clients. Your task is to create a personalized energy plan for three individuals: A 7-year-old child who enjoys

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person need from their food? 1 Energy from food.pptx			Awareness of different types of physical activity and their impact on energy use	requirements for a particular person or activity.		playing football twice a week A 35-year-old office worker who goes to the gym three times a week A 75-year-old retired person who walks daily but has limited mobility Think about how age and activity level affect energy needs.
Week 15 Lesson 3 How do we know how much energy is in food? 2 Energy from food.pptx	Calorimeter, Joules, Burning, Temperature change	Energy in Action	Familiarity with the concept of heat and temperature, Understanding of how burning substances can release energy	1. Compare the temperature rise of water when some fuels are burnt. (WS) 2. Identify situations in which an energy transfer is taking place.		Write a conclusion and evaluation for practical carried out.