Grade – 3 Science Level descriptors **Unit 1: Plants**

Expected levels	Exceeding the expected levels
Identify and label the parts of a plant. Know that all plants do not have flowers and that all leaves are not green. Know that trunk is stem of a tree.	**Realise that although plant parts look different, all flowering plants have the same basic parts.**
Name plants with storage roots that we eat and know that most roots are underground. Explain the main functions of roots. Differentiate between fibrous and tap roots with examples.	**Explain why fibrous roots spread out and tap roots grow down larger distances. Compare different types of roots in terms of other features.**
Name a few edible stems. State the functions of plant stems. Investigate the way in which stem moves water to different parts of the plant.	**Realize that warm water moves through the stem faster.**
Compare leaves of different plants. Know that plants make their own food in their leaves. Explain why leaves are vitally important for all living things. Describe the process photosynthesis.	**Explain why plants make their own food. Know water moves through the stem, leaves, flowers and some of it moves through tiny holes in the leaves and out into the air.**
Name a few plants with attractive flowers and which are edible. State the function of flowers in plants. Identify the male and female parts of a flower. Draw and label the parts of a flower.	**State the functions of parts of a flower.**
Define pollination. Know that insects and wind help in pollination. Describe insect pollination Know that when pollination happens, the fruits begin to grow with the seeds inside them and seeds later grow into new plants. Describe the life cycle of any one flowering plant.	**Describe the life cycle of any one flowering plant in a timeline. Identify how insects are important to all living things, plants and animals.**
Name some edible seeds. Know that plants use seeds to reproduce. Explain why seeds need to be scattered away from the parent plant. Describe how seeds are dispersed by four different methods.	**Relate how size, weight, shape and texture of seed affect its dispersal.** **Predict which seeds could be dispersed by each method.**
Identify the factors that plants need to grow and how these vary from plant to plant. Identify the factors needed for the germination of seeds. Identify the best places to grow a plant.	**Know that the roots grow downwards and shoot grows upwards regardless of the position of the seed.**
State what dehydration is. Investigate the effect of water on plant growth.	**Know that plants need right amount of water and this varies from plant to plant.**
Know that plants need space. State and **explain** what happens to plants grown in small pots.	**Explain why plants survive for a short time in confined spaces.**
Explain why a plant needs soil. Explain why a seedling is able to grow without soil in the beginning.	**Explain why some soils are better at supporting growth than others.**
Define a fertiliser. Identify of natural fertilizers. Explain how adding fertilizer can affect a plant.	**Explain why different nutrients are needed in plant growth.**
Compare the plants kept in sunlight and those kept in a dark place. Draw how plants move towards the window when kept in a dark place. Investigate the effect of light on plant growth.	**Draw and explain why plants move towards the window when kept in a dark place. Explain why plants grow better when they are kept in warm condition.**

Unit 2 – Animals including humans

Expected levels	Exceeding the expected levels
Realise that plants make their own food and animals depend on plants and other animals for food. Realise that animals, need the right types and amount of nutrition. Know that they get nutrition only from what they eat.	
Know that foods containing starch give us energy. Know that foods that are oily or greasy contain fats and foods that are sweet contain sugar and both give us energy. Know that meat, fish and eggs help us to grow and heal. Know that milk and other dairy products help us to grow and heal. Know that fruits and vegetables help us to remain healthy.	**Know that both starch and sugar are called carbohydrates.** **Know that meat, fish and dairy products contain protein.** **Know that fruits and vegetables contain vitamins and minerals.**
Recall the differences between herbivores, carnivore and omnivores. Identify examples of each type, using pets and common animals. Identify diet of a few animals. Compare our own diet to the diet of other animals. Explain that some of the foods that we eat can be poisonous for other animals. Identify the food requirements **of a range of** animals using secondary resources.	**Discuss the work of animal charities.** **Research on unusual food habits of certain animals.**
State what is meant by diet. Explain what a balanced diet is. Realise the need to eat foods from all the food groups in the right amount to have a balanced diet in order to stay healthy. Explain that eating too much or too little can be very bad for your health. Predict what happens to people if they under eat. Predict what happens to people if they over eat.	**Identify imbalance in a meal and types of food that are less healthy when used extensively in a diet.** **Plan a balanced diet for an 8 year old child.**
Describe the main functions of the human skeleton. **Describe** the role of skeleton in providing protection to internal organs with examples. Understand that bones and muscles are needed for movement. Realise that our skeleton grows as we get older and grow taller. Identify what an x-ray picture of our body shows. Name some common bones in human body.	**Describe the main bones so that it can be identified.** **Name many bones in human body.** **Identify similarities to and differences from the skeletons of humans and a variety of animals.**
Know that joints in skeleton enable movements. Understand that muscles attached to bones contract (pull) and relax to create movement. Know that a tendon joins a muscle to the bone.	**Explain muscle contraction as an active process and relaxation as being passive.**
Predict what happens to the number of sweets that we can grab if the hand is bigger. Predict relationship between foot size and height of a person, age and height and length of legs and length of jump. Interpret scatter graphs to arrive at a conclusion.	**Spot mistakes from graphs or results.**
Predict relationship between height of a child and arm stretch. Measure height and arm stretch of children using a ruler. Arrive at a conclusion.	**Draw a scatter graph. Plot results on the graph.**