Knowledge Organiser

Subject: Science Unit: Animals part 1

Overview:

During this sequence of learning, pupils will animal life cycles, and what animals need to stay alive and keep well. We will go on to look at animals that have skeletons and those that don't.

What should I already know?	Vocabulary:	
 Whether an animal is a mammal, bird, fish, reptile or amphibian. The difference between herbivores, carnivores and omnivores and some examples of each. 	Life cycle	The stages of change that something goes through.
What will I know by the end of the unit?	Survival	Keeping alive.
All living things reproduce and have offspring.	Adult	Fully grown up.
Some animals give birth to live young. Their offspring normally look like them when they are born.	Predict	Say what you think will happen.
 Some animals lay eggs which hatch into live young. This young then develops into an adult. To stay alive, animals have 3 basic needs: air, water and food. 	Reproduction	When living things make a new living thing of the same kind.
To grow into a healthy adult, we must eat the right types of food. Over half of our diet should be made up of	Offspring	The child of an animal.
 carbohydrates, fruits and vegetables. Fats and sugary foods should be eaten in small amounts and not very often. 	Hygiene	How clean something is (to stay healthy and stop disease and illness spreading).
 People need to exercise often to keep their bodies strong and fit. To stop illness and infections spreading, we must be hygienic 	Exercise	A physical activity to keep your body fit.
 and keep ourselves clean. There are five main food groups and they all have a different function within the body. 	Healthy	In good health, free from disease.
Protein is essential for muscle repair and growth whilst	Diet	The food you eat
 carbohydrates give you energy. Calcium which is often found in dairy foods helps your bones and teeth become strong. 	Vitamin	Substances that are present in foods that help keep us healthy.
 Fruit and vegetables contain many of the vitamins and minerals that keep us healthy. Eating the right amount of each food group is called a balanced 	Balanced diet	Eating the right amount of each different food group.
diet and this is important in order to stay healthy. • Eating too much of certain food groups is not good for you e.g. eating too much sugar can cause tooth decay and eating too	Cartilage	Elastic tissue which makes up parts of the skeleton.
much fats and sugars can cause obesity.	Vertebrate	An animal that has a spine.
 Some animals such as humans have a skeleton made up of solid bones. The skeleton provides support to the body and protects many 	Invertebrate	An animal that doesn't have a spine such as a worm or spider.
of the vital organs - the skull protects the brain and the ribcage protects the heart and the lungs. The human skeleton is made up of bones and cartilage. Muscles are arranged in pairs which work together to help with	Contract	When something is shortened or made smaller – muscles have to contract to be able to move parts of the body.
 movement. Some animals such as insects have an exoskeleton which is a hard outer surface on the outside of their body. 	Ribcage	The bony structure around the chest area.

•	Many invertebrates such as earthworms and slugs have water inside them that helps with support.	Insect	A small invertebrate animal such as a spider or centipede.