Colney Heath School ~ Science		
Topic: Animals inc humans (muscles and skeleton)	**Year: 3**	**Biology**

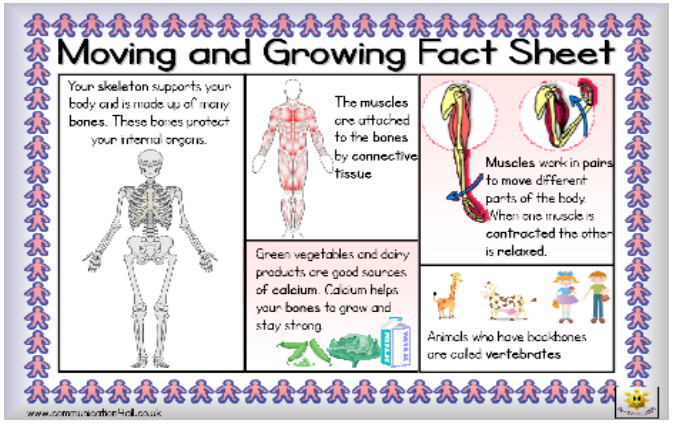
What should I already know?

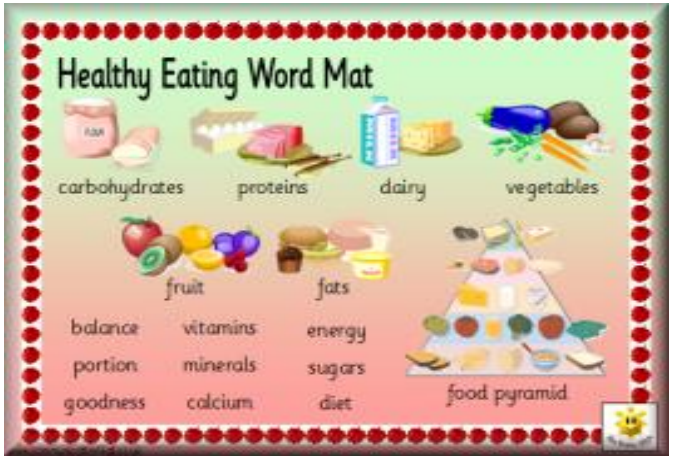
The parts of the human body and what they do.
There are five types of vertebrates (mammals, fish, reptiles, amphibians, birds) Vertebrates are animals that have a backbone. Invertebrates are animals that do not have a backbone.
All animals need water, air and food to survive.
The different ways in which humans can be healthy and what makes up a balanced diet.

Vocabulary

Skeleton	The framework of bones in your body.
Hygiene	Keeping yourself and your surroundings clean, especially in order to prevent illness or the spread of diseases.
Balanced Diet	A variety of food that you regularly eat.
Carbohydrates	A type of sugar that is rich in energy. One of three nutrients that provide calories (the others are fat and protein).
Protein	A nutrient found in food (as meat, milk, eggs, and beans) that is made up of many amino acids joined together, is a necessary part of the diet.
Fats	Fats are a type of nutrient that you get from your diet. It is essential to eat some fats, though it is also harmful to eat too many.

Diagrams





Vocabulary

Endoskeletons	Skeletons that are on the inside of bodies. These skeletons grow with the bodies.
Exoskeleton	Skeletons that exists outside the body. An exoskeleton is a covering that supports and protects animals. These have to be shed and a new skeleton is grown.
Muscles	Something inside your body which connects two bones and which you use when you make a movement.
Contract	To make smaller by drawing together; shrink or make tighter.
Relax	When a part of your body relaxes, or when you relax it, it becomes less stiff or firm.
Tendons	A strong cord in a person's or animal's body which joins a muscle to a bone. Muscles are connected to bones by tendons.
Support	To hold something up.
Joints	Where bones meet - they allow our bodies to move.

The Big Picture	By the end of our project we will know that
Biology B1: Living things are special collections of matter that make copies of themselves, use energy and grow. B2: Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago. B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.	The three most important things an endoskeleton does are: provide support and shape to an animal's body, allow movement through the joints and protect organs (e.g. the skull protects the brain). Proteins are good for growth, carbohydrates for energy and fruit and vegetables provide vitamins and minerals which help keep us healthy (e.g. calcium for healthy bones and teeth). Getting the right amount of each food group (including over half of the diet made up of fruit, vegetables and carbohydrates) is called a balanced diet. Lack of a nutrient can cause ill health; for example, a lack of vitamin D leads to a disease called rickets. Excess of a food group can cause ill health, such as tooth decay due to excess sugar. NB – some food groups are difficult to afford for some families so sensitivity is required in teaching this area.