# Year 4/5 Science: Animals including humans



# Why are we learning about 'Animals including humans '?

We are <u>building on</u> all our previous learning in KS1 about living things and their habitat; the human body; offspring of animals; groups of animals; the needs of animals and how humans can keep healthy. It also builds on our learning from autumn term on the digestive system, teeth, and food webs.

This <u>new learning</u> is important because we need to understand about nutrition and how our body is built so that we can life a healthy lifestyle. Learning about the lifecycles of both humans and animals will help us to understand the processes that all living things go through.

This will help us get ready for <u>future learning</u> about the human circulatory system and the impact of diet, exercise, drugs and lifestyle on the way our bodies function. It will also be relevant in a wide range of jobs in the areas of health, fitness and medicine.

## Important questions to answer:

- Why is it important to have a balance of all 7 nutrients in our diet?
- What are the main bones in the human body and why are they important?
- How do muscles help our body to move?
- How are the lifecycles of amphibians and insects similar?
- What are the 5 stages in the lifecycles of mammals, amphibians, insects, and birds?

#### **Experiences we will have:**

- Make and label a model of a human skeleton.
- Illustrate the life cycle of a range of animals.

#### Things we need to know:

- To know that the 7 nutrients (protein, carbohydrate, fats, fibre, vitamins, minerals, and water) are used to help keep the body in good working order and each serve a different purpose.
- To know the names of the main bones in the human body, the organs they protect and how they make up the skeleton.
- To know that muscles can only pull (not push) and we therefore need two muscles to work together at a joint to move the body.
- To know that the process of complete metamorphosis is when the fully grown adult looks completely different to the young.
- To know that the 5 stages of an animal's life cycle include birth, growth, reproduction, aging, and death.

# Skills we need to learn:

- I can **explain** the function of the different nutrients in an animal's diet.
- I can **create** a model to show the bones of the human body and their function.
- I can draw a diagram to show how muscles make skeletons move.
- I can describe the process of complete and incomplete metamorphosis.
- I can **compare** the lifecycles of mammals, amphibians, insects, and birds.

## Subject Specific Vocabulary:

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carbohydrate	metamorphosis	protection
complete	mineral	protein
complete	movement	reproduction
fibre	muscles	skeleton
growth	nutrition	vitamin
incomplete	organs	