

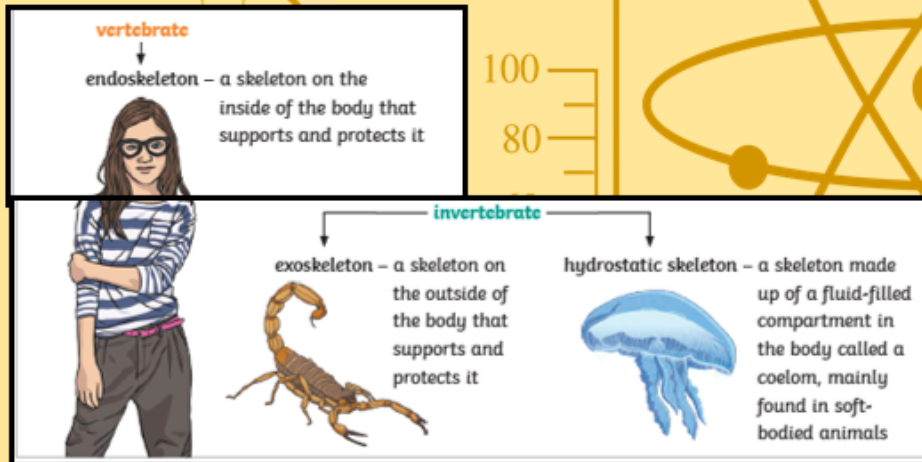
Previous knowledge.

- Can notice that animals, including humans, have offspring which grow into adults
- Research and describe the basic needs of animals, including humans, for survival (water, food, air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

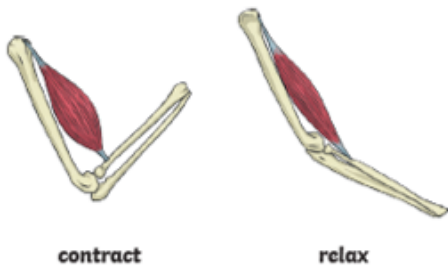
Science Knowledge Organiser – Year 3 Biology: Animals including humans

What I will learn in this unit.

- I will be able to identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- I will be able to identify that humans and some other animals have skeletons and muscles for support, protection and movement.



Skeletal **muscles** work in pairs to move the bones they are attached to by taking turns to contract (get shorter) and relax (get longer).



**Scientist study:
Wilhelm Rontgen
(1845 - Germany)**

He was the first one to produce and detect electromagnetic radiation in a wavelength. These rays are now known as x-rays or Rontgen rays.



| Word | Definition |
|-----------------------|---|
| Nutrients | Substances that help to keep living things alive |
| Skeleton | Skeletons protect the organs, allow movement and support the body |
| Hinge | A joint that bends in one way, elbow and knee and two examples |
| Socket and ball | A hip of shoulder joint that can twist and turn |
| Muscles | Soft tissue in the body that contracts and relaxes to cause movement of the skeleton |
| Vertebrates | An animal with a backbone |
| Invertebrate | An animal without a backbone |
| Exoskeleton | A skeleton on the outside of the body |
| Endoskeleton | A skeleton on the inside of the body |
| Hydrostatic skeleton | A skeleton made up of fluid |
| Carbohydrates | Food that provided energy |
| Fats | Food that provided energy but too much can be unhealthy |
| Proteins | Food that helps muscle grow and repair |
| Vitamins and minerals | In fruits and vegetables that keep you healthy |
| Fibre | Food that helps you digest and go to the toilet |
| Dairy | A food that comes originally from milk |

