

## Year 3 – Animals, including humans - Knowledge Organiser

Pupils should be taught 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.
- Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

### Vocabulary



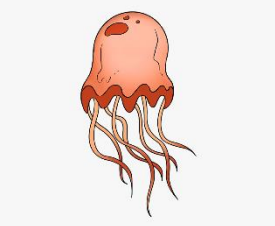



<b>nutrients:</b> substances necessary for living things to have healthy growth	<b>energy:</b> food provides energy for movement and growth	<b>healthy:</b> in good physical and mental condition	<b>skeleton:</b> structure made of bone which protects us, supports us and helps us to move	<b>vertebrate:</b> animals with backbones	<b>invertebrate:</b> animals without backbones
<b>endoskeleton:</b> a skeleton on the inside of the body	<b>exoskeleton:</b> a skeleton on the outside of the body	<b>hydrostatic skeleton:</b> a skeleton made up of a fluid filled compartment in the body	<b>tendons:</b> cord that joins muscles to bones	<b>joints:</b> part of skeleton where two bones meet	<b>muscles:</b> attached to the skeleton, used for movement

### Knowledge

#### Staying healthy

1. Animals need the right types and amount of nutrition
2. Animals cannot make their own food, they get nutrition from the food they eat
3. Animals need food, water, air and shelter to stay alive
4. Different nutrients have different roles:
  - a. *Carbohydrates* – provide energy
  - b. *Protein* – helps growth and repair
  - c. *Fibre* – helps to digest the food you have eaten
  - d. *Fats*- provide energy
  - e. *Vitamins* – keep you healthy
  - f. *minerals* – keep you healthy
  - g. *Water* – moves nutrients around the body and help to remove waste
5. Humans need to exercise regularly, have a balanced diet and be hygienic to stay healthy



<p><b>Classification</b></p> <ol style="list-style-type: none"> <li>1. Animals can be classified into vertebrates and invertebrates</li> <li>2. Vertebrates have an endoskeleton – a skeleton on the inside of the body</li> <li>3. Invertebrates have either; an exoskeleton – a skeleton on the outside of the body, or a hydrostatic skeleton – a skeleton made up of a fluid filled compartment in the body</li> </ol>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>endoskeleton</p> </div> <div style="text-align: center;">  <p>exoskeleton</p> </div> <div style="text-align: center;">  <p>hydrostatic skeleton</p> </div> </div>
<p><b>The skeleton</b></p> <ol style="list-style-type: none"> <li>1. Skeletons have three main roles:             <ol style="list-style-type: none"> <li>a. Allow <i>movement</i></li> <li>b. <i>Protect</i> organs inside the body</li> <li>c. <i>Support</i> the body</li> </ol> </li> <li>2. Muscles contract and relax to move the skeleton</li> </ol>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>contract</p> </div> <div style="text-align: center;">  <p>relax</p> </div> </div>

**Opportunities for depth:**

- *Chn understand that some diets have more than one food group than another and will consider the impact of this in terms of providing a balanced diet*
- *Will be able to talk about the nutrient content of different diets and the impact of this on health*

**Websites to use:**

<https://www.bbc.co.uk/bitesize/topics/zn22pv4/articles/zp6g7p3> - what is a vertebrate

<https://www.bbc.co.uk/bitesize/topics/zn22pv4/articles/z8mbqhv> - what is an invertebrate

<https://www.bbc.co.uk/bitesize/topics/z9339j6> - skeletons and muscles

<https://padlet.com/gmslp/animalsy3>

**Working scientifically skills/ Enquiry types:**

Identifying, grouping and classifying – different skeletons/animals with different skeleton types [WS – *identifying and classifying*]

Research using secondary sources – healthy, balanced diet [WS – *asking scientific questions*]