

Knowledge organiser rationale.

First, it acts as a planning tool, setting out all of the core, foundational facts that must be learnt to understand and master a particular topic. It should underpin and signpost where I have been, where I am now and where I'm going next.

Second, it is useful as an assessment tool, allowing you throughout a unit of work to quickly check that pupils are learning exactly what you hoped they would. Having the children self assess on the knowledge organiser keeps all child assessments in one place - enabling evaluative practice to happen quicker and children to see their own progress, go back to review information as required.

Lastly, and perhaps most powerfully, is the knowledge organiser's function as a quizzing tool, helping pupils to recall with lightning speed the key information needed to make sense of the topic. *Imagine - could they answer the small steps without even being in the lesson? This will link to the planning Hinge questions and Exit cards PDM later in the year.*

Writing an effective knowledge organiser: in brief (should mirror our MTP's/be completed in conjunction with)

DO...

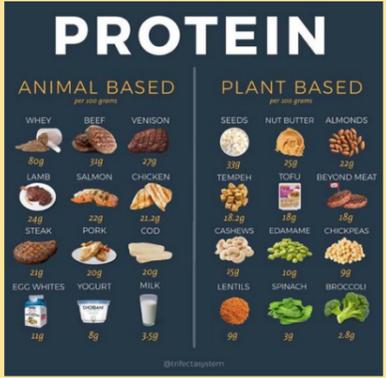
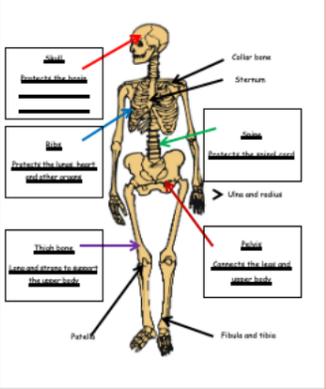
- + Write knowledge organisers while planning a scheme of work.
- + Organise your information through diagrams and tables.
- + Include the foundational knowledge needed to allow pupils to be successful in a unit.
- + Focus on facts.
- + Include keywords on every page, defining words in the most accessible way possible.
- + Plan activities and pieces of homework which get pupils actively to engage with the knowledge organiser.

DON'T...

- + Write knowledge organisers as you teach a unit, or as a reactionary step after a unit has finished.
- + Include paragraphs of text.
- + Include information just because it is interesting, rather than necessary.
- + Focus on opinion.
- + Assume pupils will be able to access or find specific key terms.
- + Expect pupils to read and retain the knowledge organiser independently.
- + Include blank sections for pupils to fill in: pupils who need knowledge organisers the most are the ones least likely to fill them in.

Year 3 – Unit 1 – Science – Animals including Humans

This unit builds on your knowledge of animals including humans in year 2 and will build towards your learning in year 4, looking at animals including humans.

LESSON 1	LESSON 2	LESSON 3	LESSON 4	LESSON 5	LESSON 6
<p>LO: To 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.</p>	<p>LO: To 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.</p>	<p>LO: To 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.</p>	<p>LO: To be able to identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p>LO: To be able to identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>	<p>LO: To be able to identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>
<p> My view:</p> <ul style="list-style-type: none"> I can explain the things that animals and humans need nutrition to survive and stay healthy. I can name the main food groups that make up an ideal diet for humans. 	<p> My view:</p> <ul style="list-style-type: none"> I can explain why each food group is important to the human diet. I can understand the possible effects of not eating the right diet. 	<p> My view:</p> <ul style="list-style-type: none"> I can explain why animals have different diets. I can understand how an animal's diet is linked to its survival. I can explain how some animals are adapted to suit their diet. 	<p> My view:</p> <ul style="list-style-type: none"> I can explain that some animals have skeletons and some do not. I can describe the function of the skeleton in support, protection of the human body. I can describe the function of the skeleton in movement. 	<p> My view:</p> <ul style="list-style-type: none"> I can describe what muscles are and what their function is in the body. I can name some muscles and say where they are in the body. I can describe that skeleton and muscles support movement in animals. 	<p> My view:</p> <ul style="list-style-type: none"> I can set my own scientific question to investigate. I can explain how I would make my test fair. I can take careful measurements and record these on a table.
<p>Key knowledge:</p> <ul style="list-style-type: none"> Living things need food to grow and to be strong and healthy. Plants can make their own food, but animals cannot. To stay healthy, humans need to exercise, eat a healthy diet and be hygienic. Animals, including humans, need food, water and air to stay alive. 	<p>Key knowledge:</p> <ul style="list-style-type: none"> Having a balanced diet is important. Everything we eat and drink contains nutrients. When we have too much or not enough of a particular nutrient, our body can develop health problems. 	<p>Key knowledge:</p> <ul style="list-style-type: none"> Look at the characteristics of the animal. How does the shape of their teeth help them eat their diet? 	<p>Key knowledge:</p> <ul style="list-style-type: none"> Without the support of a skeleton humans would not be able to stand upright. A skeleton has many functions, such as protection, as it protects our organ from outside damage. 	<p>Key knowledge:</p> <ul style="list-style-type: none"> Muscles work in pairs. When one contracts, the other relaxes. There are different types of muscles. Some work voluntary and others involuntary, like the heart. 	<p>Key knowledge:</p> <ul style="list-style-type: none"> For a test to be fair, only one thing must change. All measurements need to be taken carefully (maybe repeat measurement to check).
					<div data-bbox="2457 1339 2822 1766"> <p>Your Own Investigation</p> <p>To design and carry out my own investigation</p> <p>Questions to investigate: _____</p> <p>What will you do to investigate the question? _____</p> <p>Equipment: _____</p> <p>Making the Test Fair</p> <p>a. What are you changing in your investigation? _____</p> <p>b. What are you measuring in your investigation? _____</p> <p>c. What are we going to keep the same each time you do the investigation? _____</p> <p>Prediction (What do you think will happen?): _____</p> <p>Give a reason for your prediction. _____</p> </div>
<p>Key Vocabulary:</p> <p>Healthy, nutrients, energy, saturated fats, unsaturated fats.</p>	<p>Key Vocabulary:</p> <p>Carbohydrates, protein, fibre, fats, vitamins, minerals, dairy, fruit and vegetables.</p>	<p>Key Vocabulary:</p> <p>Carnivore, herbivore, omnivore, survival, animal, nutrition, diet.</p>	<p>Key Vocabulary:</p> <p>Skeleton, endoskeleton, exoskeleton, bones, bone names, support, organs, grow, move, vertebrates, invertebrates.</p>	<p>Key Vocabulary:</p> <p>Muscles, tendons, joints, biceps, triceps, contract, relax, bend, move, flex.</p>	<p>Key Vocabulary:</p> <p>Fair test, femur, measurement, conclusion, prediction, investigation.</p>