The Canons CE Primary School

Y3 Science – Animals inc. Humans
Autumn 1

Ladders:

I can identify that animals, including humans, get their nutrition from what they eat.

I can describe why animals need the right type and amount of nutrition.

I can research and design my own balanced diet using different food groups.

I can describe the function of a skeleton in humans.

I can describe the function of muscles in humans.

I can identify animals with and without skeletons.

I can describe what would happen if a human did not have a skeleton

Working Scientifically:

I can talk about criteria for grouping, sorting and classifying, and use a simple key.

I can identify differences, similarities or changes to simple scientific ideas and processes.

I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.

I can gather, record, classify and present data in a variety of ways to help answer questions.

Lessons	Order of Study – Autumn 1
	Topic Page KWL Pre-assessment – use this as post assessment also. Knowledge Organiser – shrink down so that it appears as an A4 sheet.
1	Big Question: How does our skeleton help us? **LI: I can describe the function of a skeleton in humans.** **LI: I can describe what would happen if a human did not have a skeleton.** Children look at the skeleton on the slide, can they name any of the bones? Go through the skeleton together and discuss the 'did you know?' facts – allow children time to discuss these facts with their learning partners. Talk to them about why we need a skeleton and what would happen if we did not have one. Adapted teaching: Same skeleton sheet but with a word bank to help remember and spelling support. Activity: Children have a picture of the skeleton – label the bones that we have talked about today. They must be able to locate them (pencil and ruler lines). Some children might want to try to draw their own skeleton. End with a recap quiz – what facts can they remember? Challenge and next step in folder.
2	Big Question: Do our bones affect what we can do?

	W/S: I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. **W/S: I can gather, record, classify and present data in a variety of ways to help answer questions.** **Enquiry type: Comparative and fair testing.** **Enquiry type: Patten seeking.** **Resources needed: - might need to book hall or go outside.** Variety of measuring equipment (rulers, measuring tape, metre sticks) Equipment that children can throw such as soft balls, rubber rings, beanbags etc. Start by recapping the names of any bones they can remember, can they locate them by pointing to their own body – discuss with partners, can they name and locate anymore? Investigation: - Do people with longer legs jump further? - Do people with longer arms throw further? Children plan how they are going to investigate this. Investigation planning sheets in the folder. At the end, children need to think about how they are going to share their results – there are three templates that they can chose from. End the lesson by discussing their findings. Challenge and next steps in folder.
3	Big question: What do our muscles do? **LI: I can describe the function of muscles in humans.** **Resources needed:** Arm model instruction card Cardboard strips Split pins Elastic bands Scissors Stapler Children will be learning about why our muscles are important and what their job is. Look at the 2 types of muscles: Voluntary and involuntary. www.bbc.co.uk/education/clips/zy6chv4 clip to help children understand muscle use. Triceps and biceps understanding so that they can then make their own model of a muscle – this will help them to see how it works. I suggest working in pairs. Instruction sheet in the folder to distribute around the room. Adapted teaching – label and explain how the muscle works. Activity – draw and label using the vocabulary we have been using – refer back to KO. End with what we found out! Challenge and next step in folder.

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4	Big Question: Do all animals have the same skeleton? **LI: I can identify animals with and without skeletons.** **Resources needed:** **Enquiry type: Identifying and classifying.** Ipads Using what they now know about human skeletons, do they think animals have the same? Look at a variety of skeleton shapes from mammals, amphibians etc... Are there and similarities/differences – allow time for discussion. Grouping – vertebrates and invertebrates. Then discuss animals that do not have a skeleton, but have a hard exterior 'exoskelton' Activity: sorting into groups – can be done on whiteboards in pairs. Go through the answers together to address any misconceptions. 2 x activity sheets to record what they have learnt. On is an adapted teaching sheet. End with quiz. Challenge and next step in folder.
5	Big Question: What types of nutrition do we need? **LI: I can describe why animals need the right type and amount of nutrition.** **LI: I can research and design my own balanced diet using different food groups.** **Enquiry type: Identifying and classifying.** Start by discussing the 7 life processes – do they know what they are? 'MRSGREN' What do we mean by 'nutrition'? Look at an Eatwell Plate – this ensures our diet is healthy and balanced. Go through each food group – what foods do we find their, what do they give our body? Activity – write the food into the correct group. Maybe we could edit this and get the children to design their own meal using the food groups – label them/what group they are form and why they are important. Challenge and next steps in folder.
6	Complete KWL Post-assess in a few days time.