Greater Depth Assessment Questions

Year 3	Name of topic	Questions
	Rocks (fossils and soil)	Bev needs to buy some new stone chopping boards for the school kitchen. She can choose either one made of granite or one made of chalk. Which one should she choose and why?
		Mrs Hutson needs to mark out a temporary 5-a-side court on the playground. She is only allowed to use rock to make the markings. Which type of rock should she use and why? Name and explain a rock that would not be suitable.
		Year 6 have decided to sculpt a statue of Mrs Clarke, which will stand proudly at the school entrance. What type of rock would be best suited for this? Explain why.
		What can Scientists learn from studying fossils? Why is it important to study fossils? Do animals look the same today as millions of years ago? WHY?
		Explain why many fossils are marine
		Sam believes that fossilization takes place with every animal that dies. Do you agree? Explain your answer.
		Why is it imperative that the sediment covers the skeleton?
	Forces and Magnets	How are magnets used in everyday life? Magnetism and gravity are both non-contact forces. Explain. Why is the Earth like a giant magnet?
	Light	Gold is shiny so it is a source of light.
		Light sources can be natural or manmade. The Moon is a source of light. True or False? Explain
		Can shadows exist without light?
		Can a cyclist wearing an outfit made of reflective material always be seen when cycling down the road? Why, why not?
		Is the Sun a friend or a foe? Discuss.
	Animals including humans (Healthy eating and healthy bodies)	
	Plants	Is a tree alive? Explain how you know.
Year 4		
	States of matter	What are the properties of a solid?/liquid?/gas?

		Is sand a solid, liquid or gas? How do you know? Where does a puddle go?
	Sound	What is the difference between the volume and pitch of a sound?
	Animals including humans (teeth and digestion)	
	Electricity	
	Living things and their habitats (Classification and interdependence)	
Year 5		
	Earth and Space	Why do we see history whenever we look at the stars? Why do the Sun and the Moon look the same size in the sky? What is between the Earth and the Sun? If the Earth is constantly spinning why don't we feel like we are moving?
	Properties and changes of materials	Where does sugar go when it is dissolved in water? What is the difference between a physical and a chemical change? Can you give an example?
	Forces	How does a parachute stop someone from crashing to the ground?
	Living things and their habitats (life cycles)	I planted a tree in my garden 4 years ago. It now weighs 250 kg more. Where did this 250 kg come from? What may happen in a food chain if there was a sudden increase in the number of foxes born in an area?
	Animals including humans (human life cycles)	If all animals lived forever, what would the impact be? - on habitats / food supplies
Year 6		
	Living things and their habitats (Classification)	Why do Scientists need to classify plants and animals? How are micro-organisms helpful and harmful? Give examples.
	Evolution and inheritance	Describe how a camel is adapted to its sandy environment.
	Light	What can you see when there is absolutely no light? Why?
	Electricity	Why are insulators as important as conductors? How can we avoid getting electrocuted?
	Animals including humans (Humans and Health)	The average height of an adult human is increasing. Why is this? What are the advantages and disadvantages of this?