We will learn: The Earth

Element	More ambitious			
The Earth	Name the layers of the Earth Describe the properties of the different layers of the Earth's structure Compare the different layers of the Earth in terms of their properties	Name the main components of the atmosphere Describe the composition of the atmosphere Describe the composition of the atmosphere in terms of abundance of components	Design a simple model of the Earth using information about its structure Describe advantages and disadvantages of a given model of the Earth's structure. Explain why models are good or poor representations of the Earth's structure in terms of materials used.	
Sedimentary Rocks	State a property of sedimentary rocks. Explain two properties of sedimentary rocks.	Describe simply how sedimentary rocks are made. Explain how sedimentary rocks are made. Give a detailed explanation of the sedimentary rock cycle.		
Weathering	Name 3 types of weathering	Describe at least one way that rocks can be weathered	Explain how different conditions can affect rocks Describe and explain 3 types of weathering and the rocks that would be affected	
Fossils in Rocks	What is a fossil?	How are fossils formed?	What can fossils tell us about rocks? What can fossils tell us about evolution?	
Igneous Rocks	From what are igneous rocks formed? What is one property of igneous rocks?	Why does cooling rate affect the size of crystals in igneous rocks?	What are the names of 3 examples of igneous rock and How was each formed?	

Metamorphic Rock	What conditions are needed for the formation of metamorphic rocks? What are the properties of metamorphic rocks? What happens to the properties of the rock when metamorphism takes place?	What models can we use to describe metamorphism, how useful are the models? What are the properties of slate and what can it be used for?	Can you use and interpret information on metamorphic rocks?
The Rock Cycle	What are the names of the 3 main rock types? What does the rock cycle show us?	Can you describe the main steps in the rock cycle?	Can you explain, in detail, how the rock cycle works?
The Carbon Cycle	What is a carbon store? Can you give some examples? Which processes add carbon dioxide to the atmosphere?	What are the word equations for 3 processes involved in the carbon cycle?	Why did the concentration of carbor dioxide in the atmosphere not change for many years?
Climate Change	Which processes take carbon dioxide from the atmosphere? What is global warming? What gas is the main cause of global warming?	What human activities contribute to global warming?	What is the difference between the greenhouse effect and global warming?
Recycling	List four items that can be recycled. Say why things should be recycled	Explain how aluminium is recycled.	Analyse the advantages and disadvantages of recycling. Apply mathematics to calculate