Sounds and their sources
When Stone Age people eventually became farmers they used music for entertainment and for dances to ensure a good harvest. For example, they made rattles from dried gourds.
- Can we make a rattle, using different materials to put inside the rattle?
- Which materials make the loudest sounds?
- Which make the quietest sounds?
- Does the sound change when we use a different material to make the rattle body?

Light sources
Stone Age people painted pictures on the walls of caves. Caves are underground and don’t get very much light.
- How did Stone Age people get light inside the caves to do their paintings?
- How would you get light if you wanted to explore a cave?

Seasonal Change
Early Stone Age people travelled around to find the best place to settle. They chose places where there was plenty of food that they could collect and hunt.
- Which season do you think Stone Age people would have preferred and why?
- Which seasons would be difficult to survive through and why?
- Can you suggest how they might be able to survive the hardest seasons?
Effects of forces in producing movement
Stone Age people walked everywhere until wheels were invented. However, there were no roads for wheeled vehicles to travel on. Can we find out how well wheeled vehicles move on different surfaces?

Can we find out how well wheeled vehicles move on different surfaces?

We could try soil, small twigs, grass, flat stone, small stones and ice. Do small wheels or big wheels work best on different surfaces?

Magnets
The Stone Age came to an end when metals were discovered, and this led into the Bronze Age. Some metals are magnetic and others aren’t.

Can we find out which metals have magnetic properties? How do you think magnetic properties might have been important to Stone Age people?

Habits and environment
Stone Age humans lived in different places around the world. Some lived in Africa, others in Europe, in Asia, in North and South America and even in Australia and New Zealand.

What would it be like to live in these different places? How would the climate be the same in these places? How would it be different? Which climate would you prefer to live in? Can you identify any animals and plants that are only found in certain places in the world? Why is this?

Conditions for growing plants
Stone Age people developed from being hunter-gatherers into farmers. Stone Age farmers lived in small communities and fed themselves from crops grown on their land.

How do you think Stone Age people decided which plants to grow for food? What features would they look for in a plant that would be good to grow for food? How do you think they discovered the best conditions for growing plants for food? If we want to grow plants for food, what conditions should we give them?

Mixtures of materials
Stone Age people invented simple ovens around 9,000 BC. They made bread by mixing together flour and water. They made flour by grinding grain between two stones.

Can we make our own Stone Age bread by grinding grain in a mortar? What happens when we mix flour and water? How do the ingredients compare before and after mixing? What happens when we add other ingredients to the mix?

Comparing and grouping rocks
Stone Age people created hunting weapons and tools from rocks and stones. The kind of weapons and tools they needed changed as they became farmers instead of hunter-gatherers.

Observe, compare and group a selection of rocks. Which do you think would make the best tools for hunting and why? Which do you think would make the best tools for farming and why? How could we find out how strong each rock type is?

Soil for growing plants
Stone Age people developed from moving around to find food to living in one place and growing plants for food where they lived.

Imagine a Stone Age community is searching for a good place to set up a new settlement. If we compare soil samples from different places, which would be a good place to settle and grow food? Can we find out by germinating a seed in different soil samples?

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**Ecosystems**
Stone Age humans hunted animals such as deer and boar. Eventually they developed from being travellers into farmers. They would have cleared land to create space for their fields.

- How would removing trees affect the water cycle?
- What effect does removing trees have around rivers?

**Adaptation and extinction**
Woolly mammoths were common animals in Ice Age Britain. They are relatives to modern elephants but had long fur and smaller ears. Mammoths are extinct today, but scientists are not certain why this happened.

- Woolly mammoths would have been adapted to their environment at the time in order to survive. How many adaptations can you think of that would help them to survive?
- What are the different theories about why they became extinct?
- Can you present a case for the one that seems most likely?

**Pure substances and mixtures**
Scientists believe that some of the prehistoric cave paintings were created by mixing powders and liquid to make the right consistency to blow the paint through a tube (similar to spray paint).

- Can we use powder paint and different liquids to find out what happens when powder paint is mixed with a variety of liquids?
- Does it create a solution or a suspension or both?
- What happens when we add different amounts of powder and liquid together?

**Composition of the Earth**
Stone Age people did not usually live in caves. However they sometimes used caves as shelters and for cave paintings – a kind of early diary. Caves are formed in different ways. They can form for example through volcanic activity, by rock or salt deposits dissolving in water or by the action of the sea.

- What can we find out about how lava from a volcano could form a cave?
- Where does the lava come from?
- What can we find out about what happens when a volcano erupts?

**Natural resources**
The Stone Age came to an end when metals were discovered; this led to the Bronze Age. In the Bronze Age, tools were made from this new material.

- How do the properties of stone and metal compare?
- How are they similar and how are they different?
- What difference might this have made to how people lived in the Bronze Age?
- What metal did people start using first?
- Where did this metal come from?
- How would metal tools be made?

**Forces: buoyancy**
By 50,000 BC, humans travelled across sea to find new land. Stone Age boats were made from materials like reeds and wood.

- Can we design and make a boat from natural materials? Think carefully about the shape of the boat, as this will affect how much cargo the boat will be able to hold.
- Can we find out which shape of boat will be able to carry the heaviest load and why?

**Sound: pitch and volume**
There is some evidence that people made and played drums as part of religious rituals towards the end of the Stone Age.

- How does a drum make a sound?
- Can we make some simple drums using different materials to make the drumhead?
- How does the tightness of the material on the drumhead affect the sound it produces?
- Can we use different bowls and pots to create the drum shell?
- Do they make different sounds?
- Can you explain the difference in the sound they produce?

**Light and shadows**
Stonehenge was built in prehistoric times and there are different ideas about what its purpose was. Many scientists think that Stone Age people were interested in how the light from the sun and moon shone on the circle and created shadows. Others think that it may have been used to measure the movement of the moon in the sky.

- Can we create a mini version of Stonehenge and observe the shadows that form during a day?
- How are the shadows formed?
- How do the shapes created by the shadows change during the day?