

- Working Scientifically
- Living things & their habitats
- Earth & Space (Physics)
- Animals (inc. Humans)
- Properties and changes of materials
- Forces

I can explain that the Earth and other planets orbit the sun

I can explain that the sun, Earth and moon are spherical bodies

I can name, place and describe the differences between the planets in the Solar

I understand that gravitational forces ensure that the orbits of planets are consistent and time taken to orbit the sun is dependent on distance from the sun

I can explain that the moon orbits the Earth, noting the number of days, apparent shape and the lunar cycle.

I can describe how the rotation of the Earth in relation to the sun causes day and night.

I can describe how the position of the Earth's orbit in relation to the sun affects the amount of daylight and temperatures on Earth, giving us our seasons.

I can explain the apparent movement of the sun during the day and its effect on shadow length.



I can make predictions based on evidence

I can ask different types of questions

I can identify appropriate secondary sources to research ideas and ask questions

I can recognise when to use comparative and fair tests

I can use varied ways to present data

I can plan when to take repeat readings

I can decide how to record data

The Year 5 Scientist
'I can...'

I can describe the effect of gravity on the rate at which objects of different shapes will fall to the earth

I can explain the movement of objects through air, water and across surfaces is resisted by these media

I can give ideas for how the effect of air and water resistance can friction can be minimised to enable objects to move more freely through the respective media

I can describe how levers, pulleys and gears work

I can explain how some mechanisms can use a small force to create a big effect

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I can explain the process of asexual reproduction in plants.

I can explain the life cycle of animals including mammals, insects, amphibia and birds.

I can compare the life expectancy of humans to other animals.

I can compare the gestation periods of various mammals and compare the similarities and differences.

I can explain that most mammals are viviparous like man (give birth to live young).

I can suggest and use a range of methods to separate materials from mixtures based on my knowledge of the properties of these materials.

I can describe some materials which have been manufactured by irreversible (chemical) change and explain how the properties of the new materials make them useful to man.

I can explain why some materials are not suitable for particular use based on my knowledge of the properties of materials.

I can identify similarities and differences between the life cycles of studied animal groups.

I can label and describe the parts of a flowering plant involved in sexual reproduction.

I can explain the life cycle of a human from conception to old age.

I can group most everyday materials on the basis of their similarities and differences.

I can explain the differences between reversible and irreversible changes, giving examples of both.

I can describe the process of sexual reproduction in plants.

I can describe the process of reproduction in some animals.

I can explain the changes which happen to the human body during adolescence.

I can name the parts of the human reproductive system/body and explain how these change during adolescence.

I can describe the changes to the human body and limitations this brings as a human gets older e.g. skin, walking, hair.

I can identify materials which are soluble in liquids and describe the process as dissolving.

I can explain how materials dissolved in a solution can be recovered.

I can describe different uses for common everyday materials based on their properties.

I understand that some irreversible changes can result in the formation of new materials. I can give examples of this.