

Light from a source forms shadows and can be absorbed, reflected and refracted (ACSSU080)

Word Wall Vocabulary

science	refraction	natural	transparent
scientist	fair test	analyse	reflection
investigation	light	hypothesis	translucent
variable	artificial	data	opaque

Definitions

science- a system of studying, testing, and experimenting on things in nature. Science is a search for general laws about how the world works.

scientist- a person who works in some branch of science.

investigation- to look into carefully and closely so as to learn the facts; examine.

E.g. The police are investigating the crime.

variable- likely to change; not constant.

refraction- the bending of rays or waves of light, heat, sound, or the like when passed obliquely from one medium to another with a different rate of transmission.

E.g. Because of refraction, objects appear different when you look at them through a substance like water.

fair test- A fair test is a controlled investigation carried out to answer a scientific question.

E.g. If testing which material is the most waterproof by pouring liquid onto a selection of different materials, in a fair test only the type of material (the component you are testing) should be changed. Therefore, all other elements (the type of liquid used, the amount of liquid used, the distance the liquid is poured from, the speed at which it is poured and the size of the material) must remain the same each time the test is carried out. It would be unfair or an unscientific test if, for example, 1000ml of water were poured onto a piece of foil and 2ml of milk poured onto a piece of foam - you would not be able to fairly compare the materials.

light- the form of energy that makes it possible for the eye to see. The sun produces light.

artificial- made by human beings; not natural.

natural- of or produced by nature; not made by humans.

analyse- to separate into parts for close study; examine and explain.

E.g. If we analyse the problem, perhaps we can solve it.

hypothesis- a prediction or educated guess that can be tested and can be used to guide further study.

data- facts, figures, or other pieces of information that can be used to learn about something.

transparent- letting light pass through and giving a clear view of objects on the other side.

E.g. Most glass used in windows is transparent.

reflection- heat, light, or an image that bounces off an object or surface.

E.g. We looked at our reflections in the lake.

translucent- letting only some light through so that what can be seen on the other side is not clear.

E.g. Our bathroom window is made of translucent glass.

opaque- not letting light pass through.

E.g. Opaque window shades darken the room.