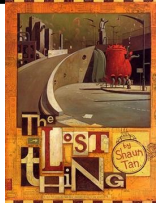




Wonderful Water

Key texts

The Lost Thing
By Shaun Tan



Opportunities/ Experiences

STEM Wow Day
Carsington Water
Severn Trent Water Visitor & Workshop

Vocabulary

Physical Geography: The study of Earth's natural features.
Aerial: Relating to in the air.
Cycle: A circle of events that repeat in a regular pattern.
Scarce: In short supply.
Abundant: A large amount or plentiful supply.
Precipitation: Water falling in the form of rain, snow, sleet or hail.
Evaporation: Liquid turning into a gas.
Environment: The conditions all around us.

Geography

The River Trent is the third longest in Britain and runs through Nottinghamshire. Other major UK rivers are the Thames, Ouse and Severn.

Two major rivers in the world are The Nile (Egypt) and The Amazon (Brazil).

Parts of a river include:

- source: where a river starts,
- meander: bends or curves
- tributaries: smaller streams
- estuary: where a river or stream meets the ocean
- mouth: where a river opens into a lake or ocean.

The force of flowing water can cause erosion.

The Sun causes the water to evaporate.

Water turns into water vapour.

As the water vapour rises, it cools down.

As it cools down, condensation happens and water vapour condenses to small droplets of water.

Clouds are made from a mix of dry air and small droplets of water.

As condensation continues to happen, more droplets of water vapour are formed.

When the droplets become heavy and large enough, they fall back to the Earth's surface in the form of rain or snow. This is called precipitation.

Water may also run off and enter oceans, seas and rivers.

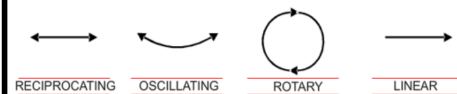
Water then evaporates again and the water cycle begins again!



Design Technology

Many mechanisms take one type of input motion and output it as a different type of motion.

Types of motion:



The input is the movement of the main lever by the user.

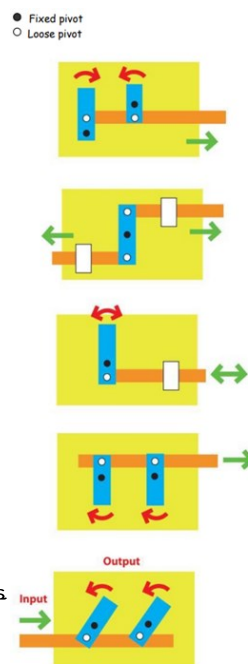
The output is the movement that is made by the smaller levers.

A lever is a stiff bar that moves around a pivot.

A linkage is the part of the mechanism used to join one or more levers to produce the type of movement required.

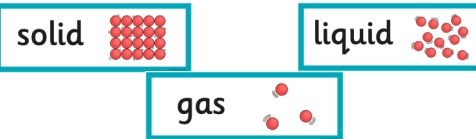
A loose pivot joins the levers together.

A fixed pivot joins the levers to the overall object.



Science:

There are three states of matter: solid, liquid, gas.



Solids will melt into liquids as the molecules start to move faster until they can move over and around each other.

Liquids will evaporate into gas when molecules begin moving even faster creating greater space between them.

Gas will become liquid again through condensation as the molecules slow down and begin coming together.

Liquid will become solid again through freezing as the molecules begin moving very slowly in a single spot close to other particles.

Condensation and evaporation both take place in the water cycle.

Realistic - a sensible idea of what can be made
Research - finding out information
Accurate - exact details or measurements
Functional - designed to work and be useful
Innovative - using new ideas
Appealing - attractive or interesting
Annotate - add notes to
Analyse - examine in detail to give an explanation.
Critically - looking at the positives and negatives
Investigate - finding out information, usually following a plan
Appearance - the way something looks
Audience - the group of people it is meant for
Characteristic - a feature of something

Solid - a state of matter that holds its shape unless force is applied to it.
Liquid - a state of matter that takes the shape of the container it is in but does not change the amount of space it takes up.
Gas - a state of matter that spreads out to completely fill the container it is in.
Melt - the process of a solid becoming a liquid.
Freeze - the process of a liquid changing to a solid.
Evaporate - the process of changing from liquid to gas.
Condense - process changing from gas to liquid.