



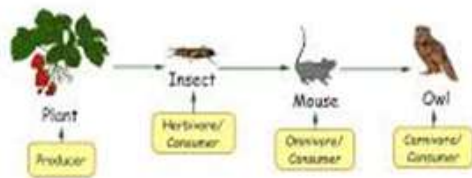
Key Ideas

- Living things can be grouped in a variety of ways.
- Classification keys help to group, identify and name a variety of living things.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Environments can change and that this can sometimes pose dangers to living things.

Important things to know/find out

- Try using a guides or key to explore and identify plants and animals.
- Research different plants and animals.
- What are food chains?

The Food Chain Of An Owl



A food chain shows the path of energy from one living thing to another. Decomposers like bacteria, are necessary for all food chains.

- Do animals that eat different food have different teeth?
- What groups can we put animals in?

Vocabulary

Producer, consumer, prey, predator, plant, energy, food for, key, feature, Carl Linnaeus, mammals, reptiles, amphibians, birds, fish, invertebrates, snails, worms, spiders, insects, seed, spore, conservation, deforestation.

Questions to consider/Activities

- Think of different animals and plants – what characteristics do they have?
- What is special about these characteristics?
- How might a habitat change?
- What might happen if a habitat is destroyed?
- Why are people cutting down the rainforest and what effect does that have?
- How does the variety of invertebrates on the school field change over the year?
- How does the use of insecticide effect the bee population?

Background information for teachers:
 Classifying keys – examples of a simple key with the same characteristics (1 and 2)
 This sheet of cards, made with 100mm objects is printed up as an A4 manual – you can either download and print the manual to use as a poster or you may wish to use an enlarged section of it, depending on the size of the classroom. Remember, it is essential to print these with the children's information book or insert it into their groups according to the system.

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    graph TD
      Q1[is it pink?] -- Yes (C/D) --> Q2[is it square?]
      Q1 -- No (A/B/E) --> Q3[is it only black and white?]
      Q2 -- Yes --> C[C]
      Q2 -- No --> D[D]
      Q3 -- Yes --> A[A]
      Q3 -- No --> B[B]
      Q3 -- Yes --> E[E]
      Q3 -- No --> F[F]
      Q4[is it pink and black?] -- Yes --> C
      Q4 -- No --> D
      Q5[is it round?] -- Yes --> H[H]
      Q5 -- No --> G[G]
  
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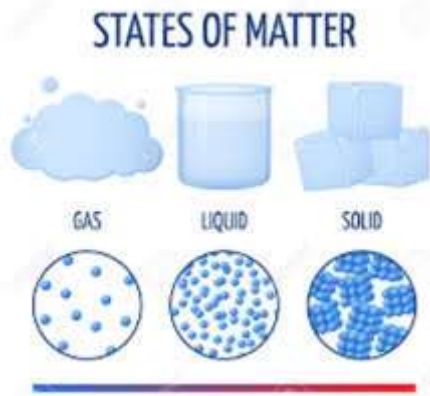


Key Ideas

- Materials can be compared and grouped based on whether they are solids, liquids or gasses.
- Some materials change state when they are heated or cooled.
- The water cycle involves evaporation and condensation.
- The rate of evaporation depends on temperature.

Important things to know/find out

- Properties of solids, liquids and gases.



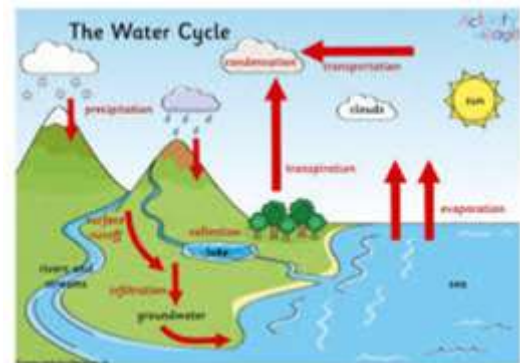
- What effect does temperature have on different substances such as chocolate?
- Find out about evaporation by examining puddles and washing on a line.
- Examine a snowman melting.

Vocabulary

State of matter, compress, solids, liquids, gases, condense, freeze, evaporate, change-of-state, melt, water-cycle, precipitation, water vapour, melting point, freezing point.

Questions to consider

- Can you describe the properties of solids, liquids and gases?
- Can you name some solids, liquids and gases?
- How can you change solids, liquids and gases?
- Can you give some examples?
- Can you change them back?
- How does the mass of a block of ice affect how long it takes to melt?
- How does the surface area of a container of water affect how long it takes to evaporate?



- Is there a pattern in how long it takes different sized ice lollies to melt?



Key Ideas

- Vibrations make sounds.
- Vibrations travel through a medium to the ear.
- Volume and pitch depend on the vibrations.
- Sounds get fainter as the distance from the sound source increases.

Important things to know/find out

- Look at different musical instruments – can you change the volume, sound and pitch?
- Experiment with different objects e.g. do different sized saucepan lids sound the same?
- Try making earmuffs from a variety of different materials.
- Which material provides the best insulation against sound?
- Where do sounds come from?

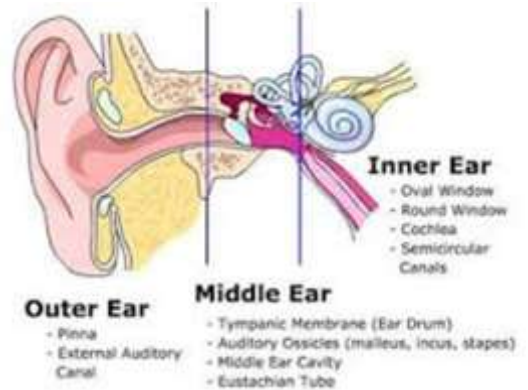


Vocabulary

Sound, source, vibrate, volume, pitch, note, air, high/low pitched notes, ear drum, Object vibrates → air vibrates → ear drum vibrates.

Questions to consider

- How can you change the volume and pitch of a sound?
- Can you give some examples?
- Can you describe the patterns?
- How does sound travel?
- Is there a link with between how loud it is in school and the time of day? If there is a pattern, is it the same in every area of the school?
- How does the length of a guitar string/tuning fork affect the pitch of the sound?
- Do all animals have the same hearing range?
- When is our classroom the quietest?
- How does the loudness of a drum change as you move it further away?



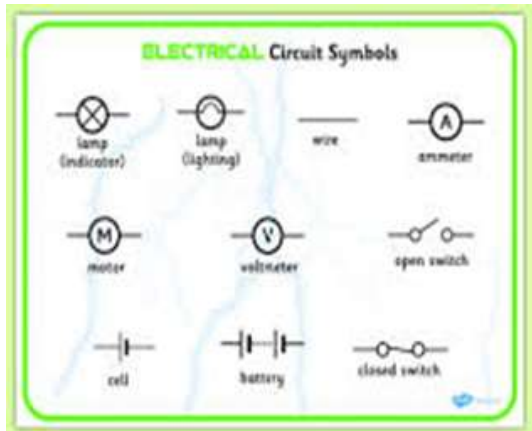


Key Ideas

- Lots of appliances run on electricity.
- Electrical circuits are made up of electrical components: cells, wires, bulbs, switches and batteries.
- Electrical circuits will only work if there is a complete loop with a battery.
- A switch opens and closes a circuit.
- Some materials conduct electricity.
- Materials that do not conduct electricity are called insulators.
- Metals are good electrical conductors.

Important things to know/find out

- Draw and label circuits.
- How to keep safe near electricity.
- What components are used in circuits?
- How do switches work?
- What kinds of materials conduct electricity?
- What do you need for an electrical circuit to work?
- What makes bulbs brighter or dimmer in a circuit?



Vocabulary

Mains, battery-cells, dangerous, complete, circuit, symbols, components, bulb, battery, buzzer, motor, switch, wires, electrical, conductor, electrical insulator.

Questions to consider

- If a circuit is to work what will it need?
- How can you stop a circuit?
- Can you name some electrical conductors and insulators?
- How can you keep safe near electricity?
- How does a light bulb work?
- How has electricity changed the way we live?
- How does the thickness of a conducting material affect how bright the lamp is?

