

EGERTON PRIMARY SCHOOL KNUTSFORD SCIENCE CONCEPTS AND END POINTS ASSESSMENT

"Ready to learn. Ready to thrive. Ready for tomorrow."

"The important thing is to never stop questioning."

Albert Einstein

Science at Egerton Primary School

Scientific Enquiry:

Comparative/Fair testing – Carrying out fair tests to see the effect of a changing variable.

Research – Using secondary sources of information to answer questions.

Observation over time – Observe changes that occur over a period of time (minutes to months).

Pattern-seeking – Identifying patterns and looking for relationships in enquires.

Identifying, grouping and classifying – Identifying patterns and looking for relationships in enquires.

Biology

- **Understand plants** This concept involves becoming familiar with different types of plants, their structure and reproduction.
- **Understand animals and humans** This concept involves becoming familiar with different types of animals, humans and the life processes they share.
- **Investigate livings things** This concept involves becoming familiar with a wider range of livings things, including insects and understanding life processes.
- **Understand evolution and inheritance** This concept involves understanding that organisms come into existence, adapt, changes and evolve and become extinct.

Chemistry

• Investigate materials – This concept involves becoming familiar with a range of materials, their properties, uses and how they may be altered or changed.

Physics

- Understand movement, forces and magnets This concept involves understanding what causes motion.
- **Understand the Earth's movement in space** This concept involves understanding what causes seasonal changes, day and night.
- Investigate light and seeing This concept involves understanding how light and reflection affect sight.
- Investigate sound and hearing This concept involves understanding how sound is produced, how it travels and how is it heard.
- **Understand electrical circuits** This concept involves understanding circuits and their role in electrical applications.

Plants



End Point Assessment

I can identify and name a variety of common wild and garden plants.

I understand the difference between trees that lose their leaves in the winter and those that keep their leaves all year round.

I can identify and name deciduous and evergreen trees.

I can point out and name the parts of a flower, such as petals, leaves, and stem.

I know the parts of a tree, like the trunk, branches, and roots.

Skills

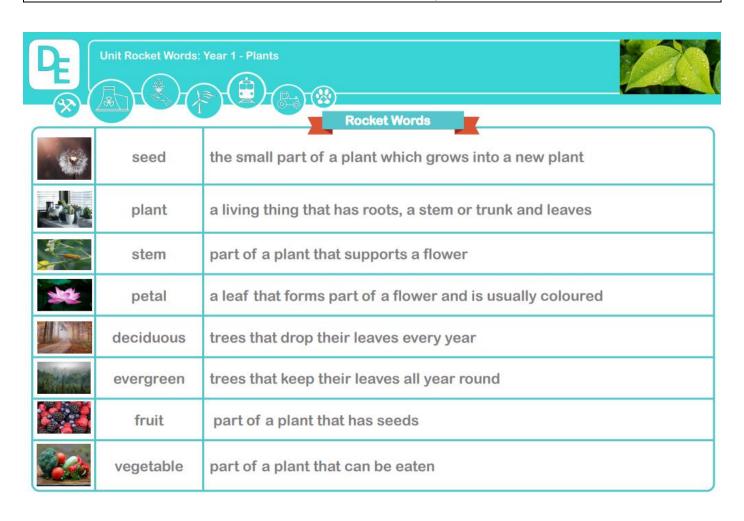
I can observe plants closely and compare them.

I use magnifying glasses to look at plants carefully and notice how they are similar and different.

I can draw diagrams showing parts of different plants.

I keep records of changes I see in plants, like leaves falling off trees and buds opening into flowers.

I can talk about what is the same and what is different between the plants I have studied.



Everyday Materials



End Point Assessment

I can distinguish between an object and the material from which it is made, like a chair made of wood or a bottle made of plastic.

I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.

I can talk about what materials are like, such as hard or soft, shiny or dull, and smooth or rough.

I can sort materials into groups based on what they are like, such as bendy or not bendy, waterproof or not waterproof.

I can do tests to answer questions like, "What is the best material for an umbrella?" or "What is the best material for curtains?"

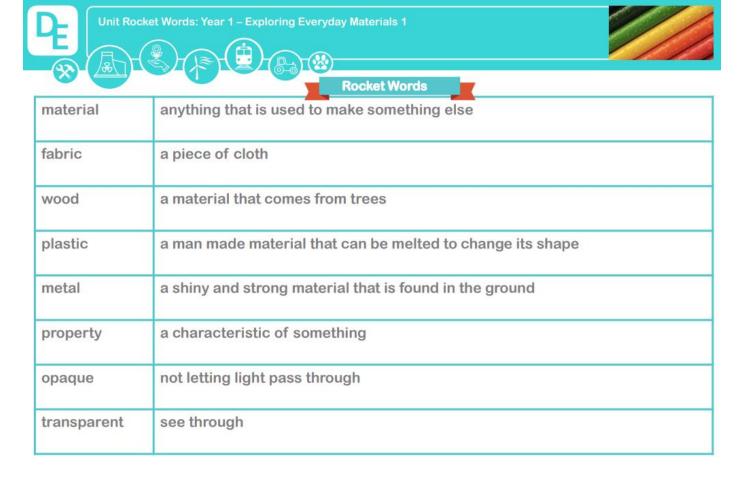
Skills

I carry out tests to see how materials behave, like testing which materials are waterproof.

I organize my findings into tables or charts to show the properties of different materials.

I can use senses and taking measurements, using a range of equipment, to make observations about a scientific enquiry.

I can use tables, a variety of graphs, labelled diagrams and models to record observations, measurements, results and findings.



Seasonal Changes



End Point Assessment

I can observe changes across the 4 seasons.

I notice how things like temperature and what people wear change from season to season.

I can talk about the different kinds of weather we have in each season, like snow in winter or sunshine in summer.

I can describe how day length varies across the seasons.

I know that the days are longer in summer and shorter in winter.

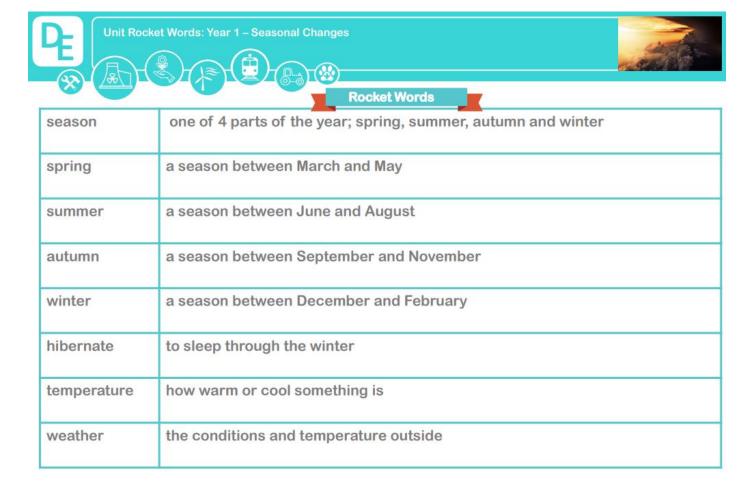
I can discuss safety when observing the weather, including why it's not safe to look directly at the sun.

Skills

I can keep track of the weather each day and put the information into a chart or table.

I can create pictures or models showing how trees, animals, and the weather change with each season.

I keep a record of how long the day is in each season and share my findings.



Animals Including Humans



End Point Assessment

I know the names of different kinds of animals like fish, frogs, lizards, birds, and mammals.

I can identify and name a variety of common animals that are carnivores, herbivores, and omnivores.

I can talk about how different animals look and what body parts they have, like fins on fish or wings on birds.

I can draw and label parts of the body like the head, neck, arms, and legs.

I can say which part of the body is associated with each sense.

I can understand how to take care of animals and return them safely to their habitat

Skills

I use my eyes to look carefully at animals and notice how they are similar and different.

I can put animals into groups based on whether they eat plants, meat, or both.

I use my senses to feel different textures, hear different sounds, and smell different things.



	Nochot World
fish	an animal that lives in water and has fins for swimming and gills for breathing
amphibian	a cold-blooded animal that spends some time on land and in water
reptile	a cold-blooded animal that usually has the skin covered with scales or bony plates
mammal	a warm-blooded animal with a skeleton inside its body that grows hair or fur on this skin; mammal mothers produce milk to feed their babies
bird	an animal with a backbone that has feathers, wings and a beak
warm-blooded	having a warm body temperature that does not change with the temperature of the air
cold-blooded	having a body temperature that changes depending on the temperature of the air or water
herbivore	an animal that only eats plants







	Noonet Words
head	the top part of a human or an animal's body
body	the whole of a human or animal, including the head, brain, heart, legs and arms
brain	the control centre of the body
pupil	the black spot in the middle of the eye that lets in light, colour and shapes
ear	the organs, or body parts, in humans and many other animals that allow them to hear
sound	vibrations, or sound waves, that we can hear
tongue	moving organ in the mouth that is used for talking, tasting, eating and licking
taste	the sense by which sweet, sour, bitter, or salty flavours are detected through taste buds in the tongue