**Featherstone Wood Primary School**

*Our School's Skills - Working Collaboratively, Independence, Community Values, Reflectiveness, Stickability, Risk-Taking, Inquisitiveness, Communication*

# Year 3 Science Autumn 1

This term in Science, we are exploring Rocks

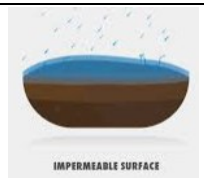
| Our Key Learning Objectives | | | |
|---|---|---|---|
| I can name and observe characteristics of a variety of rocks. I | | | |
| I can group rocks based on their appearance and physical properties. I | | | |
| I can investigate properties of rocks and relate to their use. I | | | |
| I can describe how different rocks react differently. | | | |
| I can describe how fossils are formed. | | | |
| I can describe how soil is formed. | | | |
| I can compare different properties of soil. I | | | |

**Extra questions**

1. How are different rocks formed? Can you use sweets to model this?
2. How did Mary Anning discover fossils?
3. Why do we not see the soft parts of animals in fossils?

**Texture-** the feel, appearance, or consistency of a surface or substance

**Impermeable**—not allowing fluid to pass through




**Permeable**— allowing liquids or gases to pass through it

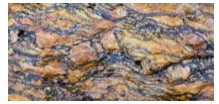

**Igneous-** having solidified from lava or magma

**Crystals-** a solid substance having a natural geometrically regular form with symmetrically arranged plane faces.

**Fossil**—the remains or impression of a prehistoric plant or animal embedded in rock and preserved in petri-

**Sedimentary-** that has formed from sediment deposited by water or air

**Metamorphic**— rock that has undergone transformation by heat, pressure, or other natural agencies



**Write down any questions you would like to explore further.**

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## Beacon 2—working scientifically skills

- I can ask relevant questions and use different types of scientific enquiries to answer them.
- I can set up simple practical enquiries, comparative and fair tests.
- I can make systematic and careful observations.
- I can make accurate measurements using standard units using a range of equipment.
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# Year 3 Science Autumn 2

This term in Science, we are exploring Light

| Our Key Learning Objectives | | | |
|---|---|---|---|
| I can describe and compare some light sources. | | | |
| I can recognise light is needed to see things and that the dark is an absence of light. | | | |
| I can notice that light is reflected from surfaces. | | | |
| I can identify materials suitable for reflective clothing. I | | | |
| I can describe how shadows are formed by a light source being blocked. | | | |
| I can describe the difference in shadows created by transparent, opaque and translucent objects. I | | | |
| I can investigate patterns in the size of shadows. I | | | |
| I know the light from the sun can be dangerous and how to protect my eyes. I | | | |

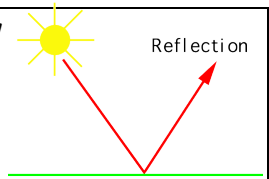
**Extra questions**

1. How are nocturnal animals adapted to use little light?
2. How did Percy Shaw invent cat's eyes?

**Light**– form of energy that makes it possible for the eye to see

**Shadow-** a dark area or shape produced by an object blocking a

**Reflect**– to throw back light




**Source**– a place or object where something comes from.

**Opaque-** not able to be seen through

**Transparent**– a material allowing light to pass through

**Translucent**– a material that allows some light to pass through.

**Surface-**the outside part or top layer of something.

**Write down any questions you would like to explore further.**

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# Year 3 Science Spring 1

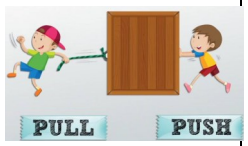
This term in Science, we are exploring Forces and Magnets

| Our Key Learning Objectives | | | |
|---|---|---|---|
| I can describe how to make an object move using push or pull force. | | | |
| I can create a labelled diagram showing the direction of force. | | | |
| I can identify friction as a force and describe how it can be increased or decreased. I | | | |
| I can compare how objects move on different surfaces. I | | | |
| I can compare and group materials based on whether they are magnetic. I | | | |
| I can notice that some forces need contact but magnetic force can work at a distance. I | | | |
| I can observe how magnets attract or repel each other. I | | | |
| I can describe magnets as having two poles and predict whether they will attract or repel. | | | |

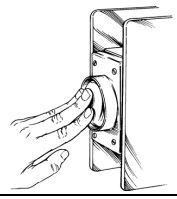
**Extra questions**

1. What are some daily uses of magnets?
2. How does a compass work?
3. How was lodestone found and used?

**Force**– an influence that can change the motion of an object.

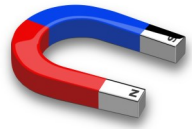



**Push**-move forward by force.



**Pull**– move steadily in a specific direction.

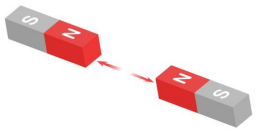
**Magnets**– a material or object that produces a magnetic field.



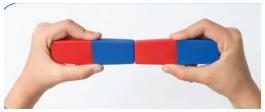
**Magnetic**- relating to a magnet.

**Friction**– the resistance that one surface experiences when moving


**Repel**– a force that pushes away.




**Attract**-to pull towards another.



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# Year 3 Science Spring 2 and Summer 1

This term in Science, we are exploring Plants

| Our Key Learning Objectives | | | |
|---|---|---|---|
| I can identify the parts and functions of a flowering plant. | | | |
| I understand how plants make their own food and absorb minerals. | | | |
| I can describe how changes to light and fertiliser affect growth. | | | |
| I can explore the requirements of plants for life and growth. I | | | |
| I can investigate the way that water is transported within plants. I | | | |
| I can describe the roles of bees and insects in pollination. I | | | |
| I can describe how pollen and seeds are dispersed. | | | |
| I can explore the life cycle of flowering plants. I | | | |

**Extra questions**

1. Why do plants need a healthy stem and roots?
2. What similarities and differences are there with methods of seed dispersal?
3. Are all roots the same?

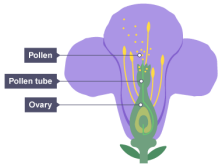
**Transport-** movement from one location to another.

**Nutrients-** a substance needed to survive and grow.

**Pollen-** a fine powdery substance

**Pollination-** the transfer of pollen to the stigma

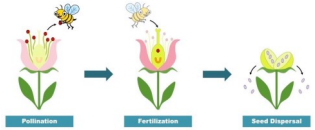
**Seed formation** -the ovule is fertilised to form a seed.




**Seed dispersal-** the movement of seeds away from the parent plant.

**Anchor-** to hold something down.

**Reproduction-** the production of offspring.

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# Year 3 Science Summer 2

This term in Science, we are exploring Animals including Humans

| Our Key Learning Objectives | | | |
|---|---|---|---|
| I can name the components of a healthy diet and explain how my diet is | | | |
| I can explain that humans and animals need the correct nutrition. I | | | |
| I can describe some key characteristics of bones. I | | | |
| I can describe the key functions of the skeleton. | | | |
| I can group skeletons with and without an internal skeleton. I | | | |
| I can state that when one muscle contracts another relaxes. | | | |

**Extra questions**

1. What are the roles of each food group?
2. What are the advantages of having an internal skeleton?
3. What is the same and different with different animal diets?

**Carbohydrates**– the main source of energy for the body.

**Proteins**– needed for building and repairing tissue in our body.

**Fats**– essential part of a balanced diet in small portions.

**Fibre**–in plant food and cannot be broken down

**Bones**– hard tissue making up the skeleton.

**Muscle**– a bundle of tissue to help movement.

**Exoskeleton**– an external skeleton.

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**Protect**– to keep safe from harm.

**Write down any questions you would like to explore further.**

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