Signhills Infant Academy Science Big Ideas

Plants

Comparative/ fair testing

Changing one variable to see it's affect on another, while keeping everything else the same.

Observation over time

Observing changes that occur over a period of time ranging from minutes to months.

Pattern Seeking

Identifying patterns and looking for relationships in enquires where variables are difficult to control.

Identifying, grouping and classifying

Make observations to name, sort and organise items.

Build an Overview

Asking questions

Making predictions

Setting up tests

Observing and measuring

Recording data

Interpreting and Communicating results

Evaluating

Signhills Infant Academy Science Big Ideas

Animals including humans

Research

Use secondary sources of information to answer scientific questions.

Pattern Seeking

Identifying patterns and looking for relationships in enquires where variables are difficult to control.

Identifying, grouping and classifying

Make observations to name, sort and organise items.

Build an Overview

- Asking questions
- Making predictions
- Recording data
- Interpreting and Communicating results

Signhills Infant Academy Science Big Ideas

Materials

Comparative/ fair testing

Changing one variable to see it's affect on another, while keeping everything else the same.

Observation over time

Observing changes that occur over a period of time ranging from minutes to months.

Pattern Seeking

Identifying patterns and looking for relationships in enquires where variables are difficult to control.

Identifying, grouping and classifying

Make observations to name, sort and organise items.

Build an Overview

- Asking questions
- Making predictions
- Setting up tests
- Observing and measuring
- Recording data
- Interpreting and Communicating results
- Evaluating

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Living things and their habitats

Research

Use secondary sources of information to answer scientific questions.

Pattern Seeking

Identifying patterns and looking for relationships in enquires where variables are difficult to control.

Identifying, grouping and classifying

Make observations to name, sort and organise items.

Build an Overview

- Asking questions
- Making predictions
- Recording data
- Observing and measuring
- Interpreting and Communicating results

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Seasonal Changes

Research

Use secondary sources of information to answer scientific questions.

Pattern Seeking

Identifying patterns and looking for relationships in enquires where variables are difficult to control.

Observation over time

Observing changes that occur over a period of time ranging from minutes to months.

Build an Overview

- Asking questions
- Making predictions
- Setting up tests
- Observing and measuring
- Recording data
- Interpreting and Communicating results

Signhills Infant Academy Science Long Term Plan

Year Groups	Autumn	Spring	Summer
Reception	<u>Seasonal Changes</u> • Signs of Autumn <u>Animals and their habitats</u> • Some animals sleep through the winter. • Some animals are awake during the night. • Animals need food, water and shelter. <u>Plants</u> • Plants need water and light to grow • Fruit and vegetables are grown on trees or in the ground.	<u>Seasonal Changes</u> • Signs of Spring <u>Contrasting Environments</u> • Different animals live in different places <u>Plants</u> • Plants need water and light to grow <u>Life Cycles</u> • Animals change over time <u>Healthy Eating</u> • We need to eat a balanced diet to keep healthy.	<u>Seasonal Changes</u> • Signs of Summer <u>Materials</u> <u>Animals and their habitats</u> • Some creatures live underwater.
Year 1	<u>Seasonal Changes</u> • Name seasons in order and describe typical weather • Name activities and events in the four seasons • Describe appearance of trees in each season • Record data about temperature across the seasons <u>Everyday Materials</u> • Name objects and identify materials they are made from • Recognise that objects are made from materials that suit their purpose • Recall that a property is how a material can be described • Sort objects based on the materials they're made from • Group objects based on their properties	<u>Sensitive Bodies</u> • Draw and label human body part • Identify the body parts associated with each sense • Compare and group body parts <u>Comparing Animals</u> • Name and describe the physical features of a range of animals • Sort animals into groups based on their similarities and differences • Identify characteristics specific to mammals, birds, reptiles, amphibians and fish • Recall the diets of carnivores, herbivores and omnivores	<u>Introduction to Plants</u> • Identify plants and their features • Recall some of the roles that flowering plant parts have • Name some trees and their parts • Identify similarities and differences between deciduous and evergreen leaves • Recall that seeds and bulbs come from plants • Recognise that seeds need water for growth <u>Investigating Science through Stories</u> • Identify the typical weather associated with each season • Describe animal features • Recognise similarities and differences between animals in the same animal group • Build an animal home with natural materials • Explain the difference between carnivores, herbivores and omnivores
Year 2	<u>Habitats</u> • Recall some life processes, giving examples of how they apply to plants and animals • Match different plants and animals to their habitats • Give examples of how animals use their habitat for food and shelter	<u>Uses of Everyday Materials</u> • Name objects with the same use that are made from different materials • Name materials that are used to make objects with different uses • Recognise that stretching, twisting, bending and squashing	<u>Plant Growth</u> • Recall that seeds have all the necessary parts inside for plants to grow • Recall that seeds need water and warmth to germinate • Recognise that light is required for healthy plant growth • Sequence the stages of plant's life cycle