



Ferndale Primary and Nursery School

Early Years Science

Working Scientifically

Planning:

- Plan and think ahead about how they will explore or play with objects
- Know more, so feel confident about coming up with their own ideas and then make more links between those ideas.
- Use talk to help work out problems and organise thinking and activities.

Observing/obtaining evidence:

- Learn new vocabulary.
- Listen attentively and respond to what they hear with relevant questions/comments
- Talk about what they see, using a wide vocabulary
- Explore how things work
- Use a range of tools competently, safely and confidently

Recording:

- Participate in discussions, offering their own ideas, using recently introduced vocabulary
- Make observations and draw pictures

Concluding:

- Explain how things work and why they might happen
- Use and understand recently introduced vocabulary during discussions
- Express their ideas and feelings about their experiences
- Offer explanations for why things might happen, making use of recently introduced vocabulary

Language Enrichment

Research centre- question/ experiment of the week promoting language
 Tuff tray- exploring materials and scientific concepts
 Getting children to act out new vocabulary words
 Using sentence stems

First Hand Experiences

Research centre- question/ experiment
 Tuff tray- exploring materials and scientific concepts
 Using scientific equipment

Purpose / Life Skills

Experimenting
 Exploring
 Discovering for themselves through exploration
 Tuff trays
 Continuous provision activities

Previous Knowledge

Is experimenting with his/her own symbols and marks as well as numerals. (Number)
 Can compare quantities using language such as; 'more than', 'fewer than'. (Number)
 Can make comparisons between objects relating to size, length, weight and capacity. (Numerical Patterns)
 Is beginning to describe a sequence of events



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Biology

Plants:

- Plant seeds and care for growing plants
- Understand the key features of the life cycle of a plant
- Explore the natural world around them- describe what they see, hear and feel while outside
- Explore the natural world around them- making observations and drawing pictures of animals and plants

Animals including Humans:

- Begin to understand the need to respect and care for the natural environment and all living things

Living Things and their Habitats:

- Understand the key features of the life cycle of an animal
- Recognise that some environments are different to the one in which they live
- Know some similarities and differences between the natural world around them and contrasting environments

Language Enrichment

Body part songs
Learning animal names with actions

First Hand Experiences

Mini- beat hunt and sort
Exploring our own bodies
Drawing around our bodies
Lookig for animal habitats
Visiting a farm

Purpose / Life Skills

Looking after your body
Brushing your teeth
Healthy eating
Looking after animals/ pets
What animals eat

Previous Knowledge

Explores collections of materials with similar and/or different properties. (The Natural World)
Plants seeds and cares for growing plants. (The Natural World)
Understands the key features of the life cycle of a plant and an animal. (The Natural World)



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		Growing sunflowers and potatoes	
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Chemistry

Everyday Materials:

- Use all their senses in hands-on exploration of natural materials
- Explore collections of materials with similar and/or different properties
- Talk about the differences between materials and the changes they notice

States of Matter:

- Understand some important processes and changes in the natural world around them, including changing states of matter

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Using language around similarities through different objects Curiosity cube Weather singalong	Freezing, making reactions Floating and sinking experiences Collecting different natural materials	Cooking Mixing Creating different materials through manipulating them	Talks about the differences between materials and changes he/she notices. (The Natural World) Explores collections of materials with similar and/or different properties. (The Natural World)



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Physics

Seasonal Changes:

- Understand some important processes and changes in the natural world around them, including the seasons
- Understand the effect of changing seasons on the natural world around them

Forces and Magnets:

- Explore and talk about the different forces they can feel

Language Enrichment	First Hand Experiences	Purpose / Life Skills	Previous Knowledge
Weather signalong Curiosity cube Research centre question Talk tasks Naming weathers and seasons	Exploradome Learning about Tim Peake Transporting water/ using different containers Experiencing weather changes Using magnetics and other resources	Applying knowledge to real world- choosing the correct equipment/clothes for weather Selecting the right container	Explores and talks about different forces he/she can feel. (The Natural World) Explores collections of materials with similar and/or different properties. (The Natural World)



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Songs

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