



Danson Primary School Progression of Knowledge and Skills

Science in the Early Years Foundation Stage

The statutory Framework for the Early Years Foundation Stage (September 2021) separates learning and development into seven areas (three prime areas and four specific areas). The most relevant statements for science are taken from: *Communication and Language* (prime area); *Personal, Social and Emotional Development* (prime area) and *Understanding the World* (specific area of learning) and the targets that relate to the science curriculum, as set out by Development Matters guidance, are as follows:

Communication and Language

1. Learn new vocabulary.
2. Ask questions to find out more and to check what has been said to them.
3. Articulate their ideas and thoughts in well-formed sentences.
4. Describe events in some detail.
5. Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.
6. Use new vocabulary in different contexts.
7. Make comments about what they have heard and ask questions to clarify their understanding (listening, attention and understanding ELG).

Personal, Social and Emotional Development

1. Be increasingly independent in meeting their own care needs, e.g. brushing teeth, using the toilet, washing and drying their hands thoroughly.
2. Make healthy choices about food, drink, activity and toothbrushing.
3. Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of ‘screen time’, having a good sleep routine and being a safe pedestrian.
4. Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices (ELG - Managing Self).

Understanding the World

1. Use all their senses in hands-on exploration of natural materials.
2. Explore collections of materials with similar and /or different properties.
3. Talk about what they see using a wide vocabulary.
4. Plant seeds and care for growing plants.
5. Understand the key features of the life cycle of a plant and an animal.
6. Begin to understand the need to respect and care for the natural environment and all living things.
7. Explore and talk about different forces they feel.
8. Talk about differences between materials and changes they notice.
9. Explore the natural world around them.
10. Describe what they see, hear and feel while they are outside.
11. Recognise some environments that are different to the one in which they live.
12. Understand the effect of changing seasons on the natural world around them.
13. Explore the natural world around them, making observations and drawing pictures of animals and plants (ELG - The natural World).
14. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class (ELG - The Natural World).
15. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter (ELG - The Natural World).

Science in the Early Years at Danson Primary School

At Danson Primary School we teach science related skills and knowledge through a mixture of child-initiated and adult-led learning in our rich indoor and outdoor environments. We provide our children with a wide variety of learning opportunities to develop their understanding and ask questions to further their knowledge, skills and understanding of vocabulary. Please see the table below for the breakdown of how the targets from *Personal, Social and Emotional Development* (prime area) and *Understanding the World* (specific area of learning) feed into different science strands.



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| EYFS | Biology | | | Chemistry | Physics | |
|------------|--|--|---|--|--|--|
| | Animals, including humans | Plants | Living things and their habitats | Materials | Forces | Seasonal Changes |
| | <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none">I can understand the key features of the life cycle of an animal.I begin to understand the need to respect and care for the natural environment and all living things.I am increasingly independent in meeting my own care needs, e.g. brushing teeth, using the toilet, washing and drying my hands thoroughly.I can make healthy choices about food, drink, activity and toothbrushing. <p>Reception</p> <ul style="list-style-type: none">I know and can talk about the different factors that support my overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of 'screen time', having a good sleep routine and being a safe pedestrian. <p>Early learning Goals</p> <ul style="list-style-type: none">I can explore the natural world around me, making observations and drawing pictures of animals and plants (ELG - The Natural World).I can manage my own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices (ELG - Managing Self). | <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none">I can plant seeds and care for growing plants.I understand the key features of a life cycle of a plant.I am beginning to understand the need to respect and care for the natural environment and all living things. <p>Early learning Goals</p> <ul style="list-style-type: none">I can explore the natural world around me, making observations and drawing pictures of animals and plants (ELG - The Natural World) | <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none">I can talk about what I see using a wide vocabulary.I understand the key features of the life cycle of an animal.I am beginning to understand the need to respect and care for the natural environment and all living things <p>Reception</p> <ul style="list-style-type: none">I can explore the natural world around me.I can describe what I can see, hear, and feel whilst outside. <p>Early learning Goals</p> <ul style="list-style-type: none">I know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class (ELG - The Natural World). | <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none">I can use all my senses in hands-on exploration of natural materials.I can explore collections of materials with similar or different properties.I can talk about the differences between materials and changes I notice. | <p>Three and Four-Year-Olds</p> <ul style="list-style-type: none">I can explore and talk about different forces I can feel. | <p>Reception</p> <ul style="list-style-type: none">I can understand the effect of changing seasons on the natural world around me. <p>Early learning Goals</p> <ul style="list-style-type: none">I can Understand some important processes and changes in the natural world around me, including the seasons and changing states of matter (ELG - The Natural World). |
| Vocabulary | alive, animal, exercise, food, life cycle, needs, smell, touch, hear, taste, see, senses, water | Change, flower, grow, leaf, plant, seed, sunlight, water, life cycle, needs | Garden, forest, sand, seaside, water, wood | Touch, shiny, soft, hard, rough | Push, up, down | Weather, seasons |
| | <p>Working Scientifically:</p> <ul style="list-style-type: none">I can ask questions to find out moreI can talk about what I see using a wide vocabularyI can look closely, using equipmentI can use my observations and ideas to suggest answers to questions | | | | | |