

## **DCC Progression Frameworks - Early, First and Second Levels**

### **Rationale**

Dundee City Council's Progression Frameworks, from early to third/fourth level provide a council-wide aid to practitioners in curriculum planning and assessment design.

They offer guidance on developing Broad General Education learning pathways within the primary curriculum, creating natural progression from nursery to secondary, and they support teachers to plan a learner journey/pathway.

The frameworks are designed to encourage pace and challenge across early, first and second levels, while accounting for breadth and depth within each curricular area, with a central focus on application of skills and knowledge in order to achieve the benchmarks.

### **Purpose**

The frameworks are a tool to provide guidance for learning progression across the BGE through early, first and second levels. They should be used in conjunction with school planning, tracking and assessment approaches.

The frameworks have been designed with two purposes in mind:

- to inform teacher judgements about an individual learner's progression through each curricular area.
- to assist in the moderation of each curricular area for effective planning of learning, teaching and assessment.

### **User Guidance**

**General Layout:** (see Appendix 1)

The frameworks assist practitioners in creating a learner journey starting at the experience and outcome and ending at the achievement of the accompanying benchmark for that outcome.

- The experiences and outcomes have been categorised into primary and secondary organisers according to practitioner input.
- In order to reflect an individual learner's journey through primary school, each experience and outcome is split to show the development of that skill from the beginning of the benchmark through to achievement of the benchmark.

**Reading the Document:** (see Appendix 2)

The frameworks include progression columns; two in the early level and three in first and second levels. These columns show standard progression for each stage of the primary school for the typical learner. It should be noted that not all learners in a class will be working in the same column.

The document is designed to be read:

- Horizontally: to chart a learner's journey through depth, challenge and application, whether that journey be linear or nonlinear, particularly in areas such as science, social subjects and expressive arts where not all experiences and outcomes will be taught each year.
- Vertically: To plan moderation of learning, teaching and assessment, taking account of the breadth of the curricular area, and to build on previous experiences. In addition, this supports the planning for coherent interdisciplinary learning experiences by ensuring that pupils have the necessary skills to access all areas of the curriculum. It also helps teachers to plan application of skills in new and unfamiliar settings.

**Meta Skills:** Meta-skills are innate, timeless, higher-order skills that create adaptive learners and promote success in whatever context the future brings. Each benchmark has a suggested linked meta-skill (**marked in blue text**) **however** these are only suggestions and others may be more appropriate for your planning. A link to the Meta Skills frameworks can be found [here](#).

## Primary Organiser:

This signposts the over-arching curricular topic.

## Secondary Organiser:

This signposts the curricular sub-topics to reflect how DCC teaching staff have unpacked the experiences and outcomes.

## Appendix 1: General Layout

## Benchmarks:

The benchmarks define the end of a pathway. It is not necessary to achieve all benchmarks to achieve a level but there should be no major gaps. Pupils can progress to the next level and any unmet benchmarks should be revisited.

| SECOND LEVEL                      |                                 | LITERACY AND ENGLISH   |  |  |  |
|-----------------------------------|---------------------------------|--|--|--|--|
| Experiences and outcomes          |                                 | Progression  |  |  | Benchmarks   |
| Organiser – Listening and Talking | Tools for listening and talking | 2.1  | 2.2  | 2.3  | <ul style="list-style-type: none"> <li>Contributes a number of relevant ideas, information and opinions when engaging with others.</li> <li>Shows respect for the views of others and offers own viewpoint.</li> <li>Builds on the contributions of others, for example, by asking or answering questions, clarifying points or supporting others' opinions or ideas.</li> <li>Applies verbal and non-verbal techniques in oral presentations and interactions, for example, vocabulary, eye contact, body language, emphasis, pace and/or tone.</li> <li>Recognises some techniques used to engage or influence the listener, for example, vocabulary, emphasis, tone and/or rhetorical questions.</li> </ul> |
|                                   |                                 | <p><b>When engaging with others I can/am able to:</b></p> <ul style="list-style-type: none"> <li>Begin to contribute my ideas &amp; opinions when I am listening.</li> <li>With support, show that I value the views of others by sharing my viewpoint respectfully.</li> <li>With support, begin to develop my thinking by asking questions which clarify or build on what others are saying. e.g. using <a href="#">Voice21 Talking Roles</a></li> <li>With support demonstrate my attention &amp; willingness to take part in discussion using eye contact &amp; body language.</li> <li>Use eye contact &amp; body language appropriately when talking to an audience.</li> <li>Speak at an appropriate volume &amp; pace to communicate things I have learned.</li> <li>With support, choose &amp; use different features of language to help me engage or influence my listeners or audience, when I speak or present for different purposes across my learning</li> </ul> | <p><b>When engaging with others I can/am able to:</b></p> <ul style="list-style-type: none"> <li>Contribute increasingly relevant ideas, information &amp; opinions to develop a group discussion.</li> <li>Show that I value the views of others by sharing my viewpoint respectfully.</li> <li>Develop my thinking by asking questions which clarify or build on what others are saying e.g. <a href="#">can re-tell what was said</a>.</li> <li>Demonstrate my attention &amp; willingness to take part in discussion using appropriate eye contact &amp; body language. e.g. using <a href="#">Voice21 Oracy Framework</a></li> <li>Talk about &amp; explore how eye contact &amp; body language helps a speaker to interest &amp; engage their audience.</li> <li>Speak at an appropriate volume &amp; pace, beginning to use tone &amp; emphasis to communicate things I have learned.</li> <li>Begin to independently choose &amp; use different features of language to help me engage or influence my listeners or audience, when I speak or present for different purposes across my learning</li> </ul> | <p><b>When engaging with others I can/am able to:</b></p> <ul style="list-style-type: none"> <li>Contribute relevant information, ideas &amp; opinions when engaging in different group discussion situations.</li> <li>Show that I value the contributions &amp; views of others by sharing &amp; justifying my viewpoint respectfully.</li> <li>Develop my thinking by asking questions which clarify or build on what others are saying e.g. <a href="#">can re-tell &amp; paraphrase</a></li> <li>Demonstrate my attention &amp; willingness to take part in discussion using my non-verbal skills &amp; by re-telling or paraphrasing what others have said.</li> <li>Recognise appropriate volume, pace, tone &amp; emphasis when listening to others &amp; use these tools when talking or presenting</li> <li>Begin to give appropriate &amp; constructive feedback to others about their non-verbal communication.</li> <li>Choose &amp; use different features of language to help me engage or influence my listeners or audience, when I speak or present for different purposes across my learning</li> </ul> |  |
|                                   |                                 | <p><i>When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking.</i><br/><b>LIT 2-02a</b></p>  |  |  |  |
|                                   |                                 | <p>I can recognise how the features of spoken language can help in communication and I can use what I learn.<br/>I can recognise different features of my own and others' spoken language.<br/><b>ENG 2-03a</b></p>  |  |  |  |

## Experiences and Outcomes:

Experiences and outcomes should be bundled to ensure coverage across the year.

## Progression Columns:

The central columns detail 'I can' statements that exemplify a learner's progress towards the level. These can be followed linear and non-linear, horizontally and vertically. Progression should be built on previous learning.

## Appendix 2: Reading the Document

Learners progress along a pathway for each learning area or skills set. This journey can be linear or non-linear, depending on the individual.

| Organiser - Forces, Electricity and Waves | Forces | EXPERIENCES AND OUTCOMES  | PROGRESSION  |  |   | BENCHMARKS   |
|---|--------|---|--|--|---|--|
|   |        |   | 1.1  | 1.2  | 1.3   |  |
|   |        |   |  |  |   |  |
|   |        | By investigating forces on toys and other objects, I can predict the effect on the shape or motion of objects.<br><b>SCN 1-07a</b>                | I can/am able to: <ul style="list-style-type: none"> <li>I can identify when I use pushing and pulling forces when playing with toys or other objects.</li> <li>I can sort toys and objects accordingly to pushes and pulls.</li> <li>I can describe how a force can make an object move faster or slower, change its direction, or change its shape.</li> </ul> | I can/am able to: <ul style="list-style-type: none"> <li>I can explain that pushing harder or pulling harder increases the force.</li> <li>I can explore how pushes and pulls can move objects.</li> <li>I can recognise that a push or pull changes the speed of an object.</li> <li>I can explain how twisting, turning, bending and stretching are forces which can cause change of shape e.g. elastic band.</li> <li>I can describe how the movement of an object is affected by the size of the force or the size of the object.</li> </ul> | I can/am able to: <ul style="list-style-type: none"> <li>I can predict how a force can change an object's shape e.g. play dough.</li> <li>I can explain that different sizes of forces produce different changes in speed and/or direction e.g. hitting a ball</li> <li>I can explain that different sizes of forces stop a moving object.</li> <li>I can explain that if forces are equal (balanced) there is no movement</li> <li>I can explain that the size of force required to move an object depends on the size, shape and mass of the object.</li> </ul> | Predicts and then investigates how a force can make an object change speed, direction or shape, and uses vocabulary such as pushing, pulling, stretching, squashing and twisting to describe forces.<br><br>Investigates balanced forces and explains that if a push and pull are equal in strength and opposite in direction then there is no change in movement. |
|   |        |   | <b>Key Words and Phrases</b><br>magnet, magnetic, non-magnetic, push, pull, force, attract, repel, pole, strength.   |  |   |  |
|   |        | By exploring the forces exerted by magnets on other magnets and magnetic materials, I can contribute to the design of a game.<br><b>SCN 1-08a</b> | I can/am able to: <ul style="list-style-type: none"> <li>I can observe magnets attracting magnetic materials.</li> <li>I can use a magnet to identify magnetic and non-magnetic materials.</li> <li>I can identify that this attraction indicates a force.</li> </ul>  | I can/am able to: <ul style="list-style-type: none"> <li>I can demonstrate that magnets have north and south poles.</li> <li>I can explain that not all metals are magnetic and can give examples.</li> </ul>  | I can/am able to: <ul style="list-style-type: none"> <li>I can describe how magnets exert a force that can attract or repel.</li> <li>I can explain that this force does not require contact between the magnet and the metal.</li> </ul>   | Reports in writing, visually, orally how magnets exert a non-contact force on each other and attract certain materials.<br><br>Demonstrates through practical activities that like   |

Key Vocabulary/Phrases

Some of the frameworks contain key vocabulary that should be taught with the experience and outcome.

### Early Level

Has two columns, E.1 which exemplifies a typical learner at the beginning of P1 and E.2 at the end of P1.

### First Level

Has three columns, 1.1 which exemplifies a typical learner in P2, 1.2 P3 and 1.3 P4.

### Second Level

Has three columns, 2.1 which exemplifies a typical learner in P5, 2.2 P6 and 2.3 P7.

| Early Level Skills  |  |
|---|--|
| Inquiry and Investigative Skills                          | <p>Plans and designs scientific investigations and enquiries</p> <ul style="list-style-type: none"> <li>• Explores and observes through play.</li> <li>• Asks questions arising from play activities.</li> <li>• Makes simple predictions of what might happen.</li> <li>• Makes suggestions about what to do to answer the selected question.</li> <li>•</li> </ul> <p>Carries out practical activities within a variety of learning environments</p> <ul style="list-style-type: none"> <li>• Discusses obvious risks and takes appropriate steps to protect themselves and others.</li> <li>• Uses their senses to acquire information.</li> <li>• Measures using simple equipment and non-standard units.</li> </ul> <p>Analyses, interprets and evaluates scientific findings</p> <ul style="list-style-type: none"> <li>• Presents and sorts data/information, for example, using displays, photographs, simple charts and drawings.</li> <li>• Provides oral descriptions of what was done and what happened.</li> <li>• Recognises similarities, patterns and differences in the findings and links these to the original question.</li> <li>• Discusses, with support, how the experiment might be improved.</li> <li>• Relates findings to everyday experiences.</li> <li>• Identifies and discusses new knowledge and understanding.</li> </ul> <p>Presents scientific findings</p> <ul style="list-style-type: none"> <li>• Communicates findings to others verbally and through drawings, photographs, displays and simple charts.</li> <li>• Responds to questions about their investigation.</li> </ul> |
| Scientific Analytical Thinking Skills                     | <p>Demonstrates natural curiosity and shows development of basic skills of analysis in simple and familiar contexts, for example, through asking questions, experimenting and making predictions.</p> <p>Demonstrates creative thinking by offering suggestions and solutions to everyday problems.</p> <p>Demonstrates reasoning skills by explaining choices and decisions.</p>  |
| Skills and Attributes of Scientifically Literate Citizens | <p>Talks about science, showing developing understanding of risks and benefits, and listens to the views of others.</p> <p>Demonstrates awareness of the importance of respecting living things and the environment and of managing the Earth's resources responsibly.</p> <p>Demonstrates a developing understanding of science in the world around them.</p> <p>Explores the ways in which people use science and science skills as part of their job.</p>   |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>P<br>l<br>a<br>n<br>e<br>t<br>E<br>a<br>r<br>t<br>h | B<br>i<br>o<br>d<br>i<br>v<br>e<br>r<br>s<br>i<br>t<br>y<br>a<br>n<br>d<br>I<br>n<br>t<br>e<br>r<br>d<br>e<br>p<br>e<br>n<br>d<br>e<br>n<br>c<br>e | EXPERIENCES AND<br>OUTCOMES   | PROGRESSION   |   | BENCHMARKS  |
|---|--|---|---|---|---|
|   |  |   | 0.1   | 0.2   |   |
|   |  |   |   |   |   |
|   |  | <p>I have observed living things in the environment over time and am becoming aware of how they depend on each other.<br/><b>SCN 0-01a</b></p>                    | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I have observed living things (animals and plants) in the environment and can talk about them.</li> <li>• I can identify the things around me as living or non-living.</li> <li>• I can show how animals change (offspring/baby to adult) over time.</li> <li>• I can show/tell what a tree looks like for each season.</li> </ul>  | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can observe/discuss some characteristics of living things e.g. growth, movement, feeding and simple life cycles.</li> <li>• I can describe how living things depend on each other for survival.</li> <li>• I can say why some animals live where they do- food, water, heat.</li> <li>• I can describe what happens to a tree in each season.</li> </ul>  | <p>Explores and sorts objects as living, non-living or once living.<br/><i>Self-Management – Focusing</i></p> <p>Describes characteristics of living things and how they depend on each other, for example, animals which depend on plants for food.<br/><i>Social Intelligence - Communicating</i></p> |
|   |  |   | <p><b>Key Words and Phrases</b><br/>living, no longer living, never been alive, breathing, drinking, moving, feeding, habitat, names of common animals, names of animal parts e.g. paws etc. names of animal babies, vet, receptionist, surgery, x-ray, names of human body parts, living things grow and change.</p>   |   |   |
|   |  | <p>I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them.<br/><b>SCN 0-03a</b></p> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I have helped to grow and care for plants.</li> <li>• I have observed the main parts of a plant.</li> <li>• I can talk about how plants grow e.g. plants get taller, grow more leaves, produce flowers etc.</li> <li>• I can talk about how to look after plants (water, sun, soil).</li> <li>• I can identify some living things as being plants (trees, flowers, vegetables, fruit).</li> </ul> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can explain that plants require water, warmth / sunlight to make food and soil in order to grow.</li> <li>• I can name the basic structures of plants (roots, leaves, stems, flowers/blossom/bud, trunk, petals).</li> <li>• I can describe how plants grow from seeds to plant (seed, seedling, plant).</li> <li>• I can identify and name some trees, flowers, vegetables and fruit.</li> </ul> | <p>Explores, observes and discusses basic needs of plants and what they need to grow including water, heat, sunlight and soil.<br/><i>Innovation – Sense Making</i></p> <p>Demonstrates understanding of how plants grow from seeds.</p>  |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

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|--|--|--|---|--------------------------------------|
|  |  |  | <b><u>Key Words and Phrases</u></b><br>Roots, stem, leaves, flower head, blossom, bud, petals, seed, soil, sunlight,. | <i>Social Intelligence - Leading</i> |
|--|--|--|---|--------------------------------------|

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>P<br>l<br>a<br>n<br>e<br>t<br>E<br>a<br>r<br>t<br>h | E<br>n<br>e<br>r<br>g<br>y<br>S<br>o<br>u<br>r<br>c<br>e<br>s<br>a<br>n<br>d<br>S<br>u<br>s<br>t<br>a<br>i<br>n<br>a<br>b<br>i<br>l<br>i<br>t<br>y | EXPERIENCES AND OUTCOMES  | PROGRESSION   |  | BENCHMARKS  |
|---|--|---|---|--|---|
|   |  |   | 0.1   | 0.2  |   |
|   |  |   | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can talk and show about the different ways of making things (toys/appliances) work (push, pull, twist, electricity).</li> <li>• I can identify that there needs to be an external stimulus to make a toy or appliance work.</li> <li>• I can explain what makes a manual toy go and describe it as a form of energy i.e. push, pull, twist and what happens.</li> <li>• I can explore what makes some toys and appliances work (wind, water. machinery etc.</li> </ul> <p><b>Error! Reference source not found.</b></p> <p><b><u>Key Words and Phrases</u></b><br/>batteries, appliances, toys, rechargeable, mains operated.</p> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can explain that some toys and some appliances produce light, heat, sounds and movement.</li> <li>• I can name sources of energy for common toys and appliances – e.g. electrical, battery.</li> <li>• I can predict what will make a toy/appliance work and test it.</li> </ul> |   |
|   |  | <p>I have experienced, used and described a wide range of toys and common appliances. I can say 'what makes it go' and say what they do when they work.</p> <p><b>SCN 0-04a</b></p> |   |  | <p>Ask questions and describes what can 'make things go', for example, batteries, wind-up toys and sunlight.</p> <p><i>Innovation – Curiosity</i></p> <p>Talks about toys and common appliances and what they do when they work, for example, produce heat, light, movement or sound.</p> <p><i>Social Intelligence - Communicating</i></p> |



## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>P<br>l<br>a<br>n<br>e<br>t<br>E<br>a<br>r | P<br>r<br>o<br>c<br>e<br>s<br>s<br>o<br>f<br>t<br>h<br>e<br>P<br>l<br>a<br>n | EXPERIENCES AND<br>OUTCOMES  | PROGRESSION   |   | BENCHMARKS   |
|---|--|--|---|---|--|
|   |  |  | 0.1   | 0.2   |  |
|   |  |  |   |   |  |
|   |  | <p>By investigating how water can change from one form to another, I can relate my findings to everyday experiences.</p> <p><b>SCN 0-05a</b></p> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can identify the different states of water – ice, water and steam.</li> <li>• I can identify a number of ways that I use water.</li> <li>• I can describe how water is used by humans, animals and plants</li> </ul> <p><b>Error! Reference source not found.</b></p> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can describe how water changes state using terms such as freezing, melting, boiling and evaporating, using common examples such as water freezing, snow melting and puddles evaporating.</li> <li>• I can explain that water is the same substance but exists in three forms.</li> <li>• I can investigate and explain how heating and freezing changes the state of water.</li> <li>• I can relate my findings to every day experience.</li> </ul> | <p>Investigates the different properties of water and shares their findings with others.</p> <p><i>Innovation - Creativity</i></p> <p>Talks about water in nature and how it influences their everyday lives.</p> <p><i>Social Intelligence - Communicating</i></p> <p>Identifies three main states of water (ice, water and steam) and uses scientific vocabulary such as 'melting', 'freezing' and</p> |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

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| t<br>h | e<br>t |  | <b><u>Key Words and Phrases</u></b><br>Water, ice, snow, snowflakes, icebergs, ice lollies, names of animals living in a cold climate, equipment, liquid, solid, melting, freezing, pour. | 'boiling' to describe changes of state.<br><i>Innovation – Critical Thinking</i> |
|--------|--------|--|---|--|

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>P<br>l<br>a<br>n<br>e<br>t<br>E<br>a<br>r | S<br>p<br>a<br>c<br>e | EXPERIENCES AND OUTCOMES  | PROGRESSION   |   | BENCHMARKS  |
|---|-----------------------|---|---|---|---|
|   |                       |   | 0.1   | 0.2   |   |
|   |                       | I have experienced the wonder of looking at the vastness of the sky, and can recognise the sun, moon and stars and link them to daily patterns of life.<br><b>SCN 0-06a</b> | I can/am able to: <ul style="list-style-type: none"> <li>• I can look at the sky and point out the Sun, Moon and the stars.</li> <li>• I can link the presence of the sun with day and the moon with night.</li> <li>• I can talk about daily time sequences e.g. morning, snack time etc.</li> </ul> | I can/am able to: <ul style="list-style-type: none"> <li>• I can name the Sun, Moon and stars.</li> <li>• I can describe the presence and absence of the Sun gives us day and night.</li> <li>• I know that the moon does not give us light.</li> <li>• I can sequence daily routines.</li> </ul> | Describes how the rotation of the Earth in relation to the sun gives us day and night.<br><i>Innovation – Sense Making</i><br><br>Talks about how the pattern of night and day changes over the course of a year.<br><i>Social Intelligence - Communicating</i> |



**Key Words and Phrases**

sun, sphere of burning gases, heat and light, harmful rays, dangerous, sunscreen protection, sunglasses, the Sun is our nearest star, rotates, orbits, the Moon reflects light from the Sun, distant stars, daytime and night-time animals, nocturnal.



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| t<br>h |  |  |  |  |
|--------|--|--|--|--|

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>F<br>o<br>r<br>c<br>e | F<br>o<br>r<br>c<br>e<br>s | EXPERIENCES AND<br>OUTCOMES  | PROGRESSION   |   | BENCHMARKS  |
|---|----------------------------|--|---|---|---|
|   |                            |  | <br>0.1   | <br>0.2  |   |
|   |                            |  |   |   |   |
|   |                            | Through everyday experiences and play with a variety of toys and other objects, I can recognise simple types of forces and describe their effects.<br><b>SCN 0-07a</b> | I can/am able to:<br><ul style="list-style-type: none"> <li>• I can identify that many toys and objects need to be pushed or pulled to make them move.</li> </ul> | I can/am able to:<br><ul style="list-style-type: none"> <li>• I can describe a force as a push or a pull and give examples.</li> <li>• I can describe how a force can make an object move faster or slower.</li> <li>• I can explain how the movement of an object is affected by the size of the force or the size of the object.</li> </ul> | Explores and sorts toys and objects into groups according to whether they need to be pushed or pulled.<br><i>Self-Management - Focusing</i><br><br>Measures, using simple equipment, how the movement of an object is affected by the size of the |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

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|---|--|--|--|---|
| S<br>,<br>E<br>l<br>e<br>c<br>t<br>r<br>i<br>c<br>i<br>t<br>y<br>a<br>n<br>d<br>W<br>a<br>v<br>e<br>s |  |  | <p><b><u>Key Words and Phrases</u></b><br/>           What makes them go? pull, push, stretch, twist, turn, squash, battery, wind-up, energy, forces, direction.</p> | <p>force or the weight of the object.<br/> <i>Innovation -Curiosity</i></p> <p>Demonstrates, through play, how a force can make an object stay still, start to move, speed up, slow down and change shape.<br/> <i>Innovation – Critical Thinking</i></p> |
|---|--|--|--|---|

|                                 |                                 |                             |  |     |            |
|---------------------------------|---------------------------------|-----------------------------|--|-----|------------|
| O<br>r<br>g<br>a<br>n<br>i<br>s | E<br>l<br>e<br>c<br>t<br>r<br>i | EXPERIENCES AND<br>OUTCOMES | <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;"> </div> <div>PROGRESSION</div> <div style="text-align: center;"> </div> </div> |     | BENCHMARKS |
|                                 |                                 |                             | 0.1  | 0.2 |            |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

|   |                  |   |   |  |   |
|---|------------------|---|---|--|---|
| e<br>r<br>-<br>F<br>o<br>r<br>c<br>e<br>s<br>,<br>E<br>l<br>e<br>c<br>t<br>r<br>i<br>c<br>i<br>t<br>y<br>a<br>n<br>d<br>W<br>a<br>v<br>e<br>s | c<br>i<br>t<br>y | <p>I know how to stay safe when using electricity. I have helped to make a display to show the importance of electricity in our daily lives.<br/><b>SCN 0-09a</b></p> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can describe electricity as a form of energy that makes something work.</li> <li>• I can identify a number of appliances that work by electricity.</li> <li>• I can describe some common dangers associated with electricity and how to avoid these.</li> </ul> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can explain why electricity is important in our daily lives.</li> <li>• I can describe how electrical appliances use electrical energy and transform it into other forms of energy – e.g. light, heat, sound.</li> <li>• I can contribute to a display showing why electricity is important in our daily lives.</li> </ul> | <p>Groups objects into those which get electricity either from mains electrical sockets or alternative sources, such as batteries and solar cells.<br/><i>Self-Management - Focusing</i></p> <p>Talks about the importance of electricity in their daily lives.<br/><i>Social Intelligence - Communicating</i></p> <p>Identifies the risks that can be caused by electricity and recognises how to stay safe.<br/><i>Self-Management - Adapting</i></p> |
|   |                  |   | <p><b><u>Key Words and Phrases</u></b><br/>electricity, electrical appliance, plug, flex, socket, switch, mains, names of common electrical appliances, safety, danger, keep out, care, battery, bulb, light, heat, sound.</p>  |  |   |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL



|  |  |   |   |   |  |
|--|--|---|---|---|--|
| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>F<br>o<br>r<br>c<br>e<br>s<br>,<br>E<br>l<br>e<br>c<br>t<br>r<br>i<br>c<br>i<br>t<br>y | V<br>i<br>b<br>r<br>a<br>t<br>i<br>o<br>n<br>s<br>a<br>n<br>d<br>W<br>a<br>v<br>e<br>s | EXPERIENCES AND<br>OUTCOMES   | PROGRESSION   |   | BENCHMARKS   |
|  |  |   | 0.1   | 0.2   |  |
|  |  | Through play, I have explored a variety of ways of making sounds.<br><b>SCN 0-11a</b> | I can/am able to:<br>● I can identify different sounds from different sources.<br>● I can demonstrate, through using a variety of materials/instruments etc. a number of different ways of making sounds – e.g. hitting, blowing, plucking, shaking, etc.<br>● I can describe how humans hear sounds with their ears. | I can/am able to:<br>● I can demonstrate that there are many different ways to describe sounds e.g. high, low, loud, quiet I can identify the source of a sound.<br>● I can share my likes and dislikes of specific sounds.<br>● I can demonstrate how volume can be changed. | Predicts, then investigates, ways to make sounds louder and quieter.<br><i>Self-Management - Initiative</i><br><br>Identifies different sources of sound.<br><i>Self-Management - Focusing</i> |
|  |  |   | <b><u>Key Words and Phrases</u></b><br>Vibrate, source, volume, loud, quiet, instrument.  |   |  |



## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

|                                      |  |  |  |  |
|--------------------------------------|--|--|--|--|
| a<br>n<br>d<br>W<br>a<br>v<br>e<br>s |  |  |  |  |
|--------------------------------------|--|--|--|--|

| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>–<br>B<br>i<br>o<br>l<br>o<br>g<br>i<br>c<br>a<br>l<br>S<br>y<br>s<br>t<br>e<br>m | B<br>o<br>d<br>y<br>S<br>y<br>s<br>t<br>e<br>m<br>s<br>a<br>n<br>d<br>C<br>e<br>l<br>l<br>s | EXPERIENCES AND<br>OUTCOMES | PROGRESSION   |   | BENCHMARKS  |
|--|---|-----------------------------|---|---|---|
|  |   |                             | 0.1   | 0.2   |   |
|  |   |                             | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>I can identify the 5 senses which allow me to explore the world around me, sight, hearing, taste, smell and touch.</li> </ul> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>I can identify the 5 senses and explain which part of the body I used to detect each one.</li> <li>I can identify which senses I am using to explore my world, e.g. on a senses journey.</li> </ul> |   |
|  |   |                             | <p><b>Key Words and Phrases</b><br/>sight, hearing, touch, taste, smell.</p>  |   | <p>Identifies specific parts of the body related to each of the senses.<br/><i>Self-Management – Focusing</i></p> <p>Uses their senses to describe the world around them, giving examples of things they see, hear, smell, taste and feel.<br/><i>Social Intelligence - Communicating</i></p> |

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

|   |   |   |  |   |  |
|---|---|---|--|---|--|
| m<br>s  |   |   |  |   |  |
| O<br>r<br>g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>M<br>a<br>t<br>e<br>r<br>i<br>a<br>l<br>s | P<br>r<br>o<br>p<br>e<br>r<br>t<br>i<br>e<br>s<br>a<br>n<br>d<br>U<br>s<br>e<br>s<br>o<br>f<br>S<br>u<br>b<br>s<br>t<br>a<br>n<br>c<br>e<br>s | EXPERIENCES AND<br>OUTCOMES   |     |   | BENCHMARKS   |
|   |   |   | 0.1  | 0.2   |  |
|   |   | Through creative play, I explore different materials and can share my reasoning for selecting materials for different purposes.<br><b>SCN 0-15a</b> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can explore and talk about the properties of a variety of materials and sort them according to strength, hardness, resistance to water.</li> <li>• I can discuss the materials that common objects are made from using appropriate vocabulary.</li> <li>• I can explore and talk about the fact properties of materials can change in some circumstances e.g. gloop, cooking.</li> </ul> | <p>I can/am able to:</p> <ul style="list-style-type: none"> <li>• I can select a suitable material for a particular purpose and to give reasons for the choice e.g. waterproof.</li> <li>• I can sort different materials/objects into groups by properties.</li> <li>• I can name what some common objects are made from.</li> </ul> | <p>Explores and sorts materials into different groups depending on their properties, for example, whether they are strong, smooth, rough and if they float or sink.<br/><i>Innovation – Sense Making</i></p> <p>Justifies the selection of appropriate materials for different uses based on their physical properties.<br/><i>Innovation- Critical Thinking</i></p> |
|   |   |   | <p><b>Key Words and Phrases</b><br/>materials, hard, soft, weak, strong.</p>   |   |  |

|        |  |                             |  |             |            |
|--------|--|-----------------------------|--|-------------|------------|
| O<br>r |  | EXPERIENCES AND<br>OUTCOMES |   | PROGRESSION | BENCHMARKS |
|--------|--|-----------------------------|--|-------------|------------|

## DUNDEE SCIENCE PROGRESSION FRAMEWORK – EARLY LEVEL

| g<br>a<br>n<br>i<br>s<br>e<br>r<br>-<br>T<br>o<br>p<br>i<br>c<br>a<br>l<br>S<br>c<br>i<br>e<br>n<br>c<br>e |  |  | 0.1   | 0.2   |   |
|--|--|--|---|---|---|
|  |  | I can talk about science stories to develop my understanding of science and the world around me.<br><b>SCN 0-20a</b> | I can/am able to:<br><ul style="list-style-type: none"> <li>• I can talk about topical science stories and ideas from a wide variety of sources.</li> </ul> | I can/am able to:<br><ul style="list-style-type: none"> <li>• I can talk about topical science stories and ideas from a wide variety of sources.</li> </ul> | Talks about the science they encounter in their everyday experiences.<br><i>Social Intelligence - Communicating</i><br><br>Explores, through role-play, how science and science skills are used in a variety of jobs.<br><i>Social Intelligence - Collaborating</i> |