



Semi-Formal Curriculum

1.0 Launching into Science [Benchmark 1 - CG5]

1.1 - Knows things are used in different ways. E.g.. A ball is for rolling, a toy car is for pushing [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.2 - Can collect and interact with natural objects [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.3 - Identifies action words/characters by pointing [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.4 - Recaps familiar phrases (with symbols, pictures or verbally) [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.5 - Can name single properties of a objects using criteria such as texture, smell visual or sound [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.6 - Explores with simple forces- float/ sink [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.7 - Explores with simple forces- push/pull [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.8 - Explores with simple forces- gravity/ air forces [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.9 - Explores with simple forces- magnetism [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.10 - Starts to carry out simple tests on materials through exploration – deconstruction [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.11 - Starts to carry out simple tests on materials through exploration - heating / cooling [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.12 - Starts to carry out simple tests on materials through exploration - combining in/ separating [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.13 - Starts to carry out simple tests on materials through exploration – mixing [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.14 - Recognise the object depicted in a photographs and colourful pictures [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

1.15 - Understands who and what in simple questions. [attention, understanding, language and communication]



NCEA Castle School – Science Assessment Criteria

Not Met	Shallow	Emerging	Developing	Deepening	Functional
1.16 - Blanks Level 1 - Naming. Matching objects - find one like this. What can you hear? What did you touch? Who is this? (Pointing to object?) Who is this? (pointing to person), What is _____ doing?, Say this "_____" (Imitation), What did you see? (Remembering items in books? [attention, understanding, language and communication])					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
Vocabulary: hear, smell, feel, see, who what, float, sink, push, pull, mix, hot, cold					



Semi-Formal Curriculum

2.0 Launching into Science [Benchmark 2 – CG6]

2.1 - Has awareness of environment around themselves [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.2 - Can transition between areas [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.3 - Can match identical photos and pictures [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.4 - Starts to carry out simple tests on objects and can comment on differences - Loud / quiet [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.5 - Starts to carry out simple tests on objects and can comment on differences - Fast / slow [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.6 - Starts to carry out simple tests on objects and can comment on differences -Big/ small [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.7 - Starts to carry out simple tests on objects and can comment on differences - heavy /light [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.8 - Choose to use a physical process for a specific result - push/ pull [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.9 - Choose to use a physical process for a specific result - wet/ dry [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.10 - Choose to use a physical process for a specific result - heat/ cool [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.11 - Explore and comment on plants and animals using a range of senses [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.12 - Understands where in simple questions. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

2.13 - Blanks Level 1 - Naming. Matching objects - find one like this. What can you hear? What did you touch? Who is this? (Pointing to object?) Who is this? (pointing to person), What is ____ doing?, Say this " ____ " (Imitation), What did you see? (Remembering items in books? [attention, understanding, language and communication])

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: match, loud, quiet, fast, slow, big, small, heavy light, heat, cool, push, pull, plants, animals

Semi-Formal Curriculum

3.0 Launching into Science [Benchmark 3 – CG7]

3.1 - Can move around familiar environment and find areas in school, home and local community [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.2 - Can identify sounds in the environment [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.3 - Lift meaning from a stationary picture and work out the activity e.g. "What is he doing?", "What is happening?" [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.4 - Shows awareness of a range of consistent changes to materials under the effect of physical processes- melting / freezing [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.5 - Shows awareness of a range of consistent changes to materials under the effect of physical processes- Heating/ cooling [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.6 - Select a familiar object by function if the simplest verb is used e.g. give me the one you eat with? [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

3.7 - Blanks Level 1 - Naming. Matching objects - find one like this. What can you hear? What did you touch? Who is this? (Pointing to object?) Who is this? (pointing to person), What is ____ doing?, Say this " ____ " (Imitation), What did you see? (Remembering items in books? [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: environment, home, school, travel, find, local community, where, what, melting, cooling, freezing, heating, hot, cold



Semi-Formal Curriculum

4.0 Launching into Science [Benchmark 4 – CG7]

4.1 - Notice and comment on one difference between plants / animals using pictures [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.2 - Notice and comment on one difference between plants / animals in real life [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.3 - Can name different rooms in their environment e.g.. School, home [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.4 - Shows care and concern for living things and environmental care- plants [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.5 - Use simple scientific equipment practically - magnifying glass [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.6 - Use simple scientific equipment practically – magnets [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.7 - Use simple scientific equipment practically – electricity [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.8 - Use simple scientific equipment practically - recording device e.g.. Stopwatch [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.9 - Repeats an action in order to test result [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.10 - Responds to instructions involving 2 part sequence in a range of familiar contexts. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

4.11 - Blanks Level 2 - Describing. What happened? Who/what/where is ____? (remembering information?. Describe characteristics of objects: what size/shape/colour is it? How does it taste/smell/feel?. Identifying object functions: show me the one we use for _____. How are these different? Tell me something that is a type of _____ (Naming object from category) [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: same, different, water, soil, roots, grow, sunlight, magnifying glass, bigger, smaller, magnetic, sticks, attract, repel, stopwatch, start, stop, electrical, electricity, wires, bulb, battery, repeat, test



Semi-Formal Curriculum

5.0 Launching into Science [Benchmark 5 – CG8]

5.1 - Comments on aspects of their familiar world such as the place where they live [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.2 - Comments on aspects of the natural world [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.3 - Shows care and concern for living things and environmental care- animals [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.4 - Shows care and concern for living things and environmental care- environmental [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.5 - Investigate with simple electrical components - wires/ lightbulbs [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.6 - Investigate with simple electrical components - fan/motor [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.7 - Investigate with simple electrical components - battery/ buzzer [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.8 - Makes comments on the results of their actions [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.9 - Shows an understanding of prepositions of under, on top, behind in play and structured situations.
[attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

5.10 - Blanks Level 2 - Describing. What happened? Who/what/where is ____? (remembering information?). Describe characteristics of objects: what size/shape/colour is it? How does it taste/smell/feel?. Identifying object functions: show me the one we use for _____. How are these different? Tell me something that is a type of _____ (Naming object from category) [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: where, natural, weather, seasons, light, dark, cold, hot, gentle touch, noise, recycling, litter, wires, lightbulbs, fan, motor, battery, buzzer, cause, effect



Semi-Formal Curriculum

6.0 Launching into Science [Benchmark 6 - CG8]

6.1 - Sort plants, animals and objects by criteria- habitat [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.2 - Sort plants, animals and objects by criteria—size [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.3 - Sort plants, animals and objects by criteria- type [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.4 - Compare and contrasts results- more/less than [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.5 - Compare and contrasts results- faster/ slower [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.6 - Compare and contrasts results-wet/dry [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.7 - Can sort objects into groups based on scientific attributes - float/ sink [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.8 - Can sort objects into groups based on scientific attributes - magnetic / non magnetic [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.9 - Focusing attention - still listen or do but can shift own attention. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

6.10 - Blanks Level 2 - Describing. What happened? Who/what/where is ____? (remembering information?). Describe characteristics of objects: what size/shape/colour is it? How does it taste/smell/feel?. Identifying object functions: show me the one we use for _____. How are these different? Tell me something that is a type of _____ (Naming object from category) [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: sort, plants, animals, objects, criteria, small, medium, large, more than, less than, compare, faster, slower, wet, dry, float, sink, magnetic, nonmagnetic,



Semi-Formal Curriculum

7.0 Launching into Science [Benchmark 7 – 9]

7.1 - Ask questions about aspects of their familiar world such as the place where they live or the natural world - in school [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.2 - Ask questions about aspects of their familiar world such as the place where they live or the natural world - in the community [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.3 - Ask questions about aspects of their familiar world such as the place where they live or the natural world - at home [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.4 - Comments on light and shadow in an investigation - proximity/ comparison [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.5 - Comments on light and shadow in an investigation - investigate with objects [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.6 - Comments on light and shadow in an investigation - transparent/ opaque [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.7 - Responds to suggestions to how to find things out [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.8 - Builds a simple circuit with lightbulb, buzzer, fan/ motor [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.9 - Makes a simple predication when repeating an experiment [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.10 - Listen to ideas expressed by other familiar people. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

7.11 - Blanks Level 3 - Re-telling. What will happen next? What is a ____? (definition). Find one to use with this. Find the things that are not _____. What could he say? (Assuming the role of another person) How are these the same? (Identifying similarities) [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: light, shadow, light, dark, transparent, opaque, how, investigate, prediction

Semi-Formal Curriculum

8.0 Launching into Science [Benchmark 8 - CG9]

8.1 - Developing an understanding of growth, decay and changes over time in animals [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.2 - Developing an understanding of growth, decay and changes over time in plants [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.3 - Developing an understanding of growth, decay and changes over time in humans and objects [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.4 - Collects objects and tools for specific purposes- cooking/ cutting / heating/cooling/ melting / freezing / pushing / pulling [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.5 - Comments on light and shadow in an investigation - proximity/ comparison [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.6 - Listen and respond to ideas and discussions with familiar/unfamiliar people. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

8.7 - Blanks Level 3 - Re-telling. What will happen next? What is a ____? (definition). Find one to use with this. Find the things that are not _____. What could he say? (Assuming the role of another person) How are these the same? (Identifying similarities) [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: growth, decay, cooking, cutting, heating , cooling, melting, freezing, pushing, pulling

Semi-Formal Curriculum

9.0 Launching into Science [Benchmark 9 - CG 9/10]

9.1 - Communicates why things happen and how things work [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.2 - Identify objects made by a range of different materials - plastic/ metal/ wood [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.3 - Uses simple scientific terminology during construction [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.4 - Uses simple scientific terminology during cooking [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.5 - Uses simple scientific terminology during exploring transport / vehicle toys [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.6 - Collects and records data- measuring equipment [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.7 - Listen and respond to ideas in discussions in structured situations and play situations with familiar and unfamiliar people. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

9.8 - Blanks Level 4: Justifying. What will happen if ____? (predicting). Why did ____? (justifying cause of event) What could ____ do/use? (solution), Why could ____ do that/use that? (Explaining means to goal). Why can't we ____? (Explaining obstacle to solution). Why is ____ made of ____? (Explaining construction of objects). [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: change, old, young, wilted, plastic, metal, wood, materials, construction, rough, smooth, transport, vehicle, collect, data, record



Semi-Formal Curriculum

10.0 Launching into Science [Benchmark 10 – CG10 / NC1]

10.1 - Communicate similarities difference and patterns [the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.2 - Moves around a course using directional language [[the world]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.3 - Can identify variables that could be changed [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.4 - Makes a prediction in a new experiment [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.5 - Decide what results to collect [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.6 - Collects and records data- recording table- tally chart [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.7 - Collects and records data- recording table [scientific enquiry]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.8 - Listen and respond to ideas in discussions in structured situations and play situations with familiar and unfamiliar people. [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

10.9 - Blanks Level 4: Justifying. What will happen if ____? (predicting). Why did ____? (justifying cause of event) What could ____ do/use? (solution), Why could ____ do that/use that? (Explaining means to goal). Why can't we ____? (Explaining obstacle to solution). Why is ____ made of ____? (Explaining construction of objects). [attention, understanding, language and communication]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
---------	---------	----------	------------	-----------	------------

Vocabulary: similar, different, forwards, backwards, left, right, stationary, changed, variables, chart, graph, table