Primary Science Revised Learning Outcomes

Broad Learning Outcomes for Continuous Assessment (Year 3 to Year 6)

These two Broad Learning Outcomes fall under Learning Outcome 1 – 'What do Scientists do?' and are assessed formatively through continuous assessment.

LO Ref.	Type of Change	Previous Wording	New Wording	Comments
1.1 (Year 3–6)	**Reworded**	I can ask questions about the world around me.	I can ask questions that can be investigated scientifically.	Shifted focus from asking generic questions to questions that can be investigated scientifically.
1.4 (Year 4–6)	**Reworded**	I can carry out a simple practical investigation, which involves up to two variables being investigated separately, with the teacher's support.	I can carry out a simple practical investigation with the teacher's support, ensuring it is a fair test.	Simplified wording and shifted from testing two variables to ensuring a fair test.

Summary of Changes — Year 5 and Year 6 (Level 6)

This document summarises the changes made to the Year 5 and Year 6 Primary Science learning outcomes.

The column 'type of change' in the table below is colour-coded by the type of change - removed (red), reworded (blue) and vocabulary change (yellow).

Year 5 — Revised Learning Outcomes

LO Ref.	Type of Change	Previous Wording	New Wording	Comments
5.1.8	**Removed**	I can identify simple cause and effect relationships.	—	Outcome removed from the Year 5 framework.
5.1.9	**Removed**	I can explain how a scientist uses a model to explain ideas.	—	Outcome removed from the Year 5 framework.
5.2	**Vocabulary change**	movement, respiration, sensitivity, growth, reproduction, excretion, nutrition, vertebrate, mammal, bird, reptile, fish, amphibian, life cycle	movement, respiration, sensitivity, growth, reproduction, excretion, nutrition, vertebrate, invertebrate, mammal, bird, reptile, fish, amphibian, life cycle	Added 'invertebrate' in key vocabulary.
5.2.6	**Reworded**	I can describe the lifecycles of birds, insects and frogs.	I can describe the lifecycle of birds, butterflies and frogs.	'Insects' replaced with the more specific 'butterflies' lifecycle.

LO Ref.	Type of Change	Previous Wording	New Wording	Comments
5.3.1	**Reworded**	I can understand that microbes or micro-organisms are living things that can be seen with a microscope, most of which are useful or beneficial, although some can cause illnesses and disease.	5.3.1A I can understand that microbes (micro-organisms) are living things that can only be seen using a microscope. 5.3.2B I can identify that microbes include viruses, bacteria and some fungi, including yeast and mould.	Split into two related learning outcomes. Added specific microbe types (viruses, bacteria, fungi, yeast, mould) that students are expected to know about.
5.3.2	**Reworded**	I can provide different examples of how microbes can be useful.	I can provide different examples of how microbes can be useful or harmful.	Included harmful not just useful microbes.
5.3	**Vocabulary change**	microbes, bacteria, viruses, useful/beneficial, fermentation, probiotics, illness/disease, germs, hygiene, spread	microbes, bacteria, viruses, useful/beneficial, fermentation, probiotics, illness/disease, germs, hygiene, spread, fungi, mould, yeast	Added 'fungi, yeast, mould' in key vocabulary.
5.4.6	**Reworded**	I can explain when and how eyes need to be protected.	I can explain when and how our eyes need to be protected.	Minor wording change.
5.5.3	**Reworded**	I can find out about scientists who were responsible for various electrical discoveries e.g. Benjamin Franklin (lightning) and Thomas Edison (light bulb).	I can find out about scientists who were responsible for various electrical discoveries including Benjamin Franklin (lightning) and Thomas Edison (light bulb).	Students are required to know simple facts about the scientists included in the learning outcomes.
5.6.2	**Reworded**	I can investigate everyday uses of magnetism.	5.6.2A I can investigate everyday uses of magnetism. 5.6.2B I can apply scientific knowledge to explain everyday uses of magnetism.	Separated the investigative part from the application component.
5.6.3	**Reworded**	I can make a solution by dissolving a substance in water.	I can explain that a solution is a type of mixture.	Emphasis on the explanation part. Students should be able to explain that a solution is a type of mixture and give examples.
5.6.4	**Reworded**	I can investigate how some substances form suspensions, while others dissolve in water.	I can investigate how some substances dissolve in water to form a solution.	Removed 'suspension' from the learning outcome and key vocabulary.
5.6.5	**Reworded**	I can perform simple investigations to separate some mixtures using the following separation techniques namely, filtration, evaporation, separation using a magnet.	I can plan and conduct simple investigations to separate mixtures using the following separation techniques namely, filtration, evaporation, separation using a magnet.	Replaced 'perform' with 'plan and conduct' to focus more on the investigative aspect.

LO Ref.	Type of Change	Previous Wording	New Wording	Comments
5.6.6	**Reworded**	I can find out about scientists who were responsible for discoveries related to mixing and dissolving substances and separation of mixtures e.g. Melitta Bentz (coffee filters).	I can find out about scientists who were responsible for discoveries related to mixing and dissolving substances and separation of mixtures including Melitta Bentz (coffee filters).	Students are required to know simple facts about the scientists included in the learning outcomes.
5.6	**Vocabulary change**	magnetic, non-magnetic, solution, soluble, insoluble, solvent, suspension, mixture, dissolve, separation, filtration, evaporation	magnetic, non-magnetic, solution, soluble, insoluble, mixture, dissolve, separation, filtration, evaporation	Removed 'solvent' and 'suspension' from key vocabulary.
5.7.1	**Reworded**	I can identify and describe different means of seed dispersal including wind, animal, explosion and water dispersal.	I can identify and compare different means of seed dispersal including wind, animal, explosion and water dispersal.	Replaced 'describe' with 'compare'.
5.7	**Vocabulary change**	<u>Endangered Species</u> overdevelopment, deforestation, trespassing, pollution	<u>Soil and Seeds</u> Removed 'liquids' from key vocabulary. overdevelopment, deforestation, trespassing, pollution, endangered, species, extinct	Removed 'liquids' Added 'endangered, species, extinct' in key vocabulary.
5.8	**Vocabulary change**	skeleton, bones, muscles, joints, x-ray, support, movement	skeleton, bones, muscles, joints, x-ray, support, movement, skull, ribcage, backbone, kneecap	Added 'skull, ribcage, backbone, kneecap' in key vocabulary.

Year 6 — Revised Learning Outcomes

LO Code	Type of Change	Previous Wording	New Wording	Notes / Practical Impact
6.1.8	**Removed**	I can identify simple cause and effect relationships.	—	Outcome removed from the Year 6 framework.
6.1.9	**Removed**	I can explain how a scientist uses a model to explain ideas.	—	Outcome removed from the Year 6 framework.
6.2.2	**Vocabulary change**	habitat, adaptation, cacti/succulents, ferns, leaves	habitat, adaptation, cacti/succulents, leaves	Removed the word 'ferns' from key vocabulary.
6.4.1	**Vocabulary change**	ear canal, ear drum, vibration	ear canal, ear drum, vibration, outer ear, middle ear, inner ear, nerve, brain	Added 'outer ear, middle ear, inner ear, nerve, brain' in key vocabulary.
6.4.5	**Reworded**	I can investigate how different images are produced by flat or curved surfaces.	I can investigate and compare images produced by flat and curved surfaces.	Added skill to compare alongside investigation.
6.5 Electricity	**Vocabulary change**	circuit, switch, battery, wires, bulb	circuit, switch, battery, wires, bulb, motor, buzzer	Added 'motor' and 'buzzer' in key vocabulary.
6.8.2	**Reworded**	I can show that air resistance exerts an opposing force to a moving object.	I can understand that air resistance exerts an opposing force to a moving object.	Change in the verb from 'show' to 'understand' which reflects a higher order change.
6.8.5	**Reworded**	I can research about scientists who have worked on gravitational theories e.g. Galileo Galilei, Isaac Newton.	I can research about scientists who have worked on gravitational theories including Galileo Galilei, Isaac Newton.	Students are required to know simple facts about the scientists included in the learning outcomes.
6.9.1	**Removed**	I can describe the basic phases of the moon including new moon, first quarter, full moon, last quarter.	—	Outcome removed from the Year 6 framework.
6.9.4	**Reworded**	I can find out about scientists who made discoveries related to outer space e.g. Hans Lippershey (optical telescope), Caroline Herschel (discovered first comet) etc.	I can find out about scientists who made discoveries related to outer space including Hans Lippershey (optical telescope) and Caroline Herschel (discovered first comet).	Students are required to know simple facts about the scientists included in the learning outcomes.