Te Tāhuhu o te Mātauranga
Ministry of Education

Te Poutāhū
Curriculum Centre

Science Learning Area Years 0–10

28 October 2025

Priority 1: Establishing a knowledge-rich curriculum grounded in the science of learning

We're pleased to release the draft curriculum content for the New Zealand Curriculum Years 0–10 Science.

Consultation is now open on the draft curriculum content for the New Zealand Curriculum Years 0–10 Science Learning Area. The content is now available here.

This information sheet outlines what you will notice across the learning area, as well as providing the high-level engagement timeline.

Key things to note:

- The draft Science Learning Area provides a clear year-by-year teaching sequence for Physical and Biological Sciences so that all students get a great science education through to Year 10. It engages students in the excitement and opportunities of science, including hands-on experiences from an early age, fostering foundational scientific knowledge and curiosity. This will prepare them for further study in science-rich subjects, opening up pathways to a range of careers.
- Science learning builds progressively from concrete observation to abstract reasoning, supporting students to explore, investigate, and explain the physical and biological world. The scientific practices underpinning the scientific method are emphasised and progressively developed, with increasing complexity across the years.
- Science kits for Years 0–8 are being developed to help with delivery of the updated curriculum. They will be provided at no cost to schools and will be available through a centralised booking system. Rollout will begin in early 2026, with full nationwide coverage expected by late 2026 to early 2027.
- The 'Nature of Science' is now embedded within scientific practices and directly linked to scientific knowledge, rather than being a standalone component.
- Science is acknowledged and celebrated as a human endeavour through the inclusion of some prominent scientists who have made influential scientific discoveries and advances relevant to the content in the teaching sequences. This includes Māori and other New

Zealand scientists, emphasising the inspiring human stories, values, and impacts of science enriches the teaching and learning of the knowledge and practices.

What you will notice across all learning areas

UKD Change — in earlier versions of English and Mathematics and Statistics the Understand, Know and Do components had been woven together within the Progress Outcomes. In the updated versions and across all learning areas these concepts of understanding, knowledge and practice are strengthened, while the terms Understand, Know and Do are no longer explicitly referred to in the curriculum.

Purpose Statement — describes why the learning area is important and how it contributes to a student's education. It captures the enduring big ideas that students develop understanding of over the years and sets out the context for teaching and learning programmes.

Learning Area Structure — defines the knowledge strands used as the major organisational components within the learning area. It lays out how the related knowledge and practices are grouped into distinct areas of disciplinary focus.

Introduction — presents the increasingly sophisticated journey of the learning area as the knowledge and practices unfold across Years 0–10. It describes the evolving role of teachers and the different emphasis of teaching and learning programmes across the different year levels.

Year-by-year teaching sequence — organised through the knowledge strands, sets out the knowledge and practices to be taught each year. Together, the knowledge and practice statements support students to build deep understanding and fluency in each learning area.

Through engaging with the disciplinary knowledge and practices of the learning areas, students develop capabilities essential for lifelong learning.

What you will notice in Science

Science has two knowledge strands as detailed below.

Physical Science includes six elements:

Materials (Years 1–10)

- Student will explore properties of materials (e.g. texture, flexibility, elasticity) and how they respond to forces like bending or stretching.
- States of matter (solid, liquid, gas), changes of state, and concepts like density and thermal conductivity are introduced in this element.
- Students will learn about mixtures, solutions, and separation techniques, including solubility and concentration.

Chemical Reactions (Years 9–10)

- Chemical reactions are introduced as processes that create new substances with observable changes (e.g. colour, temperature, gas).

- Students will explore reactions involving acids, bases, metals, and carbonates, including pH and neutralisation, along with combustion, displacement reactions, and factors affecting reaction rates (e.g. temperature, catalysts).

Matter Interactions and Energy (Years 3–10)

- Heat transfer (conduction, convection, radiation) and energy transfer (including energy efficiency) is introduced in this element.
- Electricity concepts are introduced such as static charge, current, voltage, resistance, and circuit types (series/parallel).
- Students will explore wave behaviour (sound and light), including frequency, amplitude, reflection, refraction, and the electromagnetic spectrum.

Motion and Forces (Years 2–9)

- This element begins with basic pushes and pulls, friction, and movement types and progresses to Newton's Laws of Motion.
- Contact and non-contact forces (e.g. gravity, magnetism) are explored, along with pressure, including fluid dynamics (buoyancy, drag) and simple machines.
- Processes such as motion analysis, graphing, and the use of force diagrams are covered in this element.

Earth Systems (Years 4–10)

- This element introduces the water cycle, states of matter in the atmosphere, and basic weather phenomena.
- Students will learn about rocks, minerals, fossils, and soil composition, linking to geological processes.
- The concept of Earth's spheres (atmosphere, lithosphere, biosphere, hydrosphere) and the effects of carbon cycling (including human activity) are explored.

Earth In Space (Years 3–10)

- This element begins with Earth–Sun relationships (day/night, seasons), lunar phases, and Matariki as a cultural and astronomical marker.
- It then expands to the Solar System, celestial bodies, and planetary motion.
- The universe's structure, Big Bang theory, and astronomical measurements (light years, AU) are introduced.

Biological Science includes three elements:

Organism Diversity (Years 1–10)

- This element covers the classification of organisms (plants, animals, fungi, bacteria), life cycles, and reproductive strategies.
- Cell structure, genetic inheritance, and evolution through natural selection are introduced.
- Students will explore the inheritance of traits, DNA, and variation, linking genes to observable characteristics and environmental influences.

Body Systems (Years 1–10)

- This element begins with basic body parts and senses and progresses to skeletal, muscular, digestive, respiratory, and circulatory systems.
- Students will learn about cellular processes like respiration, photosynthesis, and diffusion.
- Teaching will cover regulation and response (homeostasis, hormones, nervous system), including reproductive anatomy and puberty.

Ecosystems (Years 1–10)

- This element introduces habitats, food chains, and organism interactions (e.g. predator/prey, mutualism).
- Concepts such as ecosystem dynamics, nutrient cycles, and human impacts on biodiversity and climate are covered.
- Students will investigate local ecosystems using indicators (ngā tohu o te taiao) and sustainable practices.

Science is acknowledged and celebrated as a human endeavour through the inclusion of some prominent scientists who have made influential scientific discoveries and advances relevant to the content in the teaching sequences.

The scientific practices underpinning the scientific method are emphasised and progressively developed, with increasing complexity across the years.

Engagement and Timeline

The Years 0–10 NZC draft curriculum is now available, and we welcome your feedback on this content during our consultation through to Friday, 24 April 2026. By drawing on the expertise of teachers, principals, education professionals, academics and associations, we aim to strengthen student progress and achievement. Your insights are central to this and will help shape curriculum content that is clear, structured, evidence-based, and grounded in the science of learning.

Following consultation the draft content will be finalised, with formal release of the updated curriculum content planned for mid-2026. Years 0–10 Science will become required teaching from the start of 2027.

Online feedback forms are available on Tāhūrangi here.

Schools and kura will also be invited to participate in the in-class testing of the Years 0–10 NZC learning areas and wāhanga ako during Term 1, 2026. More information on how to take part will be shared later in Term 4, 2025.

The Refreshed National Curriculum

2025	2026	2027	2028	2029	2030
English and Te Reo Rangatira 0–6 and Mathematics and Statistics and Pāngarau 0–8 required to be used	English and Te Reo Rangatira 0–10 and Mathematics and Statistics and Pāngarau 0–10 required to be used All learning areas, wāhanga ako and curriculum frameworks available. Encouraged use of all Year 9 content	Full curriculum required to be used for Years 9–10 For Years 0–8 use requirements are extended to include Science and Pūtaiao, Social Sciences and Te Ao Māori, Health & Physical Education and Waiora	All Years 0–11 learning areas, wāhanga ako and curriculum frameworks required to be used	All Years 0–12 learning areas, wāhanga ako and curriculum frameworks required to be used	All Years 0–13 learning areas, wāhanga ako and curriculum frameworks required to be used
English 0–6	English 0–10	English 0–10	English 0–11	English 0–12	English 0–13
Te Reo Rangatira 0–6	Te Reo Rangatira 0–10	Te Reo Rangatira 0–10	Te Reo Rangatira 0–11	Te Reo Rangatira 0–12	Te Reo Rangatira 0–13
Mathematics and Statistics 0–8	Mathematics and Statistics 0–10	Mathematics and Statistics 0–10	Mathematics and Statistics 0–11	Mathematics and Statistics 0–12	Mathematics and Statistics 0–13
Pāngarau 0–8	Pāngarau 0–10	Pāngarau 0–10	Pāngarau 0–11	Pāngarau 0–12	Pāngarau 0–13
		Science 0–10	Science 0–11	Science 0–12	Science 0–13
		Pūtaiao 0–10	Pūtaiao 0–11	Pūtaiao 0–12	Pūtaiao 0–13
		Social Sciences 0–10	Social Sciences 0–11	Social Sciences 0–12	Social Sciences 0–13
		Te Ao Māori 0–10	Te Ao Māori 0–11	Te Ao Māori 0–12	Te Ao Māori 0–13
		Health & Physical Education 0–10	Health & Physical Education 0–11	Health & Physical Education 0–12	Health & Physical Education 0–13
		Waiora 0–10	Waiora 0–11	Waiora 0–12	Waiora 0–13
		The Arts 9–10	The Arts 0–11	The Arts 0–12	The Arts 0–13
		Toi Ihiihi 9–10	Toi Ihiihi 0–11	Toi Ihiihi 0–12	Toi Ihiihi 0–13
		Technology 9–10	Technology 0–11	Technology 0–12	Technology 0–13
		Hangarau 9–10	Hangarau 0–11	Hangarau 0–12	Hangarau 0–13
		Learning Languages 9–10	Learning Languages 0–11	Learning Languages 0–12	Learning Languages 0–13
		Ngā Reo 9–10	Ngā Reo 0–11	Ngā Reo 0–12	Ngā Reo 0–13
		Te Reo Pākehā 9–10	Te Reo Pākehā 0–11	Te Reo Pākehā 0–12	Te Reo Pākehā 0–13