

Curriculum Coverage and Evidence — Year 4 Science (SCSA)

Whole-unit curriculum-evidence and coverage document. Maps every mandated SCSA Year 4 Science content description (the four Science Understanding strands and the six Science Inquiry sub-strands) to the specific lessons and assessments that introduce, develop and assess it, and shows how the unit provides evidence against the Year 4 achievement standard. For teacher planning, reporting and audit.

This document maps the whole unit to the Western Australian Curriculum (SCSA) Year 4 Science content. It shows where each mandated content description is **introduced**, **developed** and **assessed**, and how the unit provides evidence against the Year 4 achievement standard. It is a planning, reporting and audit tool.

Unit structure at a glance

The unit is built as four Science Understanding strands, each taught over four lessons and assessed by one summative task, with a Science Inquiry thread woven through every strand and carried by a shared fair-test scaffold.

Strand (component)	Lessons	Summative (weighting)
Biological — Food chains	L1–L4	Build an Ecosystem (A1-BIO, 25%)
Chemical — Materials & properties	L5–L8	Egg-Drop Design Challenge (A2-CHEM, 25%)
Earth & space — Weathering & erosion	L9–L12	Waste Rock Stockpile Investigation (A3-EARTH, 25%)
Physical — Forces	L13–L16	Balanced & Unbalanced Forces (A4-PHYS, 25%)

Science Understanding — content description coverage

Content description (SCSA Year 4)	Introduced	Developed	Assessed
Biological: "Producers, consumers and decomposers have roles within an ecosystem and interact in ways that can be represented by food chains."	L1 (ecosystems), L2 (producers/consumers)	L3 (food webs, decomposers)	L4 / A1-BIO
Chemical: "Processed materials ... are made from raw materials ... and have a range of physical properties that influence their use."	L5 (physical properties)	L6 (raw→processed), L7 (absorbency)	L8 / A2-CHEM
Earth & space: "Weathering, erosion, transportation and deposition cause slow or rapid change to Earth's surface."	L9 (weathering types)	L10 (freeze–thaw), L11 (erosion/transport/deposition)	L12 / A3-EARTH
Physical: "Forces are exerted by one object on another"	L13 (pushes/pulls, contact vs distance)	L14 (friction), L15 (magnetism, gravity)	L16 / A4-PHYS

Content description (SCSA Year 4)	Introduced	Developed	Assessed
through direct contact, such as friction, or from a distance, such as magnetism and gravity."			

Science Inquiry — sub-strand coverage

The six inquiry sub-strands are developed cumulatively, anchored by the reusable *Fair Test Investigation Template* and the Working Scientifically component (C5).

Inquiry sub-strand (SCSA Year 4)	Where it is taught and assessed
Questioning and predicting — pose questions and make predictions including variables to be measured and changed	L7, L10, L14 (writing questions/predictions); assessed in A3-EARTH and evidenced across the fair-test worksheets
Planning and conducting — plan and conduct investigations including elements of fair tests, and consider risks	L7 (absorbency), L10 (freeze-thaw), L14 (friction); assessed in A3-EARTH (plan + risk) and A2-CHEM (risk)
Planning and conducting — make and record observations, including formal measurements using scaled instruments	L7 (mL), L10 (observation), L14 (distance); assessed in A3-EARTH
Processing, modelling and analysing — organise and represent data using tables, column graphs and models	L7 and L14 (column graphs), L16 (force-arrow models); assessed in A3-EARTH and A4-PHYS
Evaluating — compare findings to predictions, consider fairness, identify further questions	Evaluation sections in L7, L10, L14 (via the shared template); assessed in A3-EARTH
Communicating — communicate ideas using scientific vocabulary	Every lesson (glossary-linked vocabulary); explicitly assessed in all four summatives' communication criterion
Collaborating and applying — use science knowledge to propose explanations and solutions	L4, L8, L12 (design/apply); assessed in A1-BIO, A2-CHEM and A3-EARTH

Evidence against the Year 4 achievement standard

Achievement-standard element (paraphrased)	Evidence in this unit
Represent relationships between consumers, producers and decomposers using food chains	A1-BIO (food-chain diagram + explanation)
Investigate materials and their properties and relate these to their use	A2-CHEM (material choices justified by property)
Appreciate that Earth's surface changes over time due to a variety of processes	L9–L12; A3-EARTH (weathering/erosion applied to a real problem)
Observe and investigate forces that operate at a distance and by direct contact	L13–L16; A4-PHYS (classify and represent forces)
Pose questions, plan fair tests considering risks, make measurements, represent data, and propose explanations/solutions	The inquiry thread (L7, L10, L14) and A3-EARTH; data representation in A3-EARTH and A4-PHYS
Communicate ideas using scientific vocabulary	Glossary of 48 key terms linked to lesson vocabulary; communication criterion in all four summatives

Coverage summary. All four Year 4 Science Understanding content descriptions and all six Science Inquiry sub-strands are explicitly introduced, developed and assessed. The four summatives together (4 × 25%) provide balanced evidence across the strands, and the shared fair-test scaffold ensures the inquiry skills are practised repeatedly before they are assessed.