# NCEA Level 1 Achievement Standards in Science, Chemistry & Biology, Physics and Earth & Space Science, and Agricultural & Horticultural Science

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| **Science** | **Science 1.1** AS 91920Internal 5 cr  Develop a science-informed response to a local socio-scientific issue  <https://ncea.education.govt.nz/science/science/1/1?view=standard> | **Science 1.2** AS 91921 Internal 5 cr  Use a range of scientific investigative approaches in a taiao context  <https://ncea.education.govt.nz/science/science/1/2?view=standard> | **Science 1.3** AS 91922 External 5 cr  Describe features of science in the development of a scientific idea in an Aotearoa New Zealand or Pacific context  <https://ncea.education.govt.nz/science/science/1/3?view=standard> | **Science 1.4** AS 91923 External 5 cr  Demonstrate understanding of science claims in communicated information using māramatanga  <https://ncea.education.govt.nz/science/science/1/4?view=standard> |
| **Chemistry and Biology** | **Chem & Bio 1.1** AS 90920 Internal 5 cr  Demonstrate understanding of a microorganism in the taiao  <https://ncea.education.govt.nz/science/chemistry-and-biology/1/1?view=standard> | **Chem & Bio 1.2** AS 90921 Internal 6 cr  Demonstrate understanding of a chemical reaction in the taiao  <https://ncea.education.govt.nz/science/chemistry-and-biology/1/2?view=standard> | **Chem & Bio 1.3** AS 90922 External 5 cr  Demonstrate understanding of genetic variation in relation to whakapapa  <https://ncea.education.govt.nz/science/chemistry-and-biology/1/3?view=standard> | **Chem & Bio 1.4** AS 90923 External 4 cr  Demonstrate understanding of the physical properties of materials in the taiao  <https://ncea.education.govt.nz/science/chemistry-and-biology/1/4?view=standard> |
| **Physics and**  **Earth & Space Science** | **Physics & ESS 1.1** AS 92044 Internal 5 cr  Demonstrate understanding of human-induced changes within the Earth system  <https://ncea.education.govt.nz/science/physics-earth-and-space-science/1/1?view=standard> | **Physics & ESS 1.2** AS 92045 Internal 5 cr  Demonstrate understanding of a physics phenomenon in the taiao through modelling  <https://ncea.education.govt.nz/science/physics-earth-and-space-science/1/2?view=standard> | **Physics & ESS 1.3** AS 92046 External 5 cr  Demonstrate understanding of the effects on planet Earth of interactions between the Sun and the Earth-Moon system  <https://ncea.education.govt.nz/science/physics-earth-and-space-science/1/3?view=standard> | **Physics & ESS 1.4** AS 92047 External 5 cr  Demonstrate understanding of physics concepts in the taiao  <https://ncea.education.govt.nz/science/physics-earth-and-space-science/1/4?view=standard> |
| **Agricultural and Horticultural Science** | **Ag & Hort 1.1** AS 91928 Internal 6 cr  Demonstrate understanding of life processes and how they are managed in a primary production system  <https://ncea.education.govt.nz/science/agricultural-and-horticultural-science/1/1?view=standard> | **Ag & Hort 1.2** AS 91929 Internal 6 cr  Demonstrate understanding of management practices that modify the growing environment in a primary production system  <https://ncea.education.govt.nz/science/agricultural-and-horticultural-science/1/2?view=standard> | **Ag & Hort 1.3** AS 91930 External 4 cr  Demonstrate understanding of the pūtake and location of agricultural and horticultural production  <https://ncea.education.govt.nz/science/agricultural-and-horticultural-science/1/3?view=standard> | **Ag-& Hort 1.3** AS 91931 External 4 cr  Demonstrate understanding of kaitiakitanga and sustainability considerations in agriculture and horticulture  <https://ncea.education.govt.nz/science/agricultural-and-horticultural-science/1/4?view=standard> |

Theresa Cowan, Sacred Heart College, Napier