## Chemistry and Biology Phase 2 Survey – Raw Feedback

**Do you think the draft materials for this subject are ready for testing with students in pilot schools/kura?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The materials are ready for piloting** | **0** | **0.00%** |
| **The materials need small amendments before piloting** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.5725797746&came_from_title=Responses+by+Question&filters%2Fquestions%2F42093afe7b%2Fsubpage.2021-07-29.0054050783%2Fquestion.2021-07-30.5725797746%2Fquestion-2021-07-30-5725797746-radiosubquestion%3Alist=question-2021-07-30-5725797746-radiosubquestion%2FThe+materials+need+small+amendments+before+piloting) | **1.05%** |
| **The materials need significant amendments before piloting** | [**15**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.5725797746&came_from_title=Responses+by+Question&filters%2Fquestions%2F6702dff91e%2Fsubpage.2021-07-29.0054050783%2Fquestion.2021-07-30.5725797746%2Fquestion-2021-07-30-5725797746-radiosubquestion%3Alist=question-2021-07-30-5725797746-radiosubquestion%2FThe+materials+need+significant+amendments+before+piloting) | **1.58%** |
| **The materials are unsuitable for piloting** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.5725797746&came_from_title=Responses+by+Question&filters%2Fquestions%2F45798a2b1d%2Fsubpage.2021-07-29.0054050783%2Fquestion.2021-07-30.5725797746%2Fquestion-2021-07-30-5725797746-radiosubquestion%3Alist=question-2021-07-30-5725797746-radiosubquestion%2FThe+materials+are+unsuitable+for+piloting) | **1.16%** |
| **Not Answered** | [**915**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.5725797746&came_from_title=Responses+by+Question&filters%2Fquestions%2F9961c2b102%2Fsubpage.2021-07-29.0054050783%2Fquestion.2021-07-30.5725797746%2Fquestion-2021-07-30-5725797746-radiosubquestion%3Alist=question-2021-07-30-5725797746-radiosubquestion%2F__not_answered__) | **96.21%** |

**Do you have any further feedback on the draft materials? If there was one thing you think would help make these materials easier to test in the pilot, what would it be?**

| **Response ID** | **Answer** |
| --- | --- |
| [**ANON-767U-411M-V**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-411M-V) | The standards make reference to concepts that do not sit well in science standards - in particular the use of mauri - this concept should be deleted. |
| [**ANON-767U-412S-3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-412S-3) | Taiao and mauri need to have a very clear, scientific definition. We need to ensure it is Science we are teaching, not Social Studies, because that is already a subject. Why does Chemistry need to all be about natural chemistry because synthetic chemistry is a huge industry. Why do the students need to learn about pasifika migration when they do this in Social Studies? |
| [**ANON-767U-415H-U**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-415H-U) | I think that having only 2 chemistry and 2 biology standards to choose from is limiting. I quite like the actual standards but I would really like to do a mix and match with the general science and the physics standards in order to give students a general coverage so they choose specific science topics for Year 12. |
| [**ANON-767U-415N-1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-415N-1) | More detail assessment of 1.3. More support for teachers how to implement learning and looking into the future what direction next levels will take. Overall more detail about "success criteria" so students know how to achieve.  Resources for teachers. Integrating with local iwi and community and support with this. Support with Mātauranga Māori. Support for bio teachers how to teach chem, and vise versa. How the AS in bio/chem relate to the other sciencey subjects and how they can link together. |
| [**ANON-767U-415Y-C**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-415Y-C) | Haven't seen enough evidence of draft materials particularly the external assessments and what they might look like. What is meant by 'given stimulus' for example. What are the conditions? What is happening at Level 2 and 3? |
| [**ANON-767U-4169-D**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4169-D) | To do a comprehensive Science Course at Level 1, Physics and Earth Science should be included. One inclusive AS on Microbes and Genetics, one AS on Physics, one AS on Chemistry, one on investigation in a discipline of choice. |
| [**ANON-767U-416R-6**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-416R-6) | Students like to know where the subject leads to . Teachers like to know where the subject leads to. When planning a subject area's kaupapa, one tends to start at the top and work themselves down. So if L3 is the end result, dept schemes work down. This is impossible to do with the current pilot programme as the overall wairua of the kaupapa cant be formatted and share with the akonga. In its current iteration, its purely content driven. As a pilot this may be acceptable but as Tumuaki o Putaiao, I would like to prepare the akonga and whanau by sharing how their goals and aspirations are catered for via Putaiao. This would help when having korero with our marginalised whanau about how kura can help them in their journey |
| [**ANON-767U-41DM-F**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41DM-F) | The concepts seen here are often far too simplistic for this level. As an example, a key idea appears to be the simple linking of quantities and location of chemicals to positive or negative effects. Primary school students are capable of this.  The heavy emphasis on "understanding one's place", while a good thing for students, is not science - it is social, cultural and personal history. It is valuable, but not science. It is social science.  Inappropriate use of the term "knowledges" implies relativism and that we should be teaching science as a belief system rather than the empirically-testable set of theories and hypotheses that it really is.  The conservation of mass appears in the course outlines and the standards (this is a good thing) but is not a Big Idea, instead being presented a sub-idea. In my view, this is the foundational concept from which the other reactivity ideas stem. It also has a lot more meaning than the current Big Ideas which are so vague and broad that they not only fail to imply which chemistry or biology should be learned, but are broad enough that non-scientific ideas or ideas from primary-school science could conceivably be used to illustrate the big ideas.  I remain concerned at the lack of any emphasis on atomic structure at this level. Is this assumed? It shouldn't be, and should be assessed as an extremely foundational concept in chemistry, required to explain reactivity, concentration and properties as explored throughout the remaining material.  Finally, I wish to comment on the SEG's use of the term 'mauri'. I think it shows a misunderstanding of the idea as it relates to science, and this is a risk to the quality of the materials as a whole. The definitions provided through links in the Course Outlines and in the Glossary variously define mauri as "a force that interpenetrates all things and binds them together… the bonding element creating unity in diversity", or as "the vital essence, life force of everything: be it a physical object, living thing or ecosystem." These definitions are accurate, but they really do hit home the fact that mauri is simply not a scientific concept. A fundamental axiom of science is the rejection of this kind of essentialism of 'life force' as a useful concept to explain the empirical world. It is axiomatic because it used to be a widespread view among scientists, but the experimental evidence conclusively proved that it does not, empirically, exist. Mauri, of course, has a different cultural origin than Aristotelian essentialism or European alchemy. Like these, it does not hold up to the scrutiny of evidence, but unlike these, it was never intended to. Of course, mauri is a very useful concept for us to make decisions about upholding the rights of individuals, or when allocating resources to biodiversity, conservation and environmental management. Students in Aotearoa should know about it. However, mauri is not and has never attempted to be a scientific concept. Nor should it: it derives its value from its cultural utility rather than its explanatory power as a scientific concept. Thus it properly belongs in subject areas other than science and its disciplines. |
| [**ANON-767U-41GJ-F**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41GJ-F) | I have a major issue with Big Idea 4 - in particular the concept that all particles have mauri. The issue with this is that it seems to be a way to use a Maori world view to explain a concept that did not exist as part of matauranga - namely the particle nature of matter. Using mauri as a way to explain attractive forces seems to be a step backwards and introducing a level of pseudoscience to this concept. Furthermore, as a Maori chemist, I find this to be almost an offensive level of cultural appropriation. |
| [**ANON-767U-41T3-5**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41T3-5) | First of all, I am impressed with the level of thought that has gone into creating the different course outlines to suit different students interests and needs. So thank you for all the hard work this entailed. However, there seems to be a lot of assumptions about the knowledge students have before starting these standards. For example, although the big idea refers to atoms, nowhere is the structure of the atom included in either of the chemistry standards (although there are references in the course outlines). Similarly, the material in the course outline documents refers to many compounds and seems to assume knowledge and understanding of ions, but understanding of ions is not included in the standard. Some time back the moderators suddenly changed the assessment criteria based on what was in the standard title and anything explanatory notes were ignored. With basics things like atoms and ions not even in the explanatory notes, I can see a wide range in the teaching of the fundamental concepts at various schools, making it harder for students to transition between schools. The material for the CB1.2 standard seems like a year 10 citizen science type project with no deeper understanding of how to write formula. This will result in very different levels of understanding depending on what school the students have come from when they enter year 12. There could be very large gaps in understanding which would take up valuable level 2 time. The CB 1.4 standard does the opposite and is a watered down level 2 standard, but this fits in much better with the curriculum level 6. I do like the way it will focus students learning on linking the type of elements in the compound to the type of bonding and hence the probably properties. However, I'm not sure how one can teach the conductive nature of metals without discussing delocalised electrons. Students should be able to identify what charges are moving in the different types of solids so that they can understand why some materials conduct and others don't. They are already doing this in the current 90946 standard so I'm not sure what this limitation was included. Finally, I would love some clarity on the type of assessment for the CH1.4 standard with a stimulus released 2 weeks prior. If this is a normal end of year exam, that could be very stressful if CB1.4 exam is sat close to the end of the exam period so students are focussing on other exams as well as frantically trying to complete all their portfolios. It just seems like an extra stress to me. |
| [**ANON-767U-41U4-7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41U4-7) | We need more time. Delay the process by a year so that we have time to properly get ready. |
| [**ANON-767U-41U6-9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41U6-9) | I strongly object to the proposed materials. Specifically, as an atheist I take issue with the presentation of matauranga Maori alongside bodies of knowledge such as chemistry and biology, where a significant portion of the former is drawn from a system beliefs which are very often unsupported by any empirical data, and have more in common with spirituality and religion than with the contemporary understanding of science.  Matauranga Maori is indeed a body of knowledge, and clearly has great value to Maori, however it does not have the same requirements as contemporary science and should not be presented alongside them. For something to be accepted and become published as current understanding a scientist or scientific group has to collect data which, along with the method by which that data was obtained and the analysis thereof, will be peer reviewed by experts in that field before it being published. And even after it being published, those finding will be subjected to criticism and attempts to replicate the results before eventually a consensus will be formed.  From https://www.epa.govt.nz/assets/Uploads/Documents/Te-Hautu/Matauranga-Maori-Report\_Companion-Guide.pdf:  "Mātauranga...is essentially a system of knowledge and understanding about Māori beliefs relating to creation, the phases of creation and the relationship between atua (supernatural guardians), and tangata (mankind). This relationship or whakapapa (genealogy) determines the way people behave in the context of their environmental ethnical practices”  And: "Mātauranga has a strong oral tradition – it is transmitted in a variety of forms, including whakapapa, waiata, haka, whakataukī, pūrākau, kōrero tuku iho, and whakairo."  So a body of knowledge, passed down orally relating beliefs about creation, atua (gods) and mankind. How can any of this be validated or disputed? How can there be any discussion about it without claims of racial insensitivity? There is no way - we just have to accept it as true or not, in other words we would need to accept it on faith which is the definition of religion.  I would refer you to: https://www.hrc.co.nz/files/9414/2387/8011/HRC-Religion-in-NZ-Schools-for-web.pdf "The Education Act 1964 (Section 79) requires student participation in religious instruction or observance to be voluntary. This is achieved by allowing pupils to opt out, that is to not be present at the place and time when observance or instruction is taking place."  How do you propose to teach a syllabus where there are large sections that would fall under the category of religious instruction and which I for one would most definitely want my children to be opted out from? |
| [**ANON-767U-41ZR-A**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-41ZR-A) | A lot more resourcing needs to support the course outlines. Workbooks for each standard would be ideal and we can supplement these with out own activities. It will be very hard, especially in smaller schools, for faculties to create all the resources required to teach these standards. |
| [**ANON-767U-4E1Q-M**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4E1Q-M) | Terms used must be properly defined. The term "Mauri" is defined in the subject glossary as "Life force". Defined this way, Mauri is not a scientific concept. The term "life force" is itself meaningless when using the scientific definitions of "life" and "force". Under this definition Mauri appears to be a supernatural concept (and it may be understood as such in Te Ao Maori) and by definition supernatural concepts cannot be considered part of science - this is not only true of "western" science, but all science. There are similar problems with the concept of "whakapapa". The glossary definition given says that whakapapa "maps interrelationships between all things." but it is not clear if this refers to relationships in the physical world (such as sharing a common ancestor) or relationships in meaning (i.e. spriritual relationships). These terms are also not part of the published scientific literate - any terms used in a science standards should be recognised Science terms. We may desire science to incorporate more concepts from Te Ao Maori, and I think this would be a very positive development, but we cannot pretend that it has if it has not. |
| [**ANON-767U-4E5W-X**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4E5W-X) | While it is understandable that exemplars for externals will not be available until phase 3 it makes it very tricky, if not impossible, to give detailed feedback on any given external. If only piloting schools get access to these exemplars then even confusion will continue to fester. The sooner the better, for all subjects, for external exemplars.  Similarly, for each internal, hopefully phase 3 will include actual samples of what a student’s work may look like. This will help in many ways.  For any external, it is a deep worry that any set of explanatory notes lacks specificity and detail. Compare any phase 2 external with any current NCEA external and it will become obvious that the NCEA-review documents need much more clarity, depth and detail. One purpose of the explanatory notes is to ringfence what is and is not assessed, but the other primary purpose is to specify what exactly is inside that boundary. Broad statements or phrases that can be interpreted in many different ways will lead to failure of the external assessment system as well as the failure by the students of NZ.  4 standards attempting to assess che/bio content but no experimental processes nor conclusions based on gathered data. It is interesting, and potentially worrying, that there is no assessed experiment. The “science 1.1” standard does not do this job of a complete assessed experiment, but instead is a comparison of methodologies in various science disciplines. No conclusion, nor over explanation of the scientific concepts linked to that investigation or analysis of data is included in S1.1. Thus only a biology or chemistry assessed experiment could include those critical aspects.  Overt use of the term mauri could cause unintended consequences and inadvertent difficulty While the phase 2 titles of each standard are much improved from the phase 1 version, there now is an issue of the use of the term mauri, specifically in the title of 1.1’s internal and even the requirement to gain excellence in many standards. Mauri is a very broad concept that is interpretable in many ways. By contrast, the term taiao does seem to easily fit for the concept of (all encompassing) environmental conditions but the potential religious and/or philosophical interpretations of mauri are a concern. |
| [**ANON-767U-4EAN-1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EAN-1) | I am concerned by this in the Big Idea: Properties of matter are determined by attractive forces between particles - recognise that mauri is present in all matter which exists as particles held together by attractive forces. This is asking me as a teacher and scientist to teach akonga a hypothesis that is not the most powerful nor all encompassing hypothesis. The teacher's responsibility is not to deal with beliefs. As a scientist my job is to make the distinction between belief and research knowledge clear. Mauri in relation to the ecosystem or a living creature can be referenced. But not in the place of intra- or inter- molecular forces and energy. NZ is a secular society and this is religion that is being forced upon learners. It is on the same level as creationism being taught in US classrooms. Please, leave mauri out of chemistry. |
| [**ANON-767U-4EAW-A**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EAW-A) | Unrelated but this survey layout is terrible, with the navigation confusing for many within my school.  Mauri is not well defined and used as both noun and verb I would argue incorrectly. If you are introducing a far reaching term such as mauri it needs to be defined with a full description.  Alongside it - taiao seems to be a find/replace of environment where by definition it is more than that. It is implying a higher level of thinking and was an innate belief system of a culture that was different depending on the iwi you were part of.  Define the terms, make them able to be judged in a way that the term holistic isnt used to escape the complexity of judgment. |
| [**ANON-767U-4EBM-1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EBM-1) | This is supposed to be science. Its supposed to be about facts not feelings. This is dumbing down an entire generation of children and it started with the disastrous mathematic curriculum. My own children have suffed enough in their school ing to now have this travesty foisted upon them |
| [**ANON-767U-4ENG-7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4ENG-7) | Big Idea: "Properties of matter are determined by attractive forces between particles".  Err... There are repulsive forces between particles too, and these are also important for determining properties of matter! E.g. the electron-electron repulsion in silicon is critical for understanding its properties and use a semiconductor in electronics. I know that's not level 1, or even level 3, but I do want to make sure the Big Idea is correct. |
| [**ANON-767U-4EP7-S**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EP7-S) | The current tasks would benefit from having examples of what a student at level 1 who is attaining at achieved, merit and excellence level would produce work in different formats. |
| [**ANON-767U-4EQZ-W**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EQZ-W) | The course outlines and sample assessments seem to not reflect our current Science National Curriculum and seem to offer very limited choice and very limited breadth. Surely broader and shallower might be the way to go ay level 1 - as either a final qualification for some and as a basic for some further study ay L2. I realise that content has been drawn from 'big ideas' but it is less than inspiring! |
| [**ANON-767U-4ES9-X**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4ES9-X) | That mauri needs a specific meaning as its use in the standards does not make sense. If it is an "intent" then what exactly is that intent. These are legal documents for recognition of achievement for the lifetime of the learner, which means we need exact language to develop the correct ideas and achieve in the standard. |
| [**ANON-767U-4EU3-T**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EU3-T) | Based on the piloted standards, I have concerns over the lack of clarity when exemplars, draft assessment schedules for all standards are not available. Those that have resource material examples supplied are ambiguous, contain complex language and will mean the learners with low-average literacy will be unable to comprehend tasks. Supplying the resource material to students a few weeks ahead of the assessment is positive but may further disadvantage students who do not have support to unpack and analyse the information, exacerbating the divide in education currently. |
| [**ANON-767U-4EU5-V**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EU5-V) | Without seeing assessments and their schedules it is not easy to see what is being expected. While some if the Chemistry may help lead into L2 chemistry, it is difficult to know what is happening. Note the terminology change in Chem 1.4 compared to covalent used previously. |
| [**ANON-767U-4EU8-Y**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EU8-Y) | why complicate things with release of stimulus two weeks prior? The validity of your assessment would plummet as that would reflect on students with the means, time and resources to research that stimulus against students at other NZ schools without that. Also, it is not specified as to what type or detail of stimulus would be released prior to the assessment.  It is difficult to see how mauri can be taught alongside/instead of bonding as Matauranga Maori had/has no concept of particles beyond what can physically be seen. I understand that this is different to the 'life force' that things have, but it will be challenging to teach/comprehend as it is difficult to see/model/understand outside of Te Ao Maori and the legends. |
| [**ANON-767U-4EUH-F**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EUH-F) | Supplying a resource to students ahead of the assessment sounds like a good idea, but I do wonder if this will mean students who are less supported will not be as prepared as those that are, reinforcing the educational disparities we already see. The language contained in the standards appears confusing. Concerns around the joining of Chem and Bio and Phys and ESS. |
| [**ANON-767U-4EXU-Y**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EXU-Y) | Please consider removing the word 'balance' from big idea 1. Ecologists have moved away from the idea of ecosystems being in balance, because constant disturbances and changes are normal in nature. Including the word 'balance' therefore gives the wrong impression, as it does not accurately reflect common scientific understanding. |
| [**ANON-767U-4EZY-5**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4EZY-5) | Some of the matauranga contexts are too contrived. There are too many assessment options. Some detail on the management of the external options would be appreciated viz managing portfolio work |
| [**ANON-767U-4S1Q-2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4S1Q-2) | Biggest concern is the use of the term mauri - this has a specific meaning in Te Reo Māori, and we feel a) it can lead to misunderstanding and pseudoscience. b) it could be seen as cultural appropriation if the word’s meaning is changed. |
| [**ANON-767U-4SV5-B**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.7025346780&user_id=ANON-767U-4SV5-B) | The current CB 1.1, 1.2 & 1.3 Achievement Standards require students to analyse and discuss cultural concepts, not just science concepts, in order to attain Excellence. This is inappropriate and not in keeping with the Achievement Standards in other L1 subjects. Exacerbating this, the term 'mauri' is apparently used to mean different things in different contexts (energy? life force? environmental health?), yet this term occurs across the achievement criteria for multiple standards. |

**Do the sample Course Outline(s) exemplify how the Significant Learning can form a coherent years’ programme with opportunities to assess the 4 Standards? (Do they show how a course could be taught across a year in the subject? Remember these can be adapted to your own context.)**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The Course Outline(s) are useful examples** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.2533382105&came_from_title=Responses+by+Question&filters%2Fquestions%2F39681f1b6e%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.2533382105%2Fquestion-2021-07-30-2533382105-radiosubquestion%3Alist=question-2021-07-30-2533382105-radiosubquestion%2FThe+Course+Outline%28s%29+are+useful+examples) | **0.11%** |
| **The Course Outline(s) are unclear or do not contain enough information** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.2533382105&came_from_title=Responses+by+Question&filters%2Fquestions%2F116ee3da04%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.2533382105%2Fquestion-2021-07-30-2533382105-radiosubquestion%3Alist=question-2021-07-30-2533382105-radiosubquestion%2FThe+Course+Outline%28s%29+are+unclear+or+do+not+contain+enough+information) | **0.42%** |
| **The Course Outline(s) are too similar to show multiple ways a course could be constructed** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.2533382105&came_from_title=Responses+by+Question&filters%2Fquestions%2F3ec892d4b8%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.2533382105%2Fquestion-2021-07-30-2533382105-radiosubquestion%3Alist=question-2021-07-30-2533382105-radiosubquestion%2FThe+Course+Outline%28s%29+are+too+similar+to+show+multiple+ways+a+course+could+be+constructed) | **0.21%** |
| **The Course Outline(s) are not useful** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.2533382105&came_from_title=Responses+by+Question&filters%2Fquestions%2F980832030f%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.2533382105%2Fquestion-2021-07-30-2533382105-radiosubquestion%3Alist=question-2021-07-30-2533382105-radiosubquestion%2FThe+Course+Outline%28s%29+are+not+useful) | **0.32%** |
| **Not Answered** | [**941**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.2533382105&came_from_title=Responses+by+Question&filters%2Fquestions%2F56fec6bd27%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.2533382105%2Fquestion-2021-07-30-2533382105-radiosubquestion%3Alist=question-2021-07-30-2533382105-radiosubquestion%2F__not_answered__) | **98.95%** |

**Do the Course Outline(s) demonstrate how teaching and learning could be grounded in mātauranga Māori?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The course outline(s) demonstrate this clearly** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.4991556169&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd2de544e23%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.4991556169%2Fquestion-2021-07-30-4991556169-radiosubquestion%3Alist=question-2021-07-30-4991556169-radiosubquestion%2FThe+course+outline%28s%29+demonstrate+this+clearly) | **0.32%** |
| **The course outline(s) demonstrate this to some extent** | [**6**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.4991556169&came_from_title=Responses+by+Question&filters%2Fquestions%2F8ba0931f50%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.4991556169%2Fquestion-2021-07-30-4991556169-radiosubquestion%3Alist=question-2021-07-30-4991556169-radiosubquestion%2FThe+course+outline%28s%29+demonstrate+this+to+some+extent) | **0.63%** |
| **The course outline(s) do not demonstrate this** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.4991556169&came_from_title=Responses+by+Question&filters%2Fquestions%2Fdb71c2df93%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.4991556169%2Fquestion-2021-07-30-4991556169-radiosubquestion%3Alist=question-2021-07-30-4991556169-radiosubquestion%2FThe+course+outline%28s%29+do+not+demonstrate+this) | **0.11%** |
| **Not Answered** | [**941**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.4991556169&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc57c2f0a21%2Fsubpage.2021-07-29.7606384253%2Fquestion.2021-07-30.4991556169%2Fquestion-2021-07-30-4991556169-radiosubquestion%3Alist=question-2021-07-30-4991556169-radiosubquestion%2F__not_answered__) | **98.95%** |

**Do you have any further feedback on the Course Outline(s)?**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4E63-U](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4E63-U) | mauri is present in all matter which exists as particles held together by attractive forces - this phrase is confusing and misleading, mauri has nothing to do with intra or inter molecular forces. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4EQZ-W) | Evidently a lot more potential for teaching and learning that could be grounded in mātauranga Māori exists in the Biology than the Chemistry; I do feel that the 'fit' just comes over as forced to incorporate teaching and learning grounded in mātauranga Māori in the Chemistry standards. Chemistry is so much more than chemicals in the environment but that seems to be the overarching theme - either CO2/fossil fuels or water pollution. Re materials and their uses, the chemistry is too complex and we are left with generalisations and interpreting data for fitness for use. |
| [ANON-767U-4EJD-Z](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4EJD-Z) | The use of the word Mauri in the BIG IDEAS is difficult, all other Maori concepts fit well with science knowledge, but the idea that particles have a life force is a difficult one to force onto students with differing worldviews. |
| [ANON-767U-4EU4-U](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4EU4-U) | The aim was to be 'clear and easily understood', however I needed to use the Maori Online Dictionary to translate a lot of Te Reo kupu in the CB course outlines, anda lot of them had multiple translations that made the meaning of the authors vague and ambiguous. I consider myself to have a reasonable vocabulary regarding common curriculum terms, but a lot of these phrases were new to me. This does not make the resources accessible to teachers trying to come to terms with the new ideas and structure. Simple definitions inline with the text would have significantly improved the communication, and educated teachers in their vocabulary at the same time, rather than pushing them away from that course design due to it being too hard to engage with. |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4169-D) | Resources required to avoid one consultant having to address everybody's queries. |
| [ANON-767U-41FU-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-41FU-S) | I cannot see the flow through the course outlines given. I would much prefer a course outline that includes links between the listed significant learning sections. The biology section of the topic appears with many more links to Matauranga Maori than the chemistry section.  Some of the links given between Maori and the significant learning worry me. e.g. Explore the concept of acids and bases using agricultural or home wastewater examples. Include rongoā remedies – for example, ongaonga affliction. This one - when clicking on the link the remedies in here, while I understand they are used, it worries me that teaching this to classes might put a heavy emphasis on the science behind it and students could be encouraged away from standard medical practise and turn to "alternative" treatments. |
| [ANON-767U-41DM-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-41DM-F) | The course outlines demonstrate disturbingly low expectations of young people ("keep it simple" when learning DNA structure - my ESOL Y10s do this with little effort currently) and disturbingly little understanding of cognitive architecture.  The outlines are cluttered and heavily focused on a particular pedagogical approach (rather than on the curriculum of concepts to be learned). Such cluttering, with context being primary over the science concepts, is a direct impediment to learning the scientific concepts. The cognitive load of considering context so heavily alone implies that the detail of the science involved will be forgotten quickly, if it is even learned at all.  Contrary to the unrealistic statements of the MOE, we need to decide: Do we want students to know some contexts really well (and sacrifice generalisability of understanding) or do we want them to know the scientific concepts deeply? There is a choice to be made. Sadly, the course outlines indicate that the whole package for this subject is geared towards the first choice, with all of its attendant deleterious effects on achievement and equity in science.  I do like the proposed way that the importance of concentration is emphasised in Course Outline 4.  A number of proposed activities clearly indicate that the SEG intends for teachers to replace the learning of some science with some social science concepts. For example, in Course Outline 3, questions about who owns genetic material from species are interesting – but it is not a question that science can answer. It belongs properly in sociological, historical and legal debates where it can be considered properly using the tools from those subjects. It is a good idea to teach that scientific knowledge can generate these kinds of debates, but valuable science learning time should be spent learning about science! Let students take this science knowledge into the other, social-science spheres where they can be informed about the nature of the world.  The same can be said for the inclusion of taha wairua in Outline 4 - this is a deeply personal, spiritual and cultural concept, not a scientific one. There is nothing wrong with the idea on its own merits, but we need to take utmost care that we do not present it as science. Its evaluation and understanding the idea belongs with other, social science disciplines, not with chemistry and biology. |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-4EP7-S) | It would be good to see course outlines that show how the science standards can be combined with the bio chem standards to offer specific bio and chem courses. |
| [ANON-767U-41ZR-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.5548860439&user_id=ANON-767U-41ZR-A) | Mātauranga Maori context for our local area will be a problem for us and will take time to include once we know what the contexts are. We have no Maori staff and limited contact with the local iwi. Using student knowledge will help, let them bring the knowledge to us. We feel strongly about incorporating relevant examples. Some will can be used nation-wide of course.  The course outlines provide lots of ideas but there needs to be the resources. Just a link to some information on a website isn't enough. There needs to be the focus questions, learning activity from these etc. There is a huge amount work teachers are going to have to create from scratch if this is all we are going to get. We hope some companies have been contracted to make a head start on these. |

**Is this Achievement Standard [1.1] ready for piloting?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The standard is ready for piloting** | [**6**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6014488078&came_from_title=Responses+by+Question&filters%2Fquestions%2F4eaeecbd25%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6014488078%2Fquestion-2021-07-30-6014488078-radiosubquestion%3Alist=question-2021-07-30-6014488078-radiosubquestion%2FThe+standard+is+ready+for+piloting) | **0.63%** |
| **The standard needs small amendments before piloting** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6014488078&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa9466a02dd%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6014488078%2Fquestion-2021-07-30-6014488078-radiosubquestion%3Alist=question-2021-07-30-6014488078-radiosubquestion%2FThe+standard+needs+small+amendments+before+piloting) | **1.05%** |
| **The standard needs significant amendments before piloting** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6014488078&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd1d7a187a4%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6014488078%2Fquestion-2021-07-30-6014488078-radiosubquestion%3Alist=question-2021-07-30-6014488078-radiosubquestion%2FThe+standard+needs+significant+amendments+before+piloting) | **0.74%** |
| **The standard is unsuitable for piloting** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6014488078&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd8704c46a2%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6014488078%2Fquestion-2021-07-30-6014488078-radiosubquestion%3Alist=question-2021-07-30-6014488078-radiosubquestion%2FThe+standard+is+unsuitable+for+piloting) | **0.11%** |
| **Not Answered** | [**927**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6014488078&came_from_title=Responses+by+Question&filters%2Fquestions%2F14956996fe%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6014488078%2Fquestion-2021-07-30-6014488078-radiosubquestion%3Alist=question-2021-07-30-6014488078-radiosubquestion%2F__not_answered__) | **97.48%** |

**Are the Achieved, Merit and Excellence criteria clear enough to support consistent assessment judgments?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The criteria are clear** | [**8**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6974645169&came_from_title=Responses+by+Question&filters%2Fquestions%2F969c51bf6b%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6974645169%2Fquestion-2021-07-30-6974645169-radiosubquestion%3Alist=question-2021-07-30-6974645169-radiosubquestion%2FThe+criteria+are+clear) | **0.84%** |
| **The criteria need some clarification** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6974645169&came_from_title=Responses+by+Question&filters%2Fquestions%2Fdc4d2f77d4%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6974645169%2Fquestion-2021-07-30-6974645169-radiosubquestion%3Alist=question-2021-07-30-6974645169-radiosubquestion%2FThe+criteria+need+some+clarification) | **0.95%** |
| **The criteria need significant clarification** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6974645169&came_from_title=Responses+by+Question&filters%2Fquestions%2Fee9114e695%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6974645169%2Fquestion-2021-07-30-6974645169-radiosubquestion%3Alist=question-2021-07-30-6974645169-radiosubquestion%2FThe+criteria+need+significant+clarification) | **0.74%** |
| **Not Answered** | [**927**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.6974645169&came_from_title=Responses+by+Question&filters%2Fquestions%2F7a4769a281%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.6974645169%2Fquestion-2021-07-30-6974645169-radiosubquestion%3Alist=question-2021-07-30-6974645169-radiosubquestion%2F__not_answered__) | **97.48%** |

**Does the unpacking of the Standard and the Conditions of Assessment provide sufficient and clear guidance on the use of the standard?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Guidance is sufficient and clear** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7541658725&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc1623a7473%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.7541658725%2Fquestion-2021-07-30-7541658725-radiosubquestion%3Alist=question-2021-07-30-7541658725-radiosubquestion%2FGuidance+is+sufficient+and+clear) | **0.74%** |
| **Further detail is needed in the guidance** | [**14**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7541658725&came_from_title=Responses+by+Question&filters%2Fquestions%2F8fa0cb6528%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.7541658725%2Fquestion-2021-07-30-7541658725-radiosubquestion%3Alist=question-2021-07-30-7541658725-radiosubquestion%2FFurther+detail+is+needed+in+the+guidance) | **1.47%** |
| **Guidance is unclear** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7541658725&came_from_title=Responses+by+Question&filters%2Fquestions%2F0b7ec187e7%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.7541658725%2Fquestion-2021-07-30-7541658725-radiosubquestion%3Alist=question-2021-07-30-7541658725-radiosubquestion%2FGuidance+is+unclear) | **0.32%** |
| **Not Answered** | [**927**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7541658725&came_from_title=Responses+by+Question&filters%2Fquestions%2F5b5c0acb7d%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.7541658725%2Fquestion-2021-07-30-7541658725-radiosubquestion%3Alist=question-2021-07-30-7541658725-radiosubquestion%2F__not_answered__) | **97.48%** |

**Could the Internal Assessment Activities for AS1.1 be used or adapted in your local context?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **I could use or adapt all 3 activities** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8198184033&came_from_title=Responses+by+Question&filters%2Fquestions%2F0472ad9354%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.8198184033%2Fquestion-2021-07-30-8198184033-radiosubquestion%3Alist=question-2021-07-30-8198184033-radiosubquestion%2FI+could+use+or+adapt+all+3+activities) | **1.05%** |
| **I could use or adapt 1 or 2 activities** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8198184033&came_from_title=Responses+by+Question&filters%2Fquestions%2F4026378254%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.8198184033%2Fquestion-2021-07-30-8198184033-radiosubquestion%3Alist=question-2021-07-30-8198184033-radiosubquestion%2FI+could+use+or+adapt+1+or+2+activities) | **0.95%** |
| **I could not use or adapt any of these activities** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8198184033&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd7fe247ee6%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.8198184033%2Fquestion-2021-07-30-8198184033-radiosubquestion%3Alist=question-2021-07-30-8198184033-radiosubquestion%2FI+could+not+use+or+adapt+any+of+these+activities) | **0.11%** |
| **Not Answered** | [**931**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8198184033&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa2e7cf6b6c%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.8198184033%2Fquestion-2021-07-30-8198184033-radiosubquestion%3Alist=question-2021-07-30-8198184033-radiosubquestion%2F__not_answered__) | **97.90%** |

**Do the Internal Assessment Activities exemplify how mātauranga Māori can be recognised and valued in assessment? (Do they demonstrate appropriate Māori contexts for assessment? Do they provide guidance and support for teachers and students to engage with mātauranga Māori in assessment?)**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **All 3 activities do this** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9050132529&came_from_title=Responses+by+Question&filters%2Fquestions%2F7341773de6%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9050132529%2Fquestion-2021-07-30-9050132529-radiosubquestion%3Alist=question-2021-07-30-9050132529-radiosubquestion%2FAll+3+activities+do+this) | **1.05%** |
| **1 or 2 of the activities do this** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9050132529&came_from_title=Responses+by+Question&filters%2Fquestions%2F174c48f798%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9050132529%2Fquestion-2021-07-30-9050132529-radiosubquestion%3Alist=question-2021-07-30-9050132529-radiosubquestion%2F1+or+2+of+the+activities+do+this) | **1.05%** |
| **None of the activities do this** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9050132529&came_from_title=Responses+by+Question&filters%2Fquestions%2F088ec0a845%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9050132529%2Fquestion-2021-07-30-9050132529-radiosubquestion%3Alist=question-2021-07-30-9050132529-radiosubquestion%2FNone+of+the+activities+do+this) | **0.11%** |
| **Not Answered** | [**930**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9050132529&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc9c1e86088%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9050132529%2Fquestion-2021-07-30-9050132529-radiosubquestion%3Alist=question-2021-07-30-9050132529-radiosubquestion%2F__not_answered__) | **97.79%** |

**Do the Internal Assessment Activities for AS1.1 support the engagement, access, understanding and participation of all learners?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **All 3 activities do this** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9649383410&came_from_title=Responses+by+Question&filters%2Fquestions%2F385223e8c9%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9649383410%2Fquestion-2021-07-30-9649383410-radiosubquestion%3Alist=question-2021-07-30-9649383410-radiosubquestion%2FAll+3+activities+do+this) | **0.95%** |
| **1 or 2 of the activities do this** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9649383410&came_from_title=Responses+by+Question&filters%2Fquestions%2F96c138725f%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9649383410%2Fquestion-2021-07-30-9649383410-radiosubquestion%3Alist=question-2021-07-30-9649383410-radiosubquestion%2F1+or+2+of+the+activities+do+this) | **0.74%** |
| **None of the activities do this** | [**5**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9649383410&came_from_title=Responses+by+Question&filters%2Fquestions%2Fbdf68f03a1%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9649383410%2Fquestion-2021-07-30-9649383410-radiosubquestion%3Alist=question-2021-07-30-9649383410-radiosubquestion%2FNone+of+the+activities+do+this) | **0.53%** |
| **Not Answered** | [**930**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9649383410&came_from_title=Responses+by+Question&filters%2Fquestions%2F0835966a83%2Fsubpage.2021-07-29.5688586127%2Fquestion.2021-07-30.9649383410%2Fquestion-2021-07-30-9649383410-radiosubquestion%3Alist=question-2021-07-30-9649383410-radiosubquestion%2F__not_answered__) | **97.79%** |

**Do you have any further feedback on [Achievement Standard 1.1] and its activities? For example, if you noted that the Achieved, Merit and Excellence criteria were unclear, which grade level in particular is problematic and why? If you have noticed problems in an Activity, which one was it?**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4EAW-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EAW-A) | Define taiao with examples. mauri – the balance of health and wellbeing is not the correct definition. Where was this found. It is far more complex and help by the person so will be different for everyone. You are implying mauri is conservation, it is not and is far more powerful. mauri should be in the context and not the mark schedule. |
| [ANON-767U-4E5W-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4E5W-X) | Again, nice that the notes make it overt about the expected timeframe of teaching/learning (8 weeks). Similar workload and comparable-assessment choice-issues may manifest to the chemical reactions internal explained above. Not that those are insurmountable, but with large class sizes and at large schools things may get more complicated.  The requirement at excellence to analyse how changes “affects the mauri of the taiao” needs to be reworded to clarify what biological concepts or processes are intended. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EQZ-W) | I do not see how any assessment activity can support the engagement, access, understanding and participation of ALL learners given the NZ demographic with such an emphasis on mātauranga Māori being recognised and valued in the ASSESSMENT. In teaching and learning, yes, I get this - BUT not as part of an assessment where the focus clearly should be on the understading of the SCIENCE content. How are ALL students expected to grasp 'mauri of the taiao' and 'the mauri of the human body' and will an explanation of what this actually means be a requirement for excellence e.g. 1.1c Human Health. Otherwise some great Science understanding will only be recognised to the Merit level. (Incidentally a quick one hour scan of other subject areas does NOT have mātauranga Māori so front and centre in the assessments which is why my collegues in non Science subjects were amazed when they saw our materials). |
| [ANON-767U-4EXU-Y](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EXU-Y) | Asking students to develop an understanding of ONE life process of ONE microorganism seems to contradict the fundamental premise of the review in science - the goals was to give students a broad base knowledge. Instead, this encourages depth of knowledge of one life process of one organism. There should perhaps be more considerations of interconnections too, to align with Big Idea 1. You may hope that teachers will do a broad, general unit and then ask students to show their knowledge by demonstrating their understanding of one microorganisms. However, it is unreasonable to assume that teachers and students will not just teach and learn to pass the assessment. I suggest that it would be better to develop an assessment that includes demonstrating broad knowledge. There also needs to be clear guidelines around assessments carried out by groups, with examples of evidence that could be used to show that all members of the group meet the assessment criteria. From a scientific perspective, there are some implied values around the guidance on the affect on the mauri of the taiao which may need to be examined - e.g. sterile work environment are given as example of 'raise the health of the taiao'; - sure, it may raise the health from a human perspective, but not from the perspective of bacteria. Perhaps clarify too, whether students from other cultural backgrounds are allowed to include comparable knowledge from their own cultures. e.g. correct karakia for food production are mentioned - could student from other cultural backgrounds talk about prayers that they use? And presumably they do not need to use science to explain this? |
| [ANON-767U-4EFE-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EFE-W) | You are suggesting that correct karakia can influence/is necessary for fermented food to be produced correctly and be edible/tasty. To claim this in a scientific context is a travesty, as there is no mechanism or evidence for this to be the case. In other words, this is promoting pseudoscientific thinking and needs to be removed. |
| [ANON-767U-4EWV-Y](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EWV-Y) | Can be used with little modification |
| [ANON-767U-4EUP-Q](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EUP-Q) | Issues around understanding the cultural issues in a special character school but that is a work-on. Unsure whether can do interactions with humans like the current 90950. |
| [ANON-767U-4EZY-5](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EZY-5) | None of the activities recognise students who are presenting at year 11 without previously reaching level 6 of the curriculum. These activities force us to 'super-scaffold' the activities to get less able students through. This devalues the credits earned in comparison to students who do not require this assistance. Is the expectation that schools will gate these courses for suitable students? |
| [ANON-767U-411M-V](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-411M-V) | The BIO 1.1 standard looks fine until we get to • analysing how a change to the microorganism's population affects the mauri of the taiao. The concept of mauri seems to have many connotations: 1. (noun) life principle, life force, vital essence, special nature, a material symbol of a life principle, source of emotions - the essential quality and vitality of a being or entity. Also used for a physical object, individual, ecosystem or social group in which this essence is located. https://maoridictionary.co.nz/search?&keywords=mauri many of which I am not comfortable with having as part of any science course. Even though the “unpacking” identifies the use of mauri in the standard as meaning “the balance of health and wellbeing” I think the use of the term mauri is inappropriate in a science standard. |
| [ANON-767U-41AU-M](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41AU-M) | wording for the EN1 regarding impact on the taiao is confusing. What type of interconnections would be best to achieve Excellence with regards to micro-organisms and the taiao? |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4169-D) | Exemplars would be helpful |
| [ANON-767U-41KG-G](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41KG-G) | I think the information for this standard is clear. This is essentially "Investigate biological ideas relating to interactions between humans and microorganisms. Sci1.10 AS90950" put into NZ cultural context. The only concern I can think of is that even though there are a variety of acceptable forms of assessment - the same can be said (technically) for current internals - that schools would generally just opt for a traditional internal. Some examples of different outcomes (marked exemplars) forms of assessment might be helpful to encourage this actually being used as intended, with students getting opportunities to show understanding in their chosen form. |
| [ANON-767U-41WY-E](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41WY-E) | 1. This is a good standard with multiple ways of achieving within differentiated learning. 2. Standard is easily adapted for any community within Aotearoa 3. The identification that microorganisms have positive roles to keep the environment in balance and negative roles when the environment is out of balance is great. However: 4. The achievement criteria have an Achieved and an Excellence, the Achieved appears to have accidently been copied across 5. It would be nice to have a focus on GOOD microorganisms. Viruses are pathogens and can only be pathogens. There is no circumstance whereby they can have a positive impact when the environment they exist within is in balance (as the current COVID environment has indicated). 6. No mention of Carbon and Nitrogen cycles. This could be explicit so direct teachers to these. |
| [ANON-767U-41DM-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41DM-F) | The emphasis on the taiao context is far too strong - the context, after all, is not the point. Understanding of microorganisms and their life processes is the point. The context is a useful pedagogical tool, but should not form the basis of the curriculum or the assessment! |
| [ANON-767U-4175-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4175-A) | A big issue that came out of our teacher only day (which we spent reviewing these standards) was that the definition of “mauri” given here seems inconsistent with definitions given elsewhere, for instance the Māori online dictionary, which describes it as "Life principle, life force, vital essence, special nature, a material symbol of a life principle, source of emotions - the essential quality and vitality of a being or entity. Also used for a physical object, individual, ecosystem or social group in which this essence is located." While we very much support the integration of Māori culture into the NZ curriculum we are unsure as to whether science is the best platform for an intangible, spiritual concept such as mauri. At the very least we need a lot more clarification around what this would look like if it were intended to be incorporated, particularly given that it is written into the title of this standard. It has been defined in the standard as "the balance of health and wellbeing" (which seems different from definitions given elsewhere - maybe this needs reviewing to confirm accuracy?) it is still difficult to see how wellbeing fits in with a science standard - it seems more appropriate to social sciences, perhaps? |
| [ANON-767U-41M5-Z](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41M5-Z) | "Indigenous knowledge cannot be verified by scientific criteria nor can science be adequately assessed according to the tenets of indigenous knowledge. Each is built on distinctive philosophies, methodologies and criteria. " Mason Durie 2004.  In my opinion, we can should incorporate the empirical aspects of mātauranga Māori in teaching and assessing science but including concepts of spiritual nature such as mana, tapu, noah and mauri as scientific concepts in teaching and assessing science would be in contradiction with fundamentally materialistic understanding of nature. Any spiritual (supernatural) ideas should not be included in teaching science, regardless of their cultural origin. |
| [ANON-767U-41AB-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-41AB-1) | It is unclear what students would need to explain or refer to in order to demonstrate how changes "affects the mauri of the taiao". Reference to the "mauri" of any animate or inanimate object is unscientific since it is not supported by any evidence - it is a spiritual belief and has no place in a Science course. |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4EP7-S) | It would be good to have clarification as to whether students are required to provide evidence in their own words for merit or excellence. Exemplars for what is required at each level would be useful as the current assessment matrix is very generic. |
| [ANON-767U-4SVW-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4SVW-D) | • How do non-fluent speakers of te reo assess a waiata? This might need external moderation? If we have a variety of student assessment options, NZQA must provide exemplars at each grade boundary level so we can assess and mark consistently. |
| [ANON-767U-4SV5-B](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.1535022835&user_id=ANON-767U-4SV5-B) | Issue 1: The Merit Achievement Criteria and the Explanatory Notes do not match: the Merit requirements are about the life process of the organism, not the mauri of the taiao. Issue 2: The term 'mauri' is used in multiple places to mean different things, across the CB Ach Standards, and even within this single standard. e.g. in assessment activity 1.1C there is reference to the mauri of the microorganisms (and the taiao, and humans..). I believe the term mauri should be removed from all assessment L1 Chemistry & Biology materials, to be fair to learners and educators. Students should not be assessed on their ability to explain cultural terms in science assessments. Issue 3: 'Unpacking the Standard' contains the following statement '.... or raise the health of the taiao, for example sterile working conditions, or correct karakia for fermented food production.' This suggests the correct prayer will improve the fermentation of food. This does not belong in science materials. Issue 4: The materials (including the activities) do not provide sufficient information for educators about what the 'life process' and 'mauri' mean. |

**Is this Achievement Standard [1.2] ready for piloting?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The standard is ready for piloting** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8809456013&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd0b7f89c26%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.8809456013%2Fquestion-2021-07-30-8809456013-radiosubquestion%3Alist=question-2021-07-30-8809456013-radiosubquestion%2FThe+standard+is+ready+for+piloting) | **0.32%** |
| **The standard needs small amendments before piloting** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8809456013&came_from_title=Responses+by+Question&filters%2Fquestions%2F37dbbaae53%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.8809456013%2Fquestion-2021-07-30-8809456013-radiosubquestion%3Alist=question-2021-07-30-8809456013-radiosubquestion%2FThe+standard+needs+small+amendments+before+piloting) | **1.16%** |
| **The standard needs significant amendments before piloting** | [**8**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8809456013&came_from_title=Responses+by+Question&filters%2Fquestions%2F4834a0f70e%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.8809456013%2Fquestion-2021-07-30-8809456013-radiosubquestion%3Alist=question-2021-07-30-8809456013-radiosubquestion%2FThe+standard+needs+significant+amendments+before+piloting) | **0.84%** |
| **The standard is unsuitable for piloting** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8809456013&came_from_title=Responses+by+Question&filters%2Fquestions%2F07d5863bfa%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.8809456013%2Fquestion-2021-07-30-8809456013-radiosubquestion%3Alist=question-2021-07-30-8809456013-radiosubquestion%2FThe+standard+is+unsuitable+for+piloting) | **0.11%** |
| **Not Answered** | [**928**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.8809456013&came_from_title=Responses+by+Question&filters%2Fquestions%2Fe2ca4b06eb%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.8809456013%2Fquestion-2021-07-30-8809456013-radiosubquestion%3Alist=question-2021-07-30-8809456013-radiosubquestion%2F__not_answered__) | **97.58%** |

**Are the Achieved, Merit and Excellence criteria clear enough to support consistent assessment judgments?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The criteria are clear** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9543909533&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa241ed7454%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.9543909533%2Fquestion-2021-07-30-9543909533-radiosubquestion%3Alist=question-2021-07-30-9543909533-radiosubquestion%2FThe+criteria+are+clear) | **1.05%** |
| **The criteria need some clarification** | [**8**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9543909533&came_from_title=Responses+by+Question&filters%2Fquestions%2F8b20cd26e3%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.9543909533%2Fquestion-2021-07-30-9543909533-radiosubquestion%3Alist=question-2021-07-30-9543909533-radiosubquestion%2FThe+criteria+need+some+clarification) | **0.84%** |
| **The criteria need significant clarification** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9543909533&came_from_title=Responses+by+Question&filters%2Fquestions%2F8215ab7203%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.9543909533%2Fquestion-2021-07-30-9543909533-radiosubquestion%3Alist=question-2021-07-30-9543909533-radiosubquestion%2FThe+criteria+need+significant+clarification) | **0.32%** |
| **Not Answered** | [**930**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9543909533&came_from_title=Responses+by+Question&filters%2Fquestions%2Fed0f1f2751%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.9543909533%2Fquestion-2021-07-30-9543909533-radiosubquestion%3Alist=question-2021-07-30-9543909533-radiosubquestion%2F__not_answered__) | **97.79%** |

**Does the unpacking of the Standard and the Conditions of Assessment provide sufficient and clear guidance on the use of the standard?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Guidance is sufficient and clear** | [**6**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0079611707&came_from_title=Responses+by+Question&filters%2Fquestions%2Fb21692d046%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0079611707%2Fquestion-2021-07-30-0079611707-radiosubquestion%3Alist=question-2021-07-30-0079611707-radiosubquestion%2FGuidance+is+sufficient+and+clear) | **0.63%** |
| **Further detail is needed in the guidance** | [**14**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0079611707&came_from_title=Responses+by+Question&filters%2Fquestions%2Fe636300764%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0079611707%2Fquestion-2021-07-30-0079611707-radiosubquestion%3Alist=question-2021-07-30-0079611707-radiosubquestion%2FFurther+detail+is+needed+in+the+guidance) | **1.47%** |
| **Guidance is unclear** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0079611707&came_from_title=Responses+by+Question&filters%2Fquestions%2Fe26f41a42e%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0079611707%2Fquestion-2021-07-30-0079611707-radiosubquestion%3Alist=question-2021-07-30-0079611707-radiosubquestion%2FGuidance+is+unclear) | **0.21%** |
| **Not Answered** | [**929**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0079611707&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc060e57527%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0079611707%2Fquestion-2021-07-30-0079611707-radiosubquestion%3Alist=question-2021-07-30-0079611707-radiosubquestion%2F__not_answered__) | **97.69%** |

**Could the Internal Assessment Activities for AS1.2 be used or adapted in your local context?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **I could use or adapt all 3 activities** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0738726124&came_from_title=Responses+by+Question&filters%2Fquestions%2F8892b8f064%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0738726124%2Fquestion-2021-07-30-0738726124-radiosubquestion%3Alist=question-2021-07-30-0738726124-radiosubquestion%2FI+could+use+or+adapt+all+3+activities) | **1.16%** |
| **I could use or adapt 1 or 2 activities** | [**8**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0738726124&came_from_title=Responses+by+Question&filters%2Fquestions%2F83bb574708%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0738726124%2Fquestion-2021-07-30-0738726124-radiosubquestion%3Alist=question-2021-07-30-0738726124-radiosubquestion%2FI+could+use+or+adapt+1+or+2+activities) | **0.84%** |
| **I could not use or adapt any of these activities** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0738726124&came_from_title=Responses+by+Question&filters%2Fquestions%2F7a5abe6113%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0738726124%2Fquestion-2021-07-30-0738726124-radiosubquestion%3Alist=question-2021-07-30-0738726124-radiosubquestion%2FI+could+not+use+or+adapt+any+of+these+activities) | **0.21%** |
| **Not Answered** | [**930**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.0738726124&came_from_title=Responses+by+Question&filters%2Fquestions%2F4bcd53e5b3%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.0738726124%2Fquestion-2021-07-30-0738726124-radiosubquestion%3Alist=question-2021-07-30-0738726124-radiosubquestion%2F__not_answered__) | **97.79%** |

**Do the Internal Assessment Activities exemplify how mātauranga Māori can be recognised and valued in assessment? (Do they demonstrate appropriate Māori contexts for assessment? Do they provide guidance and support for teachers and students to engage with mātauranga Māori in assessment?)**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **All 3 activities do this** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1267731430&came_from_title=Responses+by+Question&filters%2Fquestions%2F52310fa278%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1267731430%2Fquestion-2021-07-30-1267731430-radiosubquestion%3Alist=question-2021-07-30-1267731430-radiosubquestion%2FAll+3+activities+do+this) | **0.74%** |
| **1 or 2 of the activities do this** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1267731430&came_from_title=Responses+by+Question&filters%2Fquestions%2Fe819cb1e1b%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1267731430%2Fquestion-2021-07-30-1267731430-radiosubquestion%3Alist=question-2021-07-30-1267731430-radiosubquestion%2F1+or+2+of+the+activities+do+this) | **1.16%** |
| **None of the activities do this** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1267731430&came_from_title=Responses+by+Question&filters%2Fquestions%2Ff548e4aaeb%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1267731430%2Fquestion-2021-07-30-1267731430-radiosubquestion%3Alist=question-2021-07-30-1267731430-radiosubquestion%2FNone+of+the+activities+do+this) | **0.21%** |
| **Not Answered** | [**931**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1267731430&came_from_title=Responses+by+Question&filters%2Fquestions%2F2507b8b590%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1267731430%2Fquestion-2021-07-30-1267731430-radiosubquestion%3Alist=question-2021-07-30-1267731430-radiosubquestion%2F__not_answered__) | **97.90%** |

**Do the Internal Assessment Activities for AS1.2 support the engagement, access, understanding and participation of all learners?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **All 3 activities do this** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1828698787&came_from_title=Responses+by+Question&filters%2Fquestions%2F34422ff5cd%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1828698787%2Fquestion-2021-07-30-1828698787-radiosubquestion%3Alist=question-2021-07-30-1828698787-radiosubquestion%2FAll+3+activities+do+this) | **0.74%** |
| **1 or 2 of the activities do this** | [**12**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1828698787&came_from_title=Responses+by+Question&filters%2Fquestions%2F39dc754efa%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1828698787%2Fquestion-2021-07-30-1828698787-radiosubquestion%3Alist=question-2021-07-30-1828698787-radiosubquestion%2F1+or+2+of+the+activities+do+this) | **1.26%** |
| **None of the activities do this** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1828698787&came_from_title=Responses+by+Question&filters%2Fquestions%2Fcab39f059d%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1828698787%2Fquestion-2021-07-30-1828698787-radiosubquestion%3Alist=question-2021-07-30-1828698787-radiosubquestion%2FNone+of+the+activities+do+this) | **0.21%** |
| **Not Answered** | [**930**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.1828698787&came_from_title=Responses+by+Question&filters%2Fquestions%2F33c0f81fc9%2Fsubpage.2021-07-29.0126658471%2Fquestion.2021-07-30.1828698787%2Fquestion-2021-07-30-1828698787-radiosubquestion%3Alist=question-2021-07-30-1828698787-radiosubquestion%2F__not_answered__) | **97.79%** |

**Do you have any further feedback on [Achievement Standard 1.2] and its activities? For example, if you noted that the Achieved, Merit and Excellence criteria were unclear, which grade level in particular is problematic and why? If you have noticed problems in an Activity, which one was it?**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4E6J-J](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4E6J-J) | It is understood all matter has mauri, however linking mauri to something measurable such as conservation of matter and energy, is misleading.  This sentence "The presence of matter will also affect the mauri of the taiao, especially if the matter has a pollutant or enhancement action." does not make sense; it is not the mauri of the taiao that is affected but the mana of the taiao. Also "the presence of matter might affect" would be more accurate. |
| [ANON-767U-4E5W-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4E5W-X) | Interesting. Nice that it is overt that the assessment comes at the end of an expected timeframe of learning (7-8 weeks). Interesting that it is overtly stated the students are given the opportunity as to which method of assessment. Does this imply some students may select reports while others select video or slides or other? Teachers will have to adapt to easily use the generic assessment schedule to ensure valid comparisons of different methods of assessment. Sometimes this may be easy, but sometimes not. When will the information pack or supplementary materials mentioned in some of the sample assessments be made available? Also, when will sample work or exemplars be made available? What is of concern though is highlighted in the marking schedule for Excellence. The requirement of students to overtly link aspects of the chemical reaction to the mauri of the taiao, as well as other links to the taiao. The meaning of taiao seems to be a wide interpretation of “environmental conditions” but the inclusion of mauri or “life force” into these discussions on chemical reactions seems problematic at best. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EQZ-W) | Q5. STOP putting 2 questions in one question where the answers are opposite, Yes they do (for MM). No they don't (for guidance and support). So how am I to answer? Again.... I do not see how any assessment activity can support the engagement, access, understanding and participation of ALL learners given the NZ demographic with such an emphasis on mātauranga Māori being recognised and valued in the ASSESSMENT. In teaching and learning, yes, I get this - BUT not as part of an assessment where the focus clearly should be on the understanding of the SCIENCE content. How are ALL students expected to grasp 'the mauri of the taiao to support kaitiakitanga' and will an explanation of what this actually means be a requirement for excellence e.g. 1.2a Fossil Fuels. 1.2b - similar. Some great Science understanding will only be recognised to the Merit level unless the schedules become Science based. Again my quick one hour scan of other subject areas does NOT have mātauranga Māori so front and centre in the assessments which is why my colleagues in non Science subjects were amazed when they saw our materials). |
| [ANON-767U-4EE9-G](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EE9-G) | Concerned about lack of writing formula and equations skills which should considered expected knowledge at year 11 level. Also like see a much greater range of precipitation reactions included in assessment examples. |
| [ANON-767U-4E3T-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4E3T-S) | I am concerned about a lack of formula and equations which should be expected at this level. I would like to see a greater range of precipitations in assessment examples. |
| [ANON-767U-4EEG-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EEG-X) | Not enough detail about the writing of formula skills . This knowledge is needed. A greater range of experiments is needed for example those producing precipitation . |
| [ANON-767U-4EEA-R](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EEA-R) | Removing the requirement for students to write balanced chemical and word equations has removed an important skill that students need to progress on with many areas of science. Chemical conventions (correct formula, balancing ions etc) need to be developed from early stages of NCEA. Including metal displacement reactions would round out the types of chemical reactions looked out. This would allow great practical based learning experiences and would be able to tie in to many different reactions in the taiao, as this applies to many careers (building, manufactoring, cars, agriculture etc.) The provided tasks are lacking depth in the precipitation reactions. |
| [ANON-767U-4E3K-G](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4E3K-G) | The drop of the requirement to write word and symbol equations is a detriment to students. They will need this in Senior Chemistry/Biology and should be exposed to this early on, especially since there will be sufficient time to rote learn these. Rote learning is a valuable skill to develop for higher learning. Huge variation in tasks could be difficult to moderate across schools year to year. Think there is too limited group of reactions for such a large topic - should expand reactions. |
| [ANON-767U-4EEX-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EEX-F) | Writing word and balanced chemical equations should be required as part of this standard. Students may be intimidated by the broad range of evidence accepted. Exemplars should be provided within each level of achievement. |
| [ANON-767U-4EER-9](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EER-9) | The issue I have: Students don't appear to need to be able to write chemical formula or word equations or balanced chemical equations, which they should be able to do by the end of Y11 before going into Y12 Chemistry. |
| [ANON-767U-4EUP-Q](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EUP-Q) | looks good |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4169-D) | Exemplars and resources please |
| [ANON-767U-41RY-9](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-41RY-9) | The big ideas don’t contain all 3 chemical reactions (combustion, precipitation, neutralization) Most of the time 2 are able to fit in and the 3rd gets shoved in eg water fits in neutralization and precipitation, however with the horticulture idea it could involve neutralization and combustion, but precipitation is left out The big idea is that chemistry is everywhere but we have been limited to 3 reactions The ideas don’t necessarily fit into chemical reactions The ideas are very rural, 3 out of the 4 are rural concepts and does this interest/motivate our urban students. Is this inclusive? |
| [ANON-767U-41DM-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-41DM-F) | The reaction classes selected are appropriate. However, is this really the only reaction chemistry assessed at this level? There are further reaction classes that are successfully taught in existing standards that could also be incorporated.  For Achievement, it appears that students just have to make an observation and say matter is conserved. This is clearly, manifestly not at curriculum level 6.  Deeply concerning is the lack of expectation on students to write chemical equations. Why on earth has this been done? This skill is the key way that we represent the conservation of matter, and is the language of chemistry that allows access to a powerful world of understanding. Students at Y11 are not unable to write chemical equations, as the SEG is implying. I have had considerable success in recent years with struggling Y11 students who are able to represent their chemical understanding using equations.  In fact, equation writing is more equitable than the essay-writing or video-taking proposed, as it allows ākonga to use a more efficient and easier way to represent their knowledge than working around this with long paragraphs etc. Students whose writing skills are not excellent are locked out of excellent grades. I agree that good writing is important but students can in fact be good chemists and be simply average writers. This decision is antithetical to equity and sidelines some of the most foundational disciplinary knowledge in chemistry - surely this is against the intent of the RAS. It is a very disappointing decision that will lead to worse chemists at higher levels, as well as poorer results (in terms of assessment) for the less-advanced writers too. It somehow manages to harm both excellence and equity - I implore you to reconsider. |
| [ANON-767U-41AB-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-41AB-1) | Activity C - Precipitation: the intention is clearly for local contexts to be used. In almost every region in N.Z., pollution of waterways by nitrates is the major issue - these cannot be removed by precipitation. So what exactly would the students be studying ? Removal of heavy metals perhaps, which can be done by precipitation, but is not the most significant issue in a most N.Z. waterways.  The Unpacking: ..."all matter has a mauri" - this is unscientific - there is no evidence for a life force. |
| [ANON-767U-412S-3](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-412S-3) | Why does it need to be related to the taiao? |
| [ANON-767U-41U4-7](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-41U4-7) | The big ideas don’t contain all 3 chemical reactions (combustion, precipitation, neutralization) Most of the time 2 are able to fit in and the 3rd gets shoved in eg water fits in neutralization and precipitation, however with the horticulture idea it could involve neutralization and combustion, but precipitation is left out The big idea is that chemistry is everywhere but we have been limited to 3 reactions The ideas don’t necessarily fit into chemical reactions The ideas are very rural, 3 out of the 4 are rural concepts and does this interest/motivate our urban students. Is this inclusive? |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4EP7-S) | The assessment criteria are generic and further clarification would be beneficial. |
| [ANON-767U-41ZR-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-41ZR-A) | We think this CB1.2 standard should be 5 credits and the CB1.4 external be lifted to 5 credits. |
| [ANON-767U-4SVW-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4SVW-D) | • In danger of overdoing waterways (or any other concept) • Chemistry not standing out as chem in students eyes – makes it difficult for them to select courses for future. • Links to Maturanga Mauri are tenuous and more links to bio! |
| [ANON-767U-4SV5-B](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.2444018795&user_id=ANON-767U-4SV5-B) | The use of the term 'mauri' is problematic, especially as it is used in in this standard relation to particles / matter, as well as the environment generally, including living things. This is a cultural concept with many layers to its meaning. Science students should be able to reach Excellence using their scientific understanding, rather than their ability to successfully link to aspects of te ao Maori. As such, this term should be replaced in the Achievement Standard (and all related materials) with terms that do not require a deep cultural understanding, and as such provide greater clarity. |

**Is this Achievement Standard [1.3] ready for piloting?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The standard is ready for piloting** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9263994922&came_from_title=Responses+by+Question&filters%2Fquestions%2F6a7499824a%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.9263994922%2Fquestion-2021-07-30-9263994922-radiosubquestion%3Alist=question-2021-07-30-9263994922-radiosubquestion%2FThe+standard+is+ready+for+piloting) | **0.11%** |
| **The standard needs small amendments before piloting** | [**6**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9263994922&came_from_title=Responses+by+Question&filters%2Fquestions%2F0de804478f%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.9263994922%2Fquestion-2021-07-30-9263994922-radiosubquestion%3Alist=question-2021-07-30-9263994922-radiosubquestion%2FThe+standard+needs+small+amendments+before+piloting) | **0.63%** |
| **The standard needs significant amendments before piloting** | [**17**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9263994922&came_from_title=Responses+by+Question&filters%2Fquestions%2F39143179a0%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.9263994922%2Fquestion-2021-07-30-9263994922-radiosubquestion%3Alist=question-2021-07-30-9263994922-radiosubquestion%2FThe+standard+needs+significant+amendments+before+piloting) | **1.79%** |
| **The standard is unsuitable for piloting** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9263994922&came_from_title=Responses+by+Question&filters%2Fquestions%2F581c5dce26%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.9263994922%2Fquestion-2021-07-30-9263994922-radiosubquestion%3Alist=question-2021-07-30-9263994922-radiosubquestion%2FThe+standard+is+unsuitable+for+piloting) | **0.21%** |
| **Not Answered** | [**925**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.9263994922&came_from_title=Responses+by+Question&filters%2Fquestions%2F124059ad80%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.9263994922%2Fquestion-2021-07-30-9263994922-radiosubquestion%3Alist=question-2021-07-30-9263994922-radiosubquestion%2F__not_answered__) | **97.27%** |

**Are the Achieved, Merit and Excellence criteria clear enough to support consistent assessment judgments?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The criteria are clear** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7050447841&came_from_title=Responses+by+Question&filters%2Fquestions%2F7e873d3e12%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7050447841%2Fquestion-2021-07-30-7050447841-radiosubquestion%3Alist=question-2021-07-30-7050447841-radiosubquestion%2FThe+criteria+are+clear) | **0.42%** |
| **The criteria need some clarification** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7050447841&came_from_title=Responses+by+Question&filters%2Fquestions%2F5c22c1a0f8%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7050447841%2Fquestion-2021-07-30-7050447841-radiosubquestion%3Alist=question-2021-07-30-7050447841-radiosubquestion%2FThe+criteria+need+some+clarification) | **1.16%** |
| **The criteria need significant clarification** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7050447841&came_from_title=Responses+by+Question&filters%2Fquestions%2F81a45bbaec%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7050447841%2Fquestion-2021-07-30-7050447841-radiosubquestion%3Alist=question-2021-07-30-7050447841-radiosubquestion%2FThe+criteria+need+significant+clarification) | **1.05%** |
| **Not Answered** | [**926**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7050447841&came_from_title=Responses+by+Question&filters%2Fquestions%2F0ece2609d9%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7050447841%2Fquestion-2021-07-30-7050447841-radiosubquestion%3Alist=question-2021-07-30-7050447841-radiosubquestion%2F__not_answered__) | **97.37%** |

**Does the unpacking of the Standard and the Proposed Assessment Approach provide sufficient and clear guidance on the use of the standard?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Guidance is sufficient and clear** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7572348280&came_from_title=Responses+by+Question&filters%2Fquestions%2Fee1c8b52af%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7572348280%2Fquestion-2021-07-30-7572348280-radiosubquestion%3Alist=question-2021-07-30-7572348280-radiosubquestion%2FGuidance+is+sufficient+and+clear) | **0.32%** |
| **Guidance is insufficient** | [**13**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7572348280&came_from_title=Responses+by+Question&filters%2Fquestions%2F76163f0ad8%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7572348280%2Fquestion-2021-07-30-7572348280-radiosubquestion%3Alist=question-2021-07-30-7572348280-radiosubquestion%2FGuidance+is+insufficient) | **1.37%** |
| **Guidance is unclear** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7572348280&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa317fea719%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7572348280%2Fquestion-2021-07-30-7572348280-radiosubquestion%3Alist=question-2021-07-30-7572348280-radiosubquestion%2FGuidance+is+unclear) | **0.95%** |
| **Not Answered** | [**926**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-07-30.7572348280&came_from_title=Responses+by+Question&filters%2Fquestions%2F5a1168d508%2Fsubpage.2021-07-29.1018613672%2Fquestion.2021-07-30.7572348280%2Fquestion-2021-07-30-7572348280-radiosubquestion%3Alist=question-2021-07-30-7572348280-radiosubquestion%2F__not_answered__) | **97.37%** |

**Do you have any further feedback on [Achievement Standard 1.3]? For instance, do you think the Proposed Assessment Approach will be capable of supporting fair and equitable assessment?**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4EAW-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EAW-A) | Whakapapa for merit – it links to gods. Is there a place in science for a creationist story? I would argue no. Its a weird mix of MM and western modern science that does not mere together well. interconnections between the mauri of living things and explain an aspect of the taiao DOES NOT MAKE SENSE. I read it to my class and they went WTF are you on about miss. |
| [ANON-767U-4E5W-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4E5W-X) | Assessment approach similar to CB1.4: CAA in November Seems logical but again, would be nice to see a sample assessment to see depth or possibilities involved. Should also have an indicator of the time-frame involved: like 1-2 hours? Also, the requirement at excellence to overly discuss the “mauri of things” should be reworded to specify what biological aspects or concepts will be required depending on the situation. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EQZ-W) | This seems initially like Genetics 'as we know it' with the most interesting, relevant and accessible components removed (from assessment) although we would probably still teach them e.g. Punnett squares. How an understanding of pedigree tree / family tree / whakapapa can be investigated without this is as mystery! As for 'understanding of genomic variation to explain an aspect of the taiao' this needs a lot more unpacking; here we go again disadvantaging students who possibly cannot explain this but can understand genetics. However without any sample tasks and assessment schedules we are left guessing here - yet we are being asked to give feedback! Not cool NZQA / MOE, seriously not cool! |
| [ANON-767U-4EXU-Y](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EXU-Y) | There needs to be significantly more information about what students should be learning and how they will be assessed. Please consider using bullet points such as 'describe the structure of DNA' or 'interpret pedigree charts to identify sex-linked traits' or whatever it is that is considered to be important knowledge i.e. learning that should not be left to chance. Clearer articulation of relevant matauranga maori would be helpful too. |
| [ANON-767U-4EFE-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EFE-W) | I have a significant concern that there appears to be a deliberate effort to teach Genetics and Evolution (the two branches of Biology covered by this standard), without recognising the contributions of Gregor Mendel and Charles Darwin/Alfred Russel Wallace. I can not think of a justifiable reason why natural selection would be removed, nor mendelian inheritance. Without understanding of these concepts, we can not expect Biology students to make correct connections between ideas to understand the bigger picture (Big Ideas). Biology education will therefore be worse off.  Furthermore, the term genetic code refers to how DNA is translated (via mRNA) into sequences of Amino Acids. You are using this term incorrectly, as this code is universal and not variable. This in turn is another key insight that is fundamental to the understanding of genetics.  Finally, DNA is referred to as a blueprint for life, which it is not. A blueprint can be re-created from the finished product, but you can not re-create sequences of DNA based on an organisms appearance or a fossil. |
| [ANON-767U-4EPC-5](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EPC-5) | I'm not concerned about the nature of the assessment, but rather whether there are important aspects of genetics which are missing from standard. Some examples: - Students should be learning about cells and the cell life cycle. This allows them to understand how genetic mutation and sexual reproduction lead to genetic variation. Understanding mitosis as a corollary of this is equally important in providing a the context of what gametes are. - Students should learn what a genotype is and how this is expressed on an elementary level of DNA, RNA, amino acid, protein, trait. This requires knowing what DNA, RNA, amino acids, and proteins are on some level. - I think that you cannot understand this without understanding how amino acids are coded for. This requires knowing about the 4 base pairs. - Understanding how inheritance and mutation works requires understanding how DNA duplication works in terms of the phosphate sugar backbone and base pairs. |
| [ANON-767U-4EZY-5](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EZY-5) | The continued push to overlay matauranga to the exclusion of science is distressing. A matauranga explanation of inheritance runs beside a medelian explanation. They are not mutually exclusive. To realistically look at migration patterns, we should be looking at matriarchal mitochondrial DNA bottle necks and how that sits beside the whakapapa.  ' Mauri of living things allows them to exist in balance within the taiao. ' is another example of the new content supplanting/excluding another view . It ignores a) most of our ecosystems are not in balance and b) there are other explanations eg food webs. |
| [ANON-767U-411M-V](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-411M-V) | I do not think the concept of "mauri" belongs in either of the chemistry standards. This term is used twice in the matrix statements for chemistry • use knowledge of chemicals and their reactions to inform understanding of the mauri of the taiao • recognise that mauri is present in all matter which exists as particles held together by attractive forces Both of these statements have a very non-science (pseudo-science even) feel about them. What does “mauri is present in all matter” mean? If we substitute in the phrase from 1.1 unpacking, it reads “recognise that [the balance of health and well-being ] is present in all matter” which is meaningless. Does “mauri is present in all matter” mean all matter has a “life force”? Is this a science based idea? |
| [ANON-767U-41AU-M](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41AU-M) | Concerns regarding the depth of knowledge needed for Excellence in terms of the interconnection and application of migration, forenscis, and ethnical issues. What depth is needed? How much detail is expected at L1 (Curriculum Level 6)? The assessments must be clear with boundaries between levels of achievement at Achieved, Merit, and Excellence. |
| [ANON-767U-41HS-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41HS-S) | Further clarification of the 'interconnections between the mauri of living things and explain an aspect of the taiao' is needed. Very clear instruction or background information is needed to explain how 'identification of taonga and their relationships to other living things, or origins of taonga or people to inform whakapapa' can be related back or linked to genomic information. A lot of professional development or further information will be needed so that all teachers are on the same page of exactly what this means and is expected by NZQA for these points, especially those not familiar with mataurangi Maori, so they can adequately prepare students for the assessment. |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4169-D) | Much more information required. Who will mark the AS? When will it be assessed? Resources and exemplars essential. |
| [ANON-767U-41RT-4](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41RT-4) | A lot of assumed knowledge >A number of parts which they say will be assessed demand some understanding of parts that will not be assessed (Mendelian genetics and Punnett squares) >Arbitrary lines between assessed/not assessed seem to have been drawn  Human genetics/inheritance becomes very very difficult very very quickly >Linking to real life situations could either be trivial or incredibly complex >Could be demeaning or trivial towards culture >Oversimplifying could lead to later issues with misinterpretation of simplified learning |
| [ANON-767U-41RY-9](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41RY-9) | A lot of assumed knowledge A number of parts which they say will be assessed demand some understanding of parts that will not be assessed (Mendelian genetics and Punnett squares) Arbitrary lines between assessed/not assessed seem to have been drawn Human genetics/inheritance becomes very very difficult very very quickly Linking to real life situations could either be trivial or incredibly complex Could be demeaning or trivial towards culture Oversimplifying could lead to later issues with misinterpretation of simplified learning |
| [ANON-767U-41KF-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41KF-F) | Examples of assessment questions and expected responses would be helpful to ensure consistent assessment judgements. |
| [ANON-767U-41EY-V](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41EY-V) | "Ākonga will then look at the genome as a whole to explain how genomic information can be used to show interconnections between the mauri of living things" This is the part we are unsure about. what does this mean and how will this be assessed? This is less science based but emphasised in this standard being an Excellence point. |
| [ANON-767U-41KS-V](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41KS-V) | A bit more information about assessment questions and structure is required. Ensuring that schools around the country are teaching similar ideas. |
| [ANON-767U-41WY-E](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41WY-E) | 1. While it is good to acknowledge that monohybrid crosses are limited in their use, removal of them will result in the loss of co-dominance, incomplete dominance and lethal alleles from Level 2 NCEA. 2. There are many words expressed in te reo maori in this standard that do not sit with an explanation. This makes it difficult to easily navigate. These terms should be in the standard but perhaps a glossary needs to be underneath the A,M,E criteria. 3. Attaching this standard to a child's whakapapa is of concern. There are many children who are adopted who will not be able to do this. 1 in 5 children in NZ are IVF children and many of these are a result of egg or sperm or embryo donation. These children can not achieve this task. 4. At level 1 perhaps discussing the importance of genetic variation rather than genomic variation is more attainable. 5. It is good that DNA structure will no longer to assessed as this is typically taught in Year 10. |
| [ANON-767U-41DM-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41DM-F) | The use of a CAA with a response to a stimulus is a bad idea. If there is one way to guarantee teaching to the assessment and its specific context in the few weeks before the CAA, it is this. Instead we should assess concepts through regular examination, encouraging broad and deep coverage throughout the year of disciplinary concepts – this is more in line with the intent of the RAS.  A specific concern about the content to be assessed is that “base pairing is not assessed”. Why not? This is foundational to understanding of the genetic code and understanding the source of variation through mutation - a theme that appears elsewhere in the standard.  “All living things have a whakapapa which is inextricably linked with the mauri and presence of that organism” is more of a belief statement, not a scientific one. Should we not teach students to evaluate such a claim scientifically and critically examine the tensions between statements such as this and scientific knowledge? To teach a statement like this as if it is scientific knowledge unfortunately misrepresents both mātauranga Māori and science.  Abandoning Mendelian genetics is a grave error. There is no good reason to abandon Mendelian genetics, especially at this level, other than the SEG has apparently taken a dislike to it. The other approaches listed are “post-Mendelian” and require a Mendelian approach at the start in order to understand them properly. We can then move on to cases where Mendelian genetics does not account for the full complexity at higher levels such as Level 2.  Indeed, the development of Mendelian genetics is a good NOS teaching moment! Students should be able to understand, describe and use Mendelian approaches and then be able to explain how such a model can be simultaneously useful and also unable to describe the full complexity of inheritance patterns.  Punnett squares are a more equitable way of assessing student understanding of Mendelian genetics than any other way - they are efficient and do not require students to write paragraphs!  The concept of whakapapa has also, I think, been misapplied. It's not actually a scientific concept and I am unsure how and why the SEG has concluded that it is. Whakapapa emphasises connectedness. Of course, good science often highlights useful differences, distinctions and categories to help us systematise our understanding of the vast complexity of the world. This sits in tension with whakapapa (which is OK!) Whakapapa as a concept is not scientific and if misrepresented as science it forces us to consider the amorphous mass of complexity at the expense of precision and causal understanding of phenomena. It is better understood as a cultural concept that can give us good directions to follow with scientific research, as well as providing an ethical framework for resource management etc.  Finally, there is a very woolly and undefined criterion about linking genomic information to the interconnectedness and mauri of the taiao. It's apparent immediately that students and kaiako are going to have no idea what this criterion is asking of them. I would suggest here that the difficulty the SEG has clearly had in formulating this criterion comes from the fact that it is not assessing science. |
| [ANON-767U-417S-8](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-417S-8) | I would like clarification on how you see Level 2 and 3 of Biology changing in future. I'm assuming there will be a fairly major shift at higher levels given that this standard aims to remove several fundamental concepts: DNA structure and replication (what is the point of DNA without base pairs?), Punnet squares and natural selection. I feel that the current appearance of this standard will misrepresent biology as a soft option, lacking in a chemical underpinning and showing an Evangelical aversion to the idea of evolution. How are students to predict and interpret genetic inheritance without the neat simplicity of Mendelian genetics? I believe they need that approachable, straightforward set of rules to come to grips with the vast complexity and statistical probabilities of inheritance. I understand that the field of Biology is moving on with the inclusion of epigenetics etc but young people need a foothold of understanding if they are to reach those heights. I look forward to seeing your assessment activity to see how students are to share their knowledge and we are to judge their understanding without having any data to work with. |
| [ANON-767U-41AB-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41AB-1) | To specifically exclude monohybrid crosses in an assessment of genetic variation and inheritance is ridiculous - how then are students to gain a basic understanding of how inheritance of characteristics occurs ? And why is natural selection also excluded ? It provides a clear link to the living world that students see around them. The use of the descriptor "mauri" is problematic - there is no evidence for a life force - Science is an evidence based subject, not a spiritual one. There is no place for spiritual beliefs of any nature in a Science course. |
| [ANON-767U-412S-3](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-412S-3) | Why do we need to do Pasifika migration when this is covered in Social Studies? |
| [ANON-767U-41U4-7](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41U4-7) | A lot of assumed knowledge: - A number of the parts which you say will be assessed demand some understanding of parts that will not be assessed (Mendelian genetics and Punnett squares - how can we teach genetics without these being a core part?). - Arbitrary lines between assessed/not assessed seem to have been drawn. Human genetics/inheritance becomes very very difficult very very quickly. Linking to real life situations could either be trivial or incredibly complex: - Could be demeaning or trivial towards culture. - Oversimplifying could lead to later issues with misinterpretation of simplified learning. |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4EP7-S) | There is very little information given about what students can expect to sit as a CAA at the end of the year. The information given regarding what will be covered in the standard is brief and relies on the additional information provided in the sample course outlines to give the level of understanding required to attain the standard. |
| [ANON-767U-41ZR-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-41ZR-A) | The guidance is actually fine but we don't think it matches what students should be learning. Punnett squares are a good basis to learn how traits are inherited. It is a foundation idea and allows students to visualise the idea of passing on of traits from parents to offspring. Yes, simplistic, but is a good starting point at this level. Natural selection is a excellent way to understand variation in a gene pool, again as a starting point. Those carrying on into Biology can learn the the other concepts related to micro and macro evolution. For students who do not carry on with Science, a basic understanding of natural selection is useful for understanding their living world. |
| [ANON-767U-4SVW-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4SVW-D) | • Need to understand base pairing to understand mutation. • How do we teach mutations and the importance of variation in terms of how it affects a population without extending this to natural selection? • How do we teach comparative genomics without base paring? |
| [ANON-767U-4SV5-B](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-07-30.8057839758&user_id=ANON-767U-4SV5-B) | Issue 1: The explanatory notes are skeltal and provide insufficient detail. See current AS 91159 for an example of a standard with a helpful level of detail in the explantory notes. Issue 2: For Excellence, students are required to discuss 'interconnections between the mauri of living things'. The term 'mauri' is highly problematic and used throughout the CB standards (and even within them) to mean apparently quite different things. Why not use 'genetic relatedness' or some term that is clear and does not require a cultural understanding? Phy/ESS standards do not require students to demonstrate an understanding of te ao Maori to reach Excellence - why should Chem & Bio standards? Issue 3: In the unpacking of the standard, it states 'there has been a strong focus on mendelian genetics, this is no longer the case and the use of Punnett squares will not be assessed.' As a Biology teacher, I would hope that Punnett squares could be retained in learning and in some way in assessment, as they underpin many important concepts about inheritance. Issue 4: Information about the nature, duration, format and content of the assessment is insufficient. |

**Is this Achievement Standard [1.4] ready for piloting?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The standard is ready for piloting** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617387.08-18438&came_from_title=Responses+by+Question&filters%2Fquestions%2F2caa8b7390%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617387.08-18438%2Fpasted-question-1627617387.08-18438-1627617387.32-93802%3Alist=pasted-question-1627617387.08-18438-1627617387.32-93802%2FThe+standard+is+ready+for+piloting) | **0.21%** |
| **The standard needs small amendments before piloting** | [**16**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617387.08-18438&came_from_title=Responses+by+Question&filters%2Fquestions%2F64ff4d4113%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617387.08-18438%2Fpasted-question-1627617387.08-18438-1627617387.32-93802%3Alist=pasted-question-1627617387.08-18438-1627617387.32-93802%2FThe+standard+needs+small+amendments+before+piloting) | **1.68%** |
| **The standard needs significant amendments before piloting** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617387.08-18438&came_from_title=Responses+by+Question&filters%2Fquestions%2Feb3da5eb9e%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617387.08-18438%2Fpasted-question-1627617387.08-18438-1627617387.32-93802%3Alist=pasted-question-1627617387.08-18438-1627617387.32-93802%2FThe+standard+needs+significant+amendments+before+piloting) | **0.74%** |
| **The standard is unsuitable for piloting** | **0** | **0.00%** |
| **Not Answered** | [**926**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617387.08-18438&came_from_title=Responses+by+Question&filters%2Fquestions%2Fe799f8fec6%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617387.08-18438%2Fpasted-question-1627617387.08-18438-1627617387.32-93802%3Alist=pasted-question-1627617387.08-18438-1627617387.32-93802%2F__not_answered__) | **97.37%** |

**Are the Achieved, Merit and Excellence criteria clear enough to support consistent assessment judgments?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **The criteria are clear** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617402.51-58146&came_from_title=Responses+by+Question&filters%2Fquestions%2Ff2864f998c%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617402.51-58146%2Fpasted-question-1627617402.51-58146-1627617403.41-71609%3Alist=pasted-question-1627617402.51-58146-1627617403.41-71609%2FThe+criteria+are+clear) | **1.16%** |
| **The criteria need some clarification** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617402.51-58146&came_from_title=Responses+by+Question&filters%2Fquestions%2F23864f77fd%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617402.51-58146%2Fpasted-question-1627617402.51-58146-1627617403.41-71609%3Alist=pasted-question-1627617402.51-58146-1627617403.41-71609%2FThe+criteria+need+some+clarification) | **0.74%** |
| **The criteria need significant clarification** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617402.51-58146&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc98288a8c7%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617402.51-58146%2Fpasted-question-1627617402.51-58146-1627617403.41-71609%3Alist=pasted-question-1627617402.51-58146-1627617403.41-71609%2FThe+criteria+need+significant+clarification) | **0.74%** |
| **Not Answered** | [**926**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617402.51-58146&came_from_title=Responses+by+Question&filters%2Fquestions%2Ff32e726bb8%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617402.51-58146%2Fpasted-question-1627617402.51-58146-1627617403.41-71609%3Alist=pasted-question-1627617402.51-58146-1627617403.41-71609%2F__not_answered__) | **97.37%** |

**Does the unpacking of the Standard and the Proposed Assessment Approach provide sufficient and clear guidance on the use of the standard?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Guidance is sufficient and clear** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617416.96-51396&came_from_title=Responses+by+Question&filters%2Fquestions%2F057d4614d7%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617416.96-51396%2Fpasted-question-1627617416.96-51396-1627617417.46-46227%3Alist=pasted-question-1627617416.96-51396-1627617417.46-46227%2FGuidance+is+sufficient+and+clear) | **1.05%** |
| **Guidance is insufficient** | [**11**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617416.96-51396&came_from_title=Responses+by+Question&filters%2Fquestions%2Fdf7c2a091a%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617416.96-51396%2Fpasted-question-1627617416.96-51396-1627617417.46-46227%3Alist=pasted-question-1627617416.96-51396-1627617417.46-46227%2FGuidance+is+insufficient) | **1.16%** |
| **Guidance is unclear** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617416.96-51396&came_from_title=Responses+by+Question&filters%2Fquestions%2Fded0d4d955%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617416.96-51396%2Fpasted-question-1627617416.96-51396-1627617417.46-46227%3Alist=pasted-question-1627617416.96-51396-1627617417.46-46227%2FGuidance+is+unclear) | **0.42%** |
| **Not Answered** | [**926**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627617416.96-51396&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa1563fa76f%2Fsubpage.2021-07-29.0768193648%2Fpasted-question-1627617416.96-51396%2Fpasted-question-1627617416.96-51396-1627617417.46-46227%3Alist=pasted-question-1627617416.96-51396-1627617417.46-46227%2F__not_answered__) | **97.37%** |

**Do you have any further feedback on [Achievement Standard 1.4]? For instance, do you think the Proposed Assessment Approach will be capable of supporting fair and equitable assessment?**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4E5W-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4E5W-X) | Assessment approach = CAA in November (end-ish of term 4). Content-based. That’s OK. But why complicate things with release of stimulus two weeks prior? The validity of your assessment would plummet as that would reflect on students with the means, time and resources to research that stimulus against students at other NZ schools without that. Also, it is not specified as to what type or detail of stimulus would be released prior to the assessment. A concern, similar to the other chemistry standard, is the overt requirement at Merit and Excellence to correctly interpret and use the concept of taiao. The wider meaning of taiao, than just “environmental conditions” may become problematic. What is missing - the expected duration of the exam. As an example, an English external specifies a “1-2 hour exam”. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EQZ-W) | On I know this is based on a big idea but wow, is it dull or what? Am only guessing at the assessment - really we needed a sample - but am expecting some data interpretation task, probably with a lot of reading. The types of materials would sit well in the L2 chemistry course (where they currently are!) Level 1 are not ready for this and a 'generalised' introductory version of this will make no sense. How do you explain that some ionic solids are soluble and others are not - except 'they are'. How does a molecular solid like sugar dissolve in water yet wax does not? There arfe as many exceptions as there are patterns! Level 1 students are not ready for this YET students are to understand submicroscopic interactions between particles.... and this 'dull as hell standard c1.4' would not inspire a student to progress in Chemistry. I feel it has missed the mark completely - even polymers and smart materials would have been more interesting! Much of these 'describing and linking physical properties to the use' are done in Y9 and 10. |
| [ANON-767U-4EE9-G](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EE9-G) | Need better clarity on the external assessment task expectations such task written ordigital, number of questions, expectations of answer types (such as multichoice, short answer, long answer etc). Also the end of term 4 is not appropriate as there is no need to keep the Y11's until the end of term 4, the teaching plans provided are 32 weeks, so this does not match. |
| [ANON-767U-4E3T-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4E3T-S) | Greater clarity on external assessment tasks needed. Tasks to be written or digital, how many questions. What type of questions: multichoice, long or short questions etc. No need to leave assessment until end of term 4 where there will be a log-jam of assessments. |
| [ANON-767U-4EEG-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EEG-X) | Better clarify is needed for the external assessment. In particular what are the number of questions to be asked, will it be a written or digital exam . W hat is the structure of the exam long /short answer etc. When in term 4 is the exam , it states end of term 4? . Surely not need to keep the students here for too long. |
| [ANON-767U-4EEA-R](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EEA-R) | There is a lack of information for the external assessment task. No clarifications given to the types of questions (multichoice, short answer, essays etc). Examination period is inappropriate being left at end of term 4. A 32 week long course does not match up with the assessment being left until the end of term 4. |
| [ANON-767U-4E3K-G](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4E3K-G) | No information provided on task. Very difficult to determine how to pitch the topic and the style required e.g. will the task be long written answers, short questions, mathematic or multichoice. Not sure when task will be assessed - it states term 4 but does this mean in the exam slot or as a separate assessment? It would be make sense for it to be a part of the exam block in term 4. |
| [ANON-767U-4EEX-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EEX-F) | Assessment task expectations need to be fleshed out further, eg. number and type of questions. Specific wording for Merit vs Excellence Achievement Criteria. |
| [ANON-767U-4EER-9](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EER-9) | They need better clarity on the external assessment task expectations such taks written or digital, number of questions, expectations of answer types, such as, multi-choice, short answer, long answer etc... Also, the end of Term 4 is not appropriate, as there is no need to keep the Y11's until the end of Term 4, the teaching plans provided are 32 weeks, so this does not match. |
| [ANON-767U-4EJ3-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EJ3-F) | Excellence and Merit descriptors for this standard are the same!! Why are we not required to teach learners about delocalised electrons given that conductivity is one of the properties covered in this standard? And why not intermolecular forces either, if we are teaching them about strong, medium and weak forces of attraction between particles? |
| [ANON-767U-4EUP-Q](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EUP-Q) | Good standard. Could do with others as some cross-over with climate change science standard potentially? |
| [ANON-767U-4EZ8-4](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EZ8-4) | More explanation of how the external standard will be assessed as well as what the stimulus they receive is, could be included.  The statement in the 'big idea' that says that mauri is present in all matter seems blatantly wrong. While the idea that each particle has it's own identity and characteristics as an individual as well as part of a whole is good, mauri is not the right word for it. Not everything has mauri (life essence), especially not inanimate objects, which will likely be the focus of this standard. |
| [ANON-767U-4ETR-R](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4ETR-R) | It is very difficult to imagine what this stimulus material (given two weeks prior) would look like. Does this mean the students have an opportunity to prepare their own answer to memorise leading up to the assessment? Or, is this an opportunity to be given a context to then apply their knowledge to? |
| [ANON-767U-411T-3](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-411T-3) | Under unpacking the standard it talks about "a given stimulus provided two weeks prior to the assessment event" - This leads me to believe that this standard will better assess the teachers than the students. Students with better teachers will be better prepared by said teachers for this exam, as the teacher will help unpack the potential questions asked about the stimulus/resource and work through potential problems. Students with teachers who are 'not great' won't have this additional assistance, or may be steered in the wrong direction by a teacher who misunderstands the stimulus/resource. This will widen the gap between the 'haves' and the 'have-nots'. |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4169-D) | More resources and exemplars needed. |
| [ANON-767U-41RY-9](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41RY-9) | Mauri - how do we relate a ‘lifeforce’ to metals, salts, etc? Really difficult to teach content to lower-ability students - seems to reflect current level 2 standard Would like to see an exemplar of an external assessment to inform our opinions |
| [ANON-767U-41FU-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41FU-S) | The unpacking of the standard helps make more sense of the achievement standard. However it is starting to look more and more like L2 atomic structure in regards to physical properties that are studied of metallic, ionic, molecular solids. So: Physical properties are limited to melting / boiling points, conductivity, malleability, solubility, ductility, and hardness. This very much is just taking L2 content and bringing it down to L1. The links to Maori are not clear in the unpacking of the standard.  I do like the idea of the 2 weeks before the exam materials being released to students. I would like to know more about this however and for the nature of the assessment to be clarified. E.g. are teachers able to support students in interpreting this information released in advance? How are we preventing "cheating" of teachers helping students? What happens in several years time when the contexts provided start to become more difficult or complex to create exam questions about? |
| [ANON-767U-41KH-H](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41KH-H) | The ways in which this standard is assessed is quite broad. I like the range of activities which can be used to teach this topic, however, not having writing and balancing equations to me is an integral part of y11 chemistry. For me this standard is too broad and there is not enough directed teacher resources. |
| [ANON-767U-41DM-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41DM-F) | The exam with response to a pre-provided stimulus is a particularly bad idea. If there is one way to guarantee teaching to the assessment and its specific context, it is this. I can guarantee schools will do very little chemistry learning and then drill students in how to respond to the context in question in the 2 weeks before the exam. How depressing if we reduce science learning to this. Instead we should assess concepts through regular examination, encouraging broad and deep coverage of disciplinary concepts – this is more in line with the intent of the RAS.  In addition, the fact that linking interactions between particles to properties comes in only at excellence is an example of very low expectations. At A, students really only need to identify particles present and then, separately, describe a substance's properties. This is very, very simplistic and likely below curriculum level 6. |
| [ANON-767U-41AB-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41AB-1) | Providing students with stimulus material the suggested 2 weeks prior to the assessment will result in very unfair outcomes: it will advantage students with ready access to digital and other resources/parental support/extensive teacher guidance. There will be huge issues in assuring authenticity and assurance that resulting assessment will be representative only of the student's work. |
| [ANON-767U-412S-3](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-412S-3) | Why does it need to be related to the taiao? |
| [ANON-767U-41U4-7](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41U4-7) | - Mauri - how do we relate a ‘lifeforce’ to metals, salts, etc? - Really difficult to teach content to lower-ability students - seems to reflect current level 2 standard - We would like to see an exemplar of an external assessment to inform our opinions. What is this “stimulus” you speak of releasing prior to the external assessment? |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4EP7-S) | Additional information on what type of task and context students will be expected to engage in would be useful. The standard should be stand alone and a teacher shouldn't need to look at sample course outlines to determine the level or context(s) required for an assessment that will be delivered as part of the end of year examination period. |
| [ANON-767U-41ZR-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-41ZR-A) | In the standard criteria, the descriptions for Merit and Excellence are not clear. Merit sounds more complex the Excellence. This needs better wording to reflect the explanatory notes.  Explanation of mobile electrons surely would be needed for Excellence to explain why ionic solids do not conduct, but molten or dissolved ions do. Bonds are usually described as 'medium' strength.  The assessment conditions are unclear for the provided resource two weeks prior to the exam. Will this be for class discussion, or students work individually to process this information? If there is an exam period and students are no longer at school, how is this controlled? Some students may get more help than others to process the resources, which seems unfair. |
| [ANON-767U-4SV5-B](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627617429.96-78808&user_id=ANON-767U-4SV5-B) | I do not think the proposed assessment approach will support fair and equitable assessment. If the assessment is an examination, what is the nature and purpose of the 'stimulus', provided two weeks before? Is further teaching and learning assumed to happen during this time? What other assessments will be happening at that time, and also needing preparation? How will the different levels of 'unpacking' of the stimulus and teacher-driven preparation lead to fair and equitable student assessment? |

**Do the four Achievement Standards as a group credential the most important knowledge and/or skills for this subject as illustrated by the Learning Matrix?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Yes** | [**3**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621591.24-50363&came_from_title=Responses+by+Question&filters%2Fquestions%2F6f2f3e78a1%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621591.24-50363%2Fpasted-question-1627621591.24-50363-1627621591.53-13631%3Alist=pasted-question-1627621591.24-50363-1627621591.53-13631%2FYes) | **0.32%** |
| **Some gaps** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621591.24-50363&came_from_title=Responses+by+Question&filters%2Fquestions%2Fc1591de448%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621591.24-50363%2Fpasted-question-1627621591.24-50363-1627621591.53-13631%3Alist=pasted-question-1627621591.24-50363-1627621591.53-13631%2FSome+gaps) | **0.95%** |
| **Large gaps** | [**5**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621591.24-50363&came_from_title=Responses+by+Question&filters%2Fquestions%2F5be515685b%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621591.24-50363%2Fpasted-question-1627621591.24-50363-1627621591.53-13631%3Alist=pasted-question-1627621591.24-50363-1627621591.53-13631%2FLarge+gaps) | **0.53%** |
| **They cover the wrong knowledge and/or skills** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621591.24-50363&came_from_title=Responses+by+Question&filters%2Fquestions%2Ff0749acd29%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621591.24-50363%2Fpasted-question-1627621591.24-50363-1627621591.53-13631%3Alist=pasted-question-1627621591.24-50363-1627621591.53-13631%2FThey+cover+the+wrong+knowledge+and%2For+skills) | **0.11%** |
| **Not Answered** | [**933**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621591.24-50363&came_from_title=Responses+by+Question&filters%2Fquestions%2Fddcd291a35%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621591.24-50363%2Fpasted-question-1627621591.24-50363-1627621591.53-13631%3Alist=pasted-question-1627621591.24-50363-1627621591.53-13631%2F__not_answered__) | **98.11%** |

**Do the Achievement Standards support ākonga Māori to succeed as Māori? (select all that apply) (Do the Standards value mātauranga Māori? Do they place the learner at the centre?)**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **All standards do this** | [**10**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2F408b9c3db0%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2FAll+standards+do+this) | **1.05%** |
| **1.1 does this** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2F3ef72074f3%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2F1.1+does+this) | **0.42%** |
| **1.2 does this** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2F3d2c586e07%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2F1.2+does+this) | **0.21%** |
| **1.3 does this** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2Faa6168f78a%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2F1.3+does+this) | **0.42%** |
| **1.4 does this** | **0** | **0.00%** |
| **None of the standards do this** | [**2**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2F06f3a8a5cc%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2FNone+of+the+standards+do+this) | **0.21%** |
| **Not Answered** | [**933**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621603.43-99838&came_from_title=Responses+by+Question&filters%2Fquestions%2F83118198e4%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621603.43-99838%2Fpasted-question-1627621603.43-99838-1627621603.68-53989%3Alist=pasted-question-1627621603.43-99838-1627621603.68-53989%2F__not_answered__) | **98.11%** |

**Are the Achievement Standards appropriate to Level 6 of the curriculum? (Approximately Year 11)**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **Yes** | [**9**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621614.37-94818&came_from_title=Responses+by+Question&filters%2Fquestions%2Fd261203a09%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621614.37-94818%2Fpasted-question-1627621614.37-94818-1627621615.89-85996%3Alist=pasted-question-1627621614.37-94818-1627621615.89-85996%2FYes) | **0.95%** |
| **They are too challenging** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621614.37-94818&came_from_title=Responses+by+Question&filters%2Fquestions%2F00bd02e3d9%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621614.37-94818%2Fpasted-question-1627621614.37-94818-1627621615.89-85996%3Alist=pasted-question-1627621614.37-94818-1627621615.89-85996%2FThey+are+too+challenging) | **0.11%** |
| **They are not challenging enough** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621614.37-94818&came_from_title=Responses+by+Question&filters%2Fquestions%2F61a84e407c%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621614.37-94818%2Fpasted-question-1627621614.37-94818-1627621615.89-85996%3Alist=pasted-question-1627621614.37-94818-1627621615.89-85996%2FThey+are+not+challenging+enough) | **0.11%** |
| **They are a mix of too challenging and too easy** | [**7**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621614.37-94818&came_from_title=Responses+by+Question&filters%2Fquestions%2F205a7212a7%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621614.37-94818%2Fpasted-question-1627621614.37-94818-1627621615.89-85996%3Alist=pasted-question-1627621614.37-94818-1627621615.89-85996%2FThey+are+a+mix+of+too+challenging+and+too+easy) | **0.74%** |
| **Not Answered** | [**933**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dpasted-question-1627621614.37-94818&came_from_title=Responses+by+Question&filters%2Fquestions%2F7664e3cdee%2Fsubpage.2021-07-29.0489053590%2Fpasted-question-1627621614.37-94818%2Fpasted-question-1627621614.37-94818-1627621615.89-85996%3Alist=pasted-question-1627621614.37-94818-1627621615.89-85996%2F__not_answered__) | **98.11%** |

**Do you have any further feedback on the Achievement Standards? If you noted that there is important knowledge and/or skills missing, please detail that here.**

| Response ID | Answer |
| --- | --- |
| [ANON-767U-4EX7-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EX7-1) | There are already a plethora of misconceptions that students have about microbes. genetics, and chemistry. The same applies for whakapapa and mauri. To mash these concepts together creates rooms for even more misconceptions around fundamental concepts. Students can cover ideas from Science and Matauranga but to expect students to be "explaining how the life process of the microorganism enables it to carry out its role within the mauri of the taiao." is something that is actually very difficult to do and is subjective. Some teachers may be able to navigate this and others would completely ignore it (by translating it directly into English). Consider providing different contexts that could be assessed.  Che/Bio 1.3 is no different to the current Science L1 standard (genetic variation) just without punnett squares. Including mauri and whakapapa also opens up ideas such as 'this living thing is more important' and can infer that whakapapa is only about genealogy, when in fact it goes as far as including the environment and higher beings (Atua).  Che/Bio 1.4 has no obvious ways to allow matauranga to be shared other than tokenistic examples.  This is very different to Physics/Earth Sci resources |
| [ANON-767U-4ENE-5](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4ENE-5) | Missing - punnet squares, even though they are a over-simplicatation, they're useful for introdcuing mathmatical genetics ideas, and are accessful.  It seems like the Mātauranga Māori is optional  The use of Taiao seems like a direct translation of environment/world rather than a concept.  The word mauri is used in a different ways - in some places it seems like a concept from Te Ao Māori, which makes sense, but in other places it seems like its being equated with a western concept eg) energy or living. Need to have clear boarder crossings between knowledge systems (Waiti + Hipkins).  The external assessments are wild. Undefined. What do you mean?  The big ideas don't always flow well to the assessment accounts. |
| [ANON-767U-4E5W-X](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4E5W-X) | While it is understandable that exemplars for externals will not be available until phase 3 it makes it very tricky, if not impossible, to give detailed feedback on any given external. If only piloting schools get access to these exemplars then even confusion will continue to fester. The sooner the better, for all subjects, for external exemplars.  Similarly, for each internal, hopefully phase 3 will include actual samples of what a student’s work may look like. This will help in many ways.  For any external, it is a deep worry that any set of explanatory notes lacks specificity and detail. Compare any phase 2 external with any current NCEA external and it will become obvious that the NCEA-review documents need much more clarity, depth and detail. One purpose of the explanatory notes is to ringfence what is and is not assessed, but the other primary purpose is to specify what exactly is inside that boundary. Broad statements or phrases that can be interpreted in many different ways will lead to failure of the external assessment system as well as the failure by the students of NZ. |
| [ANON-767U-4EQZ-W](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EQZ-W) | They are a horrible suite of AS. The cynic in me says they are there to punish us for asking for 'more and better than' the Science AS. In all consultation bio + chem wasn't an option but suddenly this was what was on offer. (Was phy + chem. and bio and ess). So we neither have a coherent course in either, and have in effect been offered just 2 standards in each. Where is the opportunity to do a practical investigation in any of bio/chem and PESS? Maybe S1.1 could be used as an overarching assessment for a course, with modification but the unpacking and the mātauranga pūtaiao investigation framework is not always applicable - especially for those of us where the local iwi and support of kaumatua is not strong (in Science beyond 'ecology'). That said the sample tasks 'Modelling - Supply networks of electrical energy' don't seem to match this - but that's feedback for another subject, another day. |
| [ANON-767U-4EFG-Y](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EFG-Y) | The depth of knowledge required needs clarifying. |
| [ANON-767U-4EJ5-H](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EJ5-H) | I'm surprised that the revamp of NCEA to include Matauranga Maori, Human Biology is completely taken away. It's not in Science or Health either. Something needs to be done to include something about human bio. |
| [ANON-767U-4EWA-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EWA-A) | The intended addressing of lack of te ao Maori in the curriculum is loose. The curriculum does not seem to have been changed to address this, rather there are tenuous links to a context that does not necessarily give me any understanding or assurance of how our Maori akonga will achieve or engage any further. |
| [ANON-767U-4EU4-U](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EU4-U) | There is a lack of "Ecology: Investigate the impact of natural events and human actions on a New Zealand ecosystem." which is one of the most immediately visible things for students to connect with in the world around them. This Living World Level 6 Achievement Objective is better assessed in PES1.1 "Demonstrate understanding of changes within the Earth System" which is specific to human induced changes and the assessment tasks are all about deforestation, mining and carbon emissions. With the Climate Change movement and Student Climate Strikes, this is an area of science that students feel the most connected to, but it doesn't feature in the Biology standards? |
| [ANON-767U-41AT-K](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-41AT-K) | I filled out this form with my dept, but I just wanted to add one comment that I forgot to mention. With kaitiakitanga, the concept of mauri is there, but the important conceps of tapu, mana and noa are not. I think they need to be there to avoid giving lipservice to mātauranga. If they aren't there, kaitiakitanga will just be equated to sustainability, and mauri to health. |
| [ANON-767U-41AU-M](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-41AU-M) | CB 1.3 would be most challenging. Rates of Reaction, concentrations knowledge, displacement reactions and solubility rules missing from CB 1.2 Practical Investigation to implement Scientific Method. We would probably avoid CB 1.1 and use Science 1.1 instead. |
| [ANON-767U-415N-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-415N-1) | Are they doing enough for climate change action? Can we do more to utilize our schools as platforms to utilize societal reform. Applying learning to real world contexts and actually make a difference within our communities.  The AS don't make enough explicit link to ecology. |
| [ANON-767U-4169-D](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4169-D) | As a foundational course, Physics and Earth Science is missing. Can students with SLD's only do internals? Can students with academic aspirations do 3 externals and 1 internal from the matrix? |
| [ANON-767U-41GJ-F](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-41GJ-F) | The standards seem to be quite limited in their scope in comparison to the big ideas and significant learning. For example, the first big idea is that all living things are connected, but the standard only relates to micro-organisms and the sample tasks seem very similar to the current Level 1 microbes standard. Why not broaden the scope of this standard to consider ANY type of ecological interaction. Similarly with 1.2 the big idea talks about chemicals neither being inherently good or bad, but the standard is only focused on certain reaction types which again seems very similar to the current S1.8. There also seems to be a very strong emphasis on environmental impacts in all these standards which is not implied in the big ideas/significant learning. Finally, I am concerned that these standards will not adequately prepare akonga for the rigors of NCEA Level 2 biology or chemistry. For example, in the chemistry area there seems to be little emphasis on understanding the structure of an atom, ions, ionic compounds or balancing chemical reactions, all of which are (or have been) assumed skills/knowledge in L2 chemistry. |
| [ANON-767U-415H-U](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-415H-U) | I think that we will need to be careful that the matauranga Maori work that we do is actually Science and not Social Studies. I think teachers will need more guidance on this. As a whole I think these 4 AStds contain some good ideas. |
| [ANON-767U-41AB-1](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-41AB-1) | I support the inclusion of mātauranga Māori wherever appropriate, however am very concerned about the explicit statements linking to the "mauri" which the MOE glossary defines as "life force". Science is evidence based. There is NO evidence for any " life force" - this is a cultural/spiritual belief that has value, but is NOT Science, so has no place in any Science course. |
| [ANON-767U-4EP7-S](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4EP7-S) | It would be useful to see how these standards linked to assessment at level 2 and 3. Currently, the standards lack sufficient detail and seem to work on the assumption that schools will offer these standards in combination with the proposed science standards. It is good to see that all of the proposed assessment tasks have equity at their core and a genuine effort has been made to ensure that all students are able to engage with the tasks. It is also good to see the increased use of Te Reo in the standards and the inclusion of NZSL in the internal assessment tasks. |
| [ANON-767U-41ZR-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-41ZR-A) | Some aspects have been 'dumbed down.' Other aspects have been included to make it more complex. On the whole, the balance is still there in terms of being challenging for those students who need it, and accessible for those students who are not pursuing science as a future option. |
| [ANON-767U-4SV4-A](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=pasted-question-1627621628.91-54132&user_id=ANON-767U-4SV4-A) | The standards seem to be quite limited in their scope in comparison to the big ideas and significant learning. For example, the first big idea is that all living things are connected, but the standard only relates to micro-organisms and the sample tasks seem very similar to the current Level 1 microbes standard. There is a lack of ecology. Why not broaden the scope of this standard to consider ANY type of ecological interaction. Similarly with 1.2 the big idea talks about chemicals neither being inherently good or bad, but the standard is only focused on certain reaction types which again seems very similar to the current S1.8. I am also concerned that these standards will not adequately prepare akonga for the rigors of NCEA Level 2 biology or chemistry. For example, in the chemistry area there seems to be little emphasis on understanding the structure of an atom, ions, ionic compounds or balancing chemical reactions, all of which are (or have been) assumed skills/knowledge in L2 chemistry. There doesn't appear to be any connection with rates of reaction which in biology links well with enzymes and reactions in L2 Biology. !.3 - not sure how the link between mauri and particles works, is this really mātauranaga or just trying to fit it in??? Needs clarity. |

**What do you think of the proposal to change the title of Chemistry and Biology?**

| **Option** | **Total** | **Percent** |
| --- | --- | --- |
| **I think it should remain as Chemistry and Biology** | [**4**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-08-01.2049063399&came_from_title=Responses+by+Question&filters%2Fquestions%2F190cc6376d%2Fsubpage.2021-07-29.0423558238%2Fquestion.2021-08-01.2049063399%2Fquestion-2021-08-01-2049063399-radiosubquestion%3Alist=question-2021-08-01-2049063399-radiosubquestion%2FI+think+it+should+remain+as+Chemistry+and+Biology) | **0.42%** |
| **I think it should change to Combined Science: Chemistry and Biology** | [**1**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-08-01.2049063399&came_from_title=Responses+by+Question&filters%2Fquestions%2Fff83084059%2Fsubpage.2021-07-29.0423558238%2Fquestion.2021-08-01.2049063399%2Fquestion-2021-08-01-2049063399-radiosubquestion%3Alist=question-2021-08-01-2049063399-radiosubquestion%2FI+think+it+should+change+to+Combined+Science%3A+Chemistry+and+Biology) | **0.11%** |
| **I think it should change to Life Sciences** | **0** | **0.00%** |
| **Not Answered** | [**946**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/manage_respondents?came_from=https%3A%2F%2Fconsultation.education.govt.nz%2Fncea%2Fras-level-1-phase-2-test%2Fconsultation%2Fquestion_report%3FquestionId%3Dquestion.2021-08-01.2049063399&came_from_title=Responses+by+Question&filters%2Fquestions%2Fa51ce5de89%2Fsubpage.2021-07-29.0423558238%2Fquestion.2021-08-01.2049063399%2Fquestion-2021-08-01-2049063399-radiosubquestion%3Alist=question-2021-08-01-2049063399-radiosubquestion%2F__not_answered__) | **99.47%** |

| **Response ID** | **Answer** |
| --- | --- |
| [**ANON-767U-4EQZ-W**](https://consultation.education.govt.nz/ncea/ras-level-1-phase-2-test/consultation/response_view?fromQ=question.2021-08-01.2049063399&user_id=ANON-767U-4EQZ-W) | I think it should be shuffled - to Chemistry and Physics - Physical Sciences. I also think the names of the AS need changing (again); |