

UNDERSTANDING SCIENCE INTERIM ASSESSMENTS

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Interim assessments assess smaller bundles of content throughout the year. They are designed to support ongoing teaching and learning, offering educators timely insights into student performance. By using this information, educators can gauge students' understanding and skills, helping to inform and adjust future instruction. For additional details on the purpose, types, and uses of interim assessments, please refer to the [OSAS Interims Assessment Overview](#).

Currently, there are 221 ODE Science Interim Assessments items—available at no cost to Oregon districts—that directly align with Oregon’s K-12 Science Standards. These assessments are designed to align with the item structure and [blueprint](#) of the Oregon Statewide Assessment System (OSAS) for Science. Each interim assessment item is designed to engage students in grade-appropriate meaningful science phenomena aligned to a specific [Oregon Science Standard](#).

This guide will provide educators and administrators with information on how assessment items are presented, the language formats available, how items are grouped together, and additional resources for classroom assessments.

SCIENCE INTERIM ASSESSMENT ITEM STRUCTURE

Similarly to OSAS Science summative items, the Science Interim Assessment items are structured as clusters or standalones.

Cluster Items. Cluster items are structured as tasks centered around real-world phenomena. [Figure 1](#) shows how a cluster is aligned with a standard and connects to its stimulus and task demand. The stimulus introduces a phenomenon or design problem that engages students and can be explained, modeled, investigated, or designed using the skills and knowledge outlined by the standard. The task demand specifies what students are required to do in response to the stimulus. The task demand is divided into multiple parts, each incorporating the three dimensions (Disciplinary Core Ideas-DCI, Science and Engineering Practices-SEP, and Crosscutting Concepts- CCC) of the standard (PE). These tasks are scored using specific scoring assertions, which are criteria that define the expected student responses. Most cluster items contain four or more scoring assertions. [Figure 2](#) provides an example of a Grade 5 cluster item in a student-facing format. On the left is the stimulus and on the right is the task demand.

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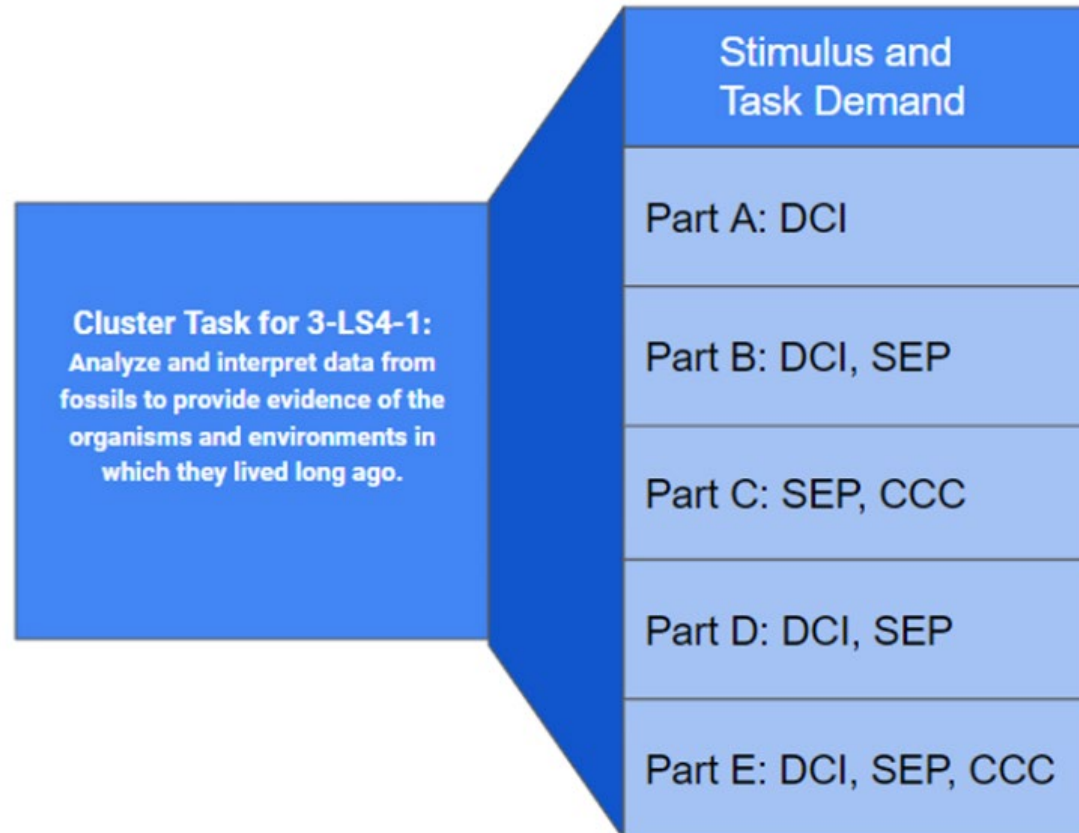


Figure 1. Cluster Item Structure.

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A student rings a doorbell. When the person inside the house is on the main floor, he can easily hear the doorbell. When he is upstairs, though, he cannot so easily hear the doorbell.

Figure 1 shows the circuit of a simple doorbell when it is on (pressed) and off (not pressed).

Figure 1. Simple Doorbell Circuit

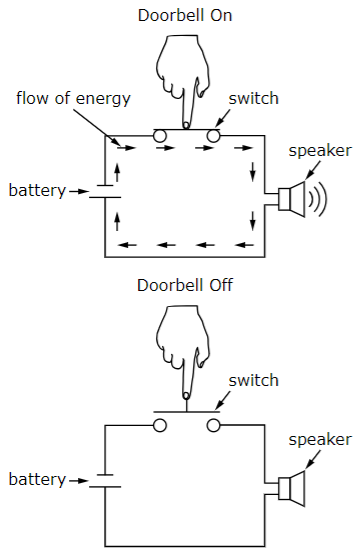


Table 1 shows the types of doorbell speakers available and their cost, in dollars (\$).

5

Part A

Click on each blank box and select a phrase to describe what is happening to the energy at each part of the circuit when the doorbell is turned on.

Parts	Energy Pathway when Doorbell Is on
Battery	<input type="text"/>
Wires	<input type="text"/>
Speaker	<input type="text"/>

Part B

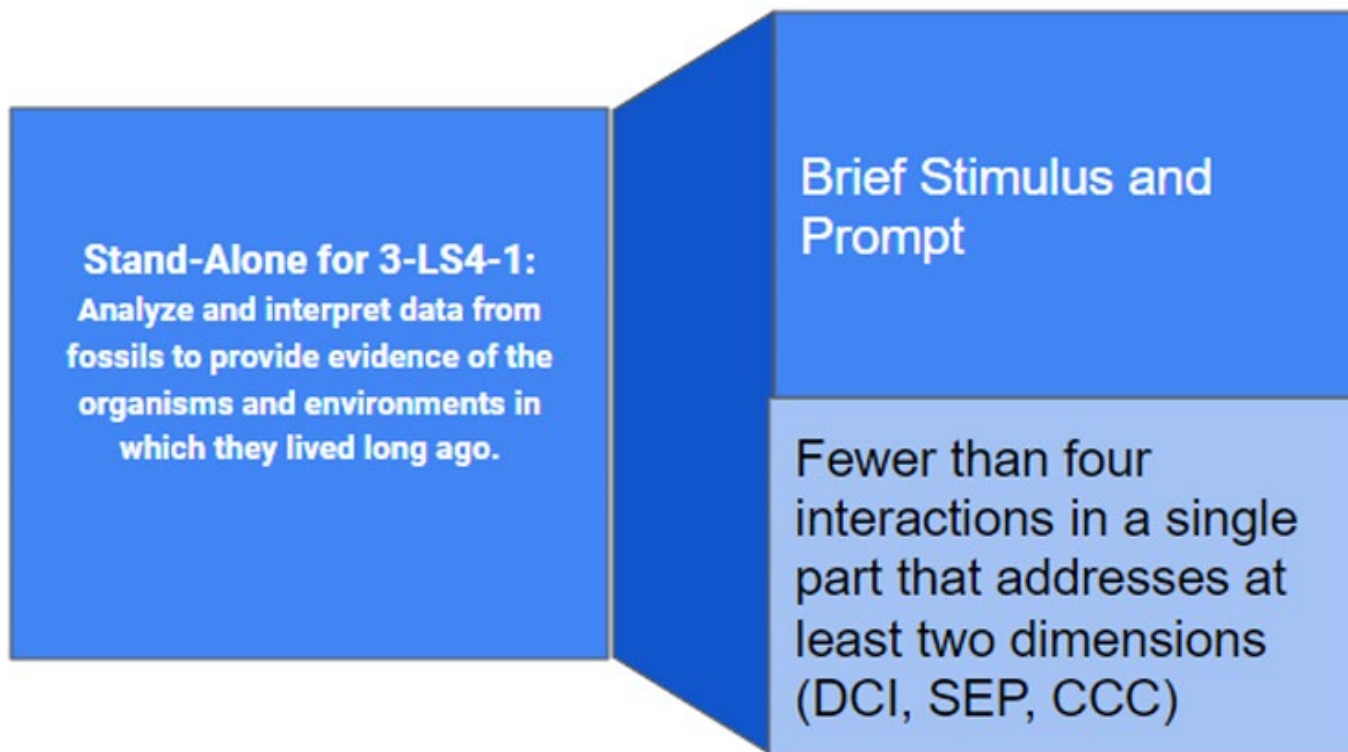
Use the simulation to select the materials necessary to conduct fair experiments and create a doorbell that can be heard from upstairs and costs less than \$40. The student can only hear a doorbell from upstairs if it is loud or very loud.

- Select the speaker, battery, and switch to determine the overall cost and loudness of the doorbell.
- Then click Run Trial.
- The cost of wire has already been included in the total cost.
- You must complete **two** trials.
- You may run up to **five** trials.
- Click the trash can icon if you want to delete a trial and generate new data.

Figure 2. Grade 5 NGSS Sample Cluster Item Student facing

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Standalone Items. Standalone items are also structured around real-world phenomena, though they are shorter in length than cluster items. [Figure 3](#) illustrates how a standalone item aligns with a standard and connects to its stimulus and task demand. The stimulus presents a concise phenomenon, while the task demand involves fewer interactions that address at least two of the three dimensions (DCI, SEP, CCC). Most standalone items include fewer than four scoring assertions. [Figure 4](#) offers an example of a student-facing Grade 11 standalone item.



[Figure 3](#). Standalone Item Structure

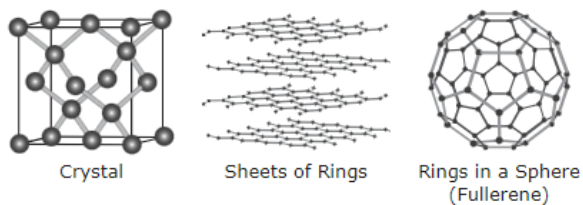
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A diamond and a piece of graphite are both made out of carbon, but the diamond has different properties from the piece of graphite.

Carbon forms chemical bonds in various forms, such as rings, sheets, and crystal structures. Another element forms similar structures.

Figure 1 shows three of the various three-dimensional structures carbon can form.

Figure 1. Three-Dimensional Structures of Carbon



Part A

Which element would form structures similar to carbon?

- Ⓐ iodine
- Ⓑ silicon
- Ⓒ lithium
- Ⓓ titanium

Part B

Using the periodic table, enter the number of valence electrons that would be contained in the element that forms structures similar to carbon. Enter your answer in the blank box provided.

Number of valence electrons in element:

Figure 4. Grade 11 NGSS Sample Standalone Item.

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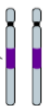



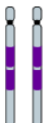

SCIENCE INTERIM ASSESSMENT LANGUAGE PRESENTATION AVAILABLE

Interim Assessment are available in English, Spanish, and Braille. Students whose first language is Spanish, or students enrolled in Spanish dual language programs, may benefit from using the Spanish presentation. Additionally, students who read text via braille (refreshable braille display or embossed braille on paper) or who use a screen reader, have the option to take the interim assessment in Braille presentation. [Figure 5](#) is an example of a Grade 8 Spanish language sample test item for science.

Las moscas con fenotipos de ojo en forma de barra no pueden ver tan bien como los que tienen fenotipos de tipo silvestre.

En la figura 1, se muestran los genotipos y fenotipos de tres moscas.

Figura 1. Genotipos y fenotipos de tres moscas

Genotipo	Cromosomas	Fenotipo
Tipo silvestre B^+B^+		Tipo silvestre 
Barra heterocigota B^+B^-		Ojos en forma de barra 
Barra homocigota B^-B^-		Ojos en forma de barra 

Fuente: Scitable by nature EDUCATION

Haz clic en cada casilla en blanco para seleccionar las afirmaciones que completan la cadena de eventos que explican cómo la mutación del ojo en forma de barra reduce la vista de la mosca.

Cadena de eventos

Paso	Evento
1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	La vista de una mosca se reduce.

[Figure 5](#). Grade 8 NGSS Sample Item in Spanish Presentation.



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GROUPING OF SCIENCE INTERIM ASSESSMENTS

Interim Assessments are organized in two groups: 1) Interim Assessment Blocks (IABs) and 2) Focused Interim Assessment Blocks (FIABs). Each interim test is designed to take no more than 20 minutes.

IABs includes sets of items covering either different related science standards or the same standard but varying phenomena. In contrast, FIABs are focus on a single science standard.

Both IABs and FIABs present items structures as cluster or standalone. However, IABs are designed to cover a broader range of content. Items in IABs are grouped based on topics that are typically taught together or sequentially in the classroom. To review the list of science items available, please refer to OSAS [Interim Assessment Overview](#).

SCORING AND REPORTING

All Science Interim Assessments are scored automatically as soon as students submit their test. Results are available in real time through the Centralized Reporting System (CRS), making it easier for teachers to reflect on both teaching and learning.

Teachers can view results for students who participated in a test session they administered or for those assigned to them through a roster. The results include **raw scores** for the item clusters in the assessment, but no scale scores or achievement levels are provided for interim assessments. In addition to raw scores, teachers can review the **scoring assertions** for each item cluster, which detail the expected student responses. They can also view individual student responses to each assertion, offering a comprehensive breakdown of student performance.

Educators can access scoring guides for each item cluster via the General Resources tab in TIDE from the [OSAS Portal](#). Individual item scoring guides are available within the Centralized Reporting System (CRS) under Rubric & Resources. For more information, please review the [Science Interims Quick Guide](#).

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IMPORTANT TAKEAWAYS RELATED TO THE SCIENCE INTERIM ASSESSMENTS:

- The Science Interim Assessments are aligned with the Oregon Science Standards (NGSS).
- All embedded designated supports offered on the Science Summative Assessments are available on the Science Interim Assessments, including Text-to-Speech, Spanish translation, and many options offered in Braille.
- All items on the Science Interim Assessments are machine-scored. Once a student has taken and submitted a Science Interim Assessment, the results are reported immediately in the CRS.
- Educators and administrators can securely log into the Assessment Viewing Application (AVA) to preview the Science Interim Assessments alongside their rubrics without needing to create a test session.
- All students are eligible to take any Science Interim Assessments, as long as they are registered in TIDE.
- Students have five opportunities to take each Science Interim Assessment, though the same assessment cannot be taken twice in one day.

Additional information can be found on the [Oregon Department of Education Interim Assessment webpage](#).

For additional questions regarding science, please contact:

- [Dr. Mariela Salas Bao](#), Science Assessment Specialist.
- [Jamie Ramage](#), Science Education Specialist.