

Performance Assessment Screener

Read or **take** the entire assessment.

Reflect - What did you like? What was confusing?

Use the standard to apply the **checklist** in order.

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| 1. The assessment contains a phenomenon (science) or a problem (engineering). | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 2. The prompts match the Science and Engineering Practice (SEP) and engage students in sense making. | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 3. The stimuli have multiple and sufficient information needed to utilize the SEP .
(e.g. text, images, video, etc.) | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 4. The prompts elicit observable understanding of the Disciplinary Core Idea (DCI) . | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 5. The prompts explicitly mention the Crosscutting Concept (CCC) . | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 6. The assessment includes language from the grade appropriate progressions.
(colored boxes) (DCI)(CCC)(SEP) | No | Partially | Yes |
| | ☐ | ☐ | ☐ |
| 7. The phenomenon or problem is novel to show the transfer of knowledge.
(i.e. not in the unit) | No | Partially | Yes |
| | ☐ | ☐ | ☐ |

State Standard



7.3.3 Construct an explanation using evidence to explain how body systems have various levels of organization. Emphasize understanding that cells form tissues, tissues form organs, and organs form systems specialized for particular body functions. Examples could include relationships between the circulatory, excretory, digestive, respiratory, muscular, skeletal, and nervous systems. Specific organ functions will be taught at the high school level. (LS1.A)

Grade 7 - Online body systems

What did you like?

We liked learning about the frogs' extra respiratory organs. Lots of models for stimuli. The comparison between frogs and humans was nice. We liked the question about comparing the structure of frog and human cells.

What was confusing about the assessment?

Is skin an organ? The words tissue, cell, and system (e.g. skin tissue) give away the answer.

Checklist:

1. Partially - the frog is an observable phenomenon but there is no sense-making.
2. No - Wrong practice - not constructing an explanation with evidence
3. Partially -
4. Partially - hierarchy is good (e.g. cells-tissue-organs) no interacting systems
5. No - not in the constructing of the explanation
6. Partially - nothing on the relationship between the systems. Interactions.
7. N/A

Suggestions -

Questions 1-12 should be formative assessments within the unit. Start with the frog as a phenomenon. Include another system in the model (i.e. circulatory system). There needs to be a question that the students are constructing an explanation for. Phenomenon- Frogs can hold their breath from 4-7 hours. How do they use interacting body systems to provide oxygen to their cells while holding their breath - Claim - Evidence - Reasoning.

For example: Use evidence

Practice - Construct an explanation with evidence

Crosscutting Concept - Function

DCI - Cells to Organ system -hierarchy of life, and interacting systems

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| | ☐ | ☐ | ☐ |

State Standard

8.4.4

Analyze and interpret data on the factors that change global temperatures and their effects on regional **climates**. Examples of factors could include agricultural activity, changes in solar radiation, fossil fuel use, and volcanic activity. Examples of data could include graphs of the atmospheric levels of gases, seawater levels, ice cap coverage, human activities, and maps of global and regional temperatures. (ESS3.D)

What did you like?

We enjoyed analyzing the patterns in the graph. It made us think about causes that would account for the changes. We liked that the time scales were different so you couldn't just compare the general trends. It was a real phenomenon.

What was confusing about the assessment?

MC Question 1 - solar energy isn't trapped. Heat is trapped. Question 2 - Atmosphere is still ok. Temperature anomaly? Is the CO2 a global distribution as well? Question 6 (prediction) and 7 would be difficult to assess.

Checklist:

1. Yes - both the temperature and CO2 changes
2. Yes
3. Partially - you can't interpret with only one cause and one effect - more data
4. No - there is no effect on regional climates
5. Partially - change and effect are in terms not the practices
6. No - mostly regional climate as well as multiple factors are missing (e.g. volcanic activity, solar radiation,)
7. N/A

Suggestions - Include more factors and effects. Here's a [nice link on regional climate](#) changes. I included a couple graphs on the following pages. Use CER as a framework for prompts.

Question: What factors are affecting global temperatures and regional climates.

