

SCIENCE TASK ANNOTATION

ANNOTATION KEY

EQUITY

Supporting a wide range of diverse students.

SCENARIOS

Information provided to elicit performances.

SEPs

Opportunities to demonstrate science and engineering practices.

DCIs

Opportunities to demonstrate understanding of disciplinary core ideas.

CCCs

Opportunities to demonstrate understanding of crosscutting concepts.

SENSE-MAKING

Opportunities for reasoning about phenomena and problems.

ASSESSMENT PURPOSE

Highlights how the task features connect to intended assessment use.

WATER WISE STUDENT PRODUCT WORKSHEET

Overall: it would be helpful if the teacher guide included supports for connecting this task to any appropriate ELA standards to better support elementary teachers.

CONNECTION TO ASSESSMENT PURPOSE

WATER WISE

LETTER TO THE MAYOR

Overall task: this is very similar to the conversation students will have had in the community discussion, which might make it difficult for a teacher to discern between students who really “got it” and students who are repeating what they heard in the group conversation.

CONNECTION TO ASSESSMENT PURPOSE

The emphasis of a “letter” seems to suggest an emphasis on written responses, with some specific opportunities to bring in graphs and images (e.g., when citing evidence). The task seems like it could support multiple ways of making student thinking visible, like diagrams—if this is permissible, it would be helpful if this was made clear to students.

EQUITY

Dear Mayor,

WATER WISE STUDENT PRODUCT WORKSHEET (CONTINUED)

Describe the problem:

Throughout the task, scaffolding through prompts like this help students track all of the information they need to include for a complete response. This helps ensure students are making their complete thinking visible, providing more information about student understanding.

EQUITY

CONNECTION TO ASSESSMENT PURPOSE

Set the Context — Explain how stakeholders will need to change their water use. Include why some will need to reduce their water use more than others.

Scaffolds like this prompt remind students what information to include while still allowing them to make sense-making visible. It should be noted that students may be representing their prior thinking (from the group work) rather than actively constructing a new understanding here.

EQUITY

Explain to the Mayor how changing the water use of some major stakeholders will impact the city's water use as a whole system.

When students describe how some stakeholder water use impacts the whole system, they are making their thinking about systems and system models visible.

CCCs

SENSE-MAKING

WATER WISE STUDENT PRODUCT WORKSHEET (CONTINUED)

Identify which stakeholders you think should change their water use the most in order to reduce all of California City's water use.

Students must make a claim (justified below) based on evidence, providing an opportunity to demonstrate the SEP element "construct an argument with evidence...".

Students have the opportunity to make choices and decisions about which stakeholder group(s) belong here as long as their responses can be supported by evidence and reasoning, allowing them to take more ownership over the task

SEPs

EQUITY

Provide evidence that shows the water use of these stakeholders. Use evidence from at least two sources including text, charts or graphs. Draw or paste the charts or graphs here.

Here, students have to obtain and communicate information provided by each stakeholder group to describe the water usage by the stakeholder groups, demonstrating the 3-5 SEP element "obtain and combine information from complex texts and/or other reliable media to support [engaging in argument]".

Students get to choose which evidence is the most compelling, providing an opportunity to increase student ownership over the task.

SEPs

EQUITY

Use this evidence to explain why these stakeholders are the best choice for reducing water use in California City.

Here, students complete the argument by connecting the evidence to their claim with reasoning. It should be noted that because students are guided through constructing the argument, this task does not assess whether students understand how to construct an argument. It:

- 1) gives students the opportunity to demonstrate that that understand how to evaluate information to provide compelling evidence, and
- 2) gives students the opportunity to develop and practice constructing arguments.

SEPs

SENSE-MAKING

WATER WISE STUDENT PRODUCT WORKSHEET (CONTINUED)

Make recommendations for how these stakeholders might reduce their water use.

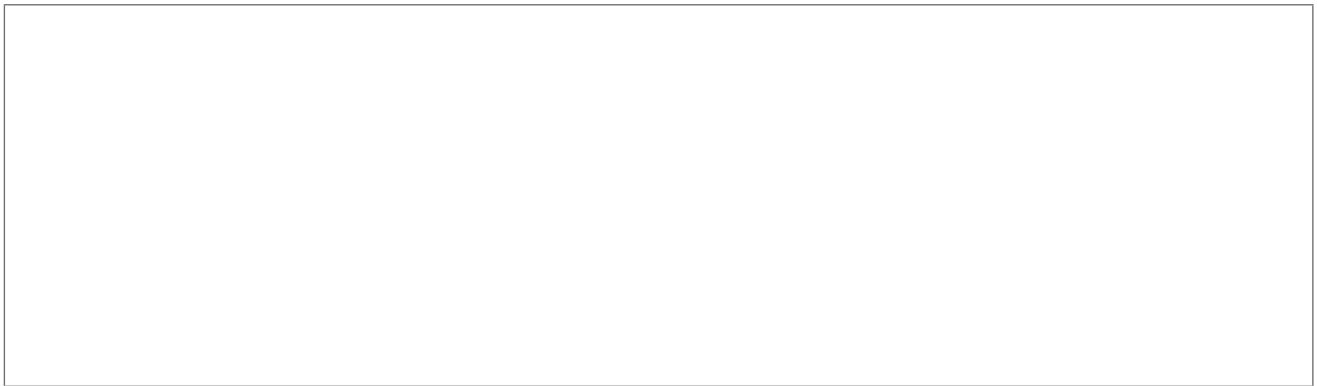
Like above, students need to make an evidence-based claim (recommendation) for reducing water use. The next portion of the task (through evidence and justification) provides students another opportunity to demonstrate parts of the SEPs engaging in argument from evidence, and obtaining, evaluating, and communicating information. Similar to above, students have a great deal of choice and decision-making power, supporting student ownership of and confidence in their work.

SEPs

SENSE-MAKING

EQUITY

Provide evidence that shows the water use of these stakeholders. Use evidence from at least two sources including text, charts or graphs. Draw or paste the charts or graphs here.



Use this evidence to explain how these are the best solutions to reduce water use the most by these stakeholders

Sincerely,
