



What's Sprouting Lab TDA

Instructional Text Dependent Questions and Text Dependent Analysis Prompt	
Time of Administration	January 21 - 27, 2019
Text	<i>7 Factors that Affect Seed Germination</i> and What's Sprouting Lab Data Graph
Complexity (Lexile and Qualitative analysis)	Est Lex: 1010-1200 Article heavily dependent on vocabulary which is being supported in class discussion
Reading Elements/Structure for analysis	Graph Structure

Instructional Text Dependent Analysis Prompt

In the What's Sprouting Lab, you read an article titled, "7 Factors that Affect Seed Germination" and created a graph of your data. Write an essay explaining which factors impacted radish seed germination in this lab. Use evidence from the article and graph to support your analysis.

Sample Proficient Student Response

Many factors could impact radish seed germination. In our lab, temperature and light played the most significant roll in seed germination. In "7 Factors that Affect Seed Germination" it states, "some seeds germinate just fine in the dark while other seeds need light to break dormancy." The seeds in Phase 1 (in a cabinet) and Phase 2 (in a window sill) both germinated. Also from the article, it states, "most vegetable seeds benefit from added heat ..." Phase 1 of the lab the seeds were kept at room temperature while Phase 2 was near a window where the temperature was impacted by sunlight or outside temperature. Phase 3 was in the refrigerator where it was dark and cold. The graph of the What's Sprouting Lab data showed the size of germination growth. In Phase 1, the most germination growth was seen. In Phase 2, there was germination but not as much growth. And, Phase 3 had little to no germination growth. In conclusion, with Phase 1 having the most germination growth, I conclude radish seeds need a warm dark environment to germinate.

***NOTE:** Students do not need to use all the evidence that is found in the text. They do need to explain the relationship of the evidence that they select to the reading element expected in the prompt.

Instructional Text Dependent Questions that Scaffold the Response to the Text Dependent Analysis Prompt		
Opening question to orient students to the text		
Text Dependent Question	Page/Paragraph/Line	Possible Text Evidence/Explanation
Key idea: What is the author going to discuss?	Close Reading Slide 1 of 10	"environmental conditions to break dormancy. Germinating most .. varieties of .. seeds ..." Explain: factors impacting germination
Key idea: Why should urban water be left sit on a counter for 24 hours?	Close Reading Slide 2 of 10	"water should be ...chlorine-free. Urban water supplies are heavily chlorinated ..." Explain: reduce the chemicals that could impact germination



Craft/Structure: What does substrate mean? How do you know?	Close Reading Slide 4 of 10	“You might have expected me to say “soil” here” Explain: what plants grow in
Craft/Structure: How will you use the structure of the article to help you find information you need?	Close Reading Slide 10 of 10	The Title “7 Factors that Affect Seed Germination” Explain: the article is numerically structured with headings; the headings can guide to information that can be cited in writing
Integration of knowledge: How do you think this text supports what you observed in the lab?	Close Reading Slide 7 of 10	Evidence/Explanation “Some seeds germinate just fine in the dark while other seeds need light to break dormancy.” Explain: seed usually need to be in a dark place to germinate
Integration of knowledge: How do you think this text supports what you observed in the lab?	Close Reading Slide 8 of 10	“Some seeds require heat for germination, ... most vegetable seeds benefit from added heat” Explain: cold will not break the seed dormancy
Integration of knowledge: How does the lab data graph support the factors discussed in the article?	What’s Sprouting Lab Graph – Interpretation Slide	Phase 1’s data grows the more than Phases 2 and 3. Explain: Phase 1 had an absence of light and consistent temperature.
<u>How will the students access the text when close reading?</u> PDF and PwrPt Slides		
<u>Which collaborative discussion strategies will students use when discussing the close reading questions?</u> In class whole group discussion (first TDA lesson)		
<u>How will you provide teaching/guidance of writing an essay?</u> Students will complete a TDA Guided Graphic Organizer which should be used to complete the TDA writing.		