

## Worksheets for Developing Selected Response Items (Filled Out)

Use a number code to identify the goal, expectation, indicator, and concept from the Assessment Limits or "At Least" list.

1.2.1: The student will identify meaningful, answerable scientific questions.

### QUESTION:

Read the description of the experiment and use the table of results below to answer Number(s)\_\_\_\_\_.

Dish Number	Temperature (°C)	Light Intensity (lux)	Number of Seeds Sprouted
1	0	1500	0
2	15	1500	11
3	30	1500	23
4	45	1500	9
5	60	1500	0

A student designed an experiment using 125 radish seeds and 5 petri dishes. Each petri dish contained a filter paper disk moistened with 5mL of water. She placed 25 seeds in each petri dish and recorded the results four days later.

Which of these questions is the student trying to answer?

Response Alternatives; Correct Response and Distractors	Rationale for Alternatives
A. Does temperature affect the number of seeds that sprout?	Correct response since data shows change in the number of seeds that sprouted as temperature changes
B. Does light intensity affect the temperature of the dish?	Plausible since light intensity could change the temperature
C. Does light intensity affect the number of seeds that sprout?	Plausible since this is a question that could be investigated
D. Does temperature affect the light intensity needed by the seeds?	Plausible since these are two of the variables in the investigation