



Science Student Questionnaire

**2018
Grade 4
(Pilot)**

Pilot

These items are being pilot tested in 2018 for possible inclusion in the 2019 NAEP operational assessment. Some items that are pilot tested may not be included in the final assessment. A pilot is a pretest that occurs prior to an assessment. Individual students will receive a subset of these 2018 pilot questions.

1. In your science class this year, how often have you learned about living things (for example, plants, animals, or bacteria)?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Very often

2. In your science class this year, how often have you learned about electricity (for example, circuits, batteries, or light bulbs)?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Very often

3. In your science class this year, how often have you learned about chemicals (for example, vinegar, baking soda, or hydrogen peroxide)?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Very often

4. In your science class this year, how often have you learned about rocks or minerals (for example, diamond, iron, or lava rock)?

- Ⓐ Never or hardly ever
- Ⓑ Once in a while
- Ⓒ Sometimes
- Ⓓ Often
- Ⓔ Very often

5. In your science class this year, how often have you done science activities using scientific tools (for example, microscopes, thermometers, beakers, or weighing scales)?

- Ⓐ Never or hardly ever
- Ⓑ Once in a while
- Ⓒ Sometimes
- Ⓓ Often
- Ⓔ Always or almost always

6. In your science class this year, how often have you read from a science textbook (print or digital)?

- Ⓐ Never or hardly ever
- Ⓑ Once in a while
- Ⓒ Sometimes
- Ⓓ Often
- Ⓔ Always or almost always

7. In your science class this year, how often have you learned about science topics on the Internet?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

8. In your science class this year, how often have you watched a short video clip, movie, or video about science topics?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

9. In your science class this year, how often have you been asked to write about science topics (for example, a science journal, lab report, or essay)?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

10. In this school year, how often have you understood what the teacher talks about in science class?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

11. In this school year, how often have you done well on your science tests?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

12. In this school year, how often have you done well on your science assignments (for example, projects, homework, or worksheets)?
- Ⓐ Never or hardly ever
 - Ⓑ Once in a while
 - Ⓒ Sometimes
 - Ⓓ Often
 - Ⓔ Always or almost always

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VH638866

13. Thinking about science, do you think that you would be able to do each of the following activities? Select **one** answer choice on each row.

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. Describe different ways to heat or cool water	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638868
b. Describe how the length of a vibrating string affects the sound it makes	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638870
c. Design an experiment to show how sunlight affects the growth of a plant	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638872
d. Use examples to show how one living thing has helped another to survive	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638875
e. Describe what would happen to the number of frogs at a pond if all the insects were removed from the pond	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638876
f. Decide which tool to use if you want to measure wind speed	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638883
g. Describe why the weather in the summer is different than in the winter	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638885

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VH639079

14. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I want other students to think I am good at science.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639080
b. I want to show others that science schoolwork is easy for me.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639082
c. I want to look smart in comparison to the other students in my science class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639084
d. I want to get better science grades than most other students in my class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH732329
e. I want to learn as much as possible in my science class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639086
f. I want to become better in science this year.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639087
g. I want to understand as much as I can in my science class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639089
h. I want to master a lot of new science skills in my class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH732330

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VH638951

15. In this school year, how often have you done each of the following activities **outside of school**? Select **one** answer choice on each row.

	Never	About once or twice a year	About once or twice a month	About once or twice a week	Every day or almost every day	
a. Work on science-related projects (for example, making a volcano, growing plants from seeds, or building simple rockets)	(A)	(B)	(C)	(D)	(E)	VH638970
b. Write or blog about science topics	(A)	(B)	(C)	(D)	(E)	VH638983
c. Use scientific tools (for example, microscopes, thermometers, beakers, or weighing scales)	(A)	(B)	(C)	(D)	(E)	VH638985
d. Read about science topics in books or magazines (print or digital)	(A)	(B)	(C)	(D)	(E)	VH638987
e. Attend clubs or programs that include science or engineering activities (for example, chemistry club, robotics club, or coding programs)	(A)	(B)	(C)	(D)	(E)	VH638991

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VH639115

16. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I enjoy science activities.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639117
b. I look forward to my science class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639120
c. I am interested in the things I learn in science class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639122
d. I think making an effort in science class is worthwhile.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639125
e. I think science will help me even when I am not in school.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639127
f. I think it is important to do well on science assignments.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639128

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VH639149

17. In this school year, how often have you done the following activities in your science class? Select **one** answer choice on each row.

	Never or hardly ever	Once in a while	Sometimes	Often	Always or almost always	
a. Made a drawing that explains why or how something happens	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639156
b. Used a science experiment to answer a question	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639162
c. Put information you collected into a table or graph	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639164
d. Used evidence to explain why something happens	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639166
e. Found news articles about science on the Internet	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639169

VH743438

18. How often do you talk about things you have learned in science class with someone in your family?

- Ⓐ Never or hardly ever
- Ⓑ Once in a while
- Ⓒ Sometimes
- Ⓓ Often
- Ⓔ Very often