



**Science
Student Questionnaire**

**2019
Grade 12**

1. How easy or difficult was this test?

- Ⓐ Extremely difficult
- Ⓑ Quite difficult
- Ⓒ Somewhat difficult
- Ⓓ Somewhat easy
- Ⓔ Quite easy
- Ⓕ Extremely easy

2. How much effort did you apply to succeed on this test?

- Ⓐ No effort at all
- Ⓑ Very little effort
- Ⓒ Some effort
- Ⓓ Quite a bit of effort
- Ⓔ A lot of effort

3. Are you Hispanic or Latino? Select **one or more** answer choices.

- Ⓐ No, I am not Hispanic or Latino.
- Ⓑ Yes, I am Mexican, Mexican American, or Chicano.
- Ⓒ Yes, I am Puerto Rican or Puerto Rican American.
- Ⓓ Yes, I am Cuban or Cuban American.
- Ⓔ Yes, I am from some other Hispanic or Latino background.

4. Which of the following best describes you? Select **one or more** answer choices.

- Ⓐ White
- Ⓑ Black or African American
- Ⓒ Asian
- Ⓓ American Indian or Alaska Native
- Ⓔ Native Hawaiian or other Pacific Islander

5. About how many books are there in your home?

- Ⓐ Few (0–10)
- Ⓑ Enough to fill one shelf (11–25)
- Ⓒ Enough to fill one bookcase (26–100)
- Ⓓ Enough to fill several bookcases (more than 100)

6. Do you have any of the following in your home? Select **one** answer choice on each row.

	Yes	No	
a. Access to the Internet	<input type="radio"/> A	<input type="radio"/> B	VH271105
b. Your own bedroom	<input type="radio"/> A	<input type="radio"/> B	VH336762
c. A desktop or laptop computer (including Chromebooks) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH591976
d. A tablet (for example, Surface Pro, iPad, Kindle Fire) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH271110
e. A smartphone (for example, iPhone, Samsung Galaxy, HTC One) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH271112

7. How often do you use the Internet for homework at home?

- A Never
- B About once or twice a month
- C About once or twice a week
- D Almost every day
- E Every day

8. How many days were you absent from school in the last month?

- A None
- B 1 or 2 days
- C 3 or 4 days
- D 5 to 10 days
- E More than 10 days

9. How often do you talk about things you have studied in school with someone in your family?

- Ⓐ Never or hardly ever
- Ⓑ Once every few weeks
- Ⓒ About once a week
- Ⓓ Two or three times a week
- Ⓔ Every day

10. How far in school did **your mother** go?

- Ⓐ She did not finish high school.
- Ⓑ She graduated from high school.
- Ⓒ She had some education after high school.
- Ⓓ She graduated from college.
- Ⓔ I don't know.

11. How far in school did **your father** go?

- Ⓐ He did not finish high school.
- Ⓑ He graduated from high school.
- Ⓒ He had some education after high school.
- Ⓓ He graduated from college.
- Ⓔ I don't know.

VH336776

12. Does **your mother** work?

- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.

VH336779

13. Does **your father** work?

- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.

14. Do any of the following people live in your home? Select **one** answer choice on each row.

	Yes	No	
a. Mother	<input type="radio"/> A	<input type="radio"/> B	VH271145
b. Stepmother	<input type="radio"/> A	<input type="radio"/> B	VH271146
c. Foster mother or other female legal guardian	<input type="radio"/> A	<input type="radio"/> B	VH271147
d. Father	<input type="radio"/> A	<input type="radio"/> B	VH271148
e. Stepfather	<input type="radio"/> A	<input type="radio"/> B	VH271149
f. Foster father or other male legal guardian	<input type="radio"/> A	<input type="radio"/> B	VH271150

15. In this school year, how often did you use a **laptop or desktop computer** (including Chromebooks) during your classes at school?

- A Never
- B In some classes
- C In about half of the classes
- D In more than half of the classes
- E In all or almost all classes

16. In this school year, how often did you use a **tablet** (for example, Surface Pro, iPad, Kindle Fire) during your classes at school?

- A Never
- B In some classes
- C In about half of the classes
- D In more than half of the classes
- E In all or almost all classes

17. How much does each of the following statements describe you? Select **one** answer choice on each row.¹

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Very much like me	
a. I finish whatever I begin.	(A)	(B)	(C)	(D)	(E)	VH733142
b. I try very hard even after making mistakes.	(A)	(B)	(C)	(D)	(E)	VH733143
c. I keep working hard even when I feel like quitting.	(A)	(B)	(C)	(D)	(E)	VH733145
d. I keep trying to improve myself, even when it takes a long time to get there.	(A)	(B)	(C)	(D)	(E)	VH733144

18. How much does each of the following statements describe you? Select **one** answer choice on each row.²

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Very much like me	
a. I like complex problems more than easy problems.	(A)	(B)	(C)	(D)	(E)	VH733150
b. I like activities that challenge my thinking abilities.	(A)	(B)	(C)	(D)	(E)	VH733151
c. I enjoy situations where I will have to think about something.	(A)	(B)	(C)	(D)	(E)	VH733155
d. I enjoy thinking about new solutions to problems.	(A)	(B)	(C)	(D)	(E)	VH733154

¹ Items 17a-17d are used to create the Students' Persistence in Learning index (NAEPID for index: SQCATS4; NAEPIDs for index items: B034901, B034902, B034903, B034904).

² Items 18a-18d are used to create the Students' Enjoyment of Complex Problems index (NAEPID for index: SQCATS6; NAEPIDs for index items: B035101, B035102, B035103, B035104).

19. In this school year, how often have you done each of the following? Select **one** answer choice on each row.³

	Never or hardly ever	Less than half of the time	About half of the time	More than half of the time	All or almost all of the time	
a. I started working on assignments right away rather than waiting until the last minute.	(A)	(B)	(C)	(D)	(E)	VH271370
b. I paid attention and resisted distractions.	(A)	(B)	(C)	(D)	(E)	VH271372
c. I stayed on task without reminders from my teacher.	(A)	(B)	(C)	(D)	(E)	VH271374
d. I paid attention in class even when I was not interested.	(A)	(B)	(C)	(D)	(E)	VH271375

20. In this school year, how often have you felt any of the following ways about your school? Select **one** answer choice on each row.

	Never or hardly ever	Less than half of the time	About half of the time	More than half of the time	All or almost all of the time	
a. I felt awkward and out of place at school.	(A)	(B)	(C)	(D)	(E)	VH271942
b. I felt happy at school.	(A)	(B)	(C)	(D)	(E)	VH271944
c. I felt that I learned something that I can use in my daily life.	(A)	(B)	(C)	(D)	(E)	VH336903

21. Are you taking an art course this school year (for example, drawing, painting, or studio art)?

- (A) Yes
- (B) No

³ Items 19a-19d are used to create the Students' Academic Self-Discipline index (NAEPID for index: SQCATS5; NAEPIDs for index items: B035001, B035002, B035003, B035004).

22. During this school year, which of the following have you done? Select **one** answer on each row.

	Yes	No	
a. Taken the SAT or ACT College Entrance Exams	<input type="radio"/> A	<input type="radio"/> B	VH740702
b. Submitted the Free Application for Federal Student Aid (FAFSA)	<input type="radio"/> A	<input type="radio"/> B	VH740703
c. Applied to a 2-year college	<input type="radio"/> A	<input type="radio"/> B	VH740704
d. Been accepted to a 2-year college	<input type="radio"/> A	<input type="radio"/> B	VH740705
e. Applied to a 4-year college	<input type="radio"/> A	<input type="radio"/> B	VH740706
f. Been accepted to a 4-year college	<input type="radio"/> A	<input type="radio"/> B	VH740708
g. Applied to a certificate or diploma program at a school that provides occupational training (such as electrician, beautician, mechanic, computer programmer, etc.)	<input type="radio"/> A	<input type="radio"/> B	VH740709
h. Been accepted to a technical training program	<input type="radio"/> A	<input type="radio"/> B	VH740710
i. Talked with a military recruiter	<input type="radio"/> A	<input type="radio"/> B	VH740711
j. Enlisted in the military	<input type="radio"/> A	<input type="radio"/> B	VH740712
k. Applied for a full-time job	<input type="radio"/> A	<input type="radio"/> B	VH740713
l. Been interviewed for a full-time job	<input type="radio"/> A	<input type="radio"/> B	VH740714

23. Which of the following best describes your high school program?

- A General
- B Academic or college preparatory
- C Vocational or technical

24. Which courses have you taken from eighth grade to the present? If you have taken a course more than once, give the most recent year you took it. Select **one** answer choice on each row. INCLUDE courses taken in summer school, but DO NOT INCLUDE topics that were only taught as part of a longer course.

	I did not take this course.	I took this course in Grade 8.	I took this course in Grade 9.	I took this course in Grade 10.	I took this course in Grade 11.	I am taking or have taken this course in Grade 12.	
a. General science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241150
b. First-year biology	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241151
c. Second-year biology	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241159
d. Life science (other than biology)	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241148
e. First-year chemistry	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241154
f. Second-year chemistry	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241155
g. First-year physics	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241156
h. Second-year physics	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241157
i. Physical science (other than chemistry or physics)	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241149
j. Earth and space science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241147
k. Engineering and technology	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F	VH241158

25. Are you currently enrolled in or have you taken any online science courses for high school or college credit?

- A Yes
 B No

26. Are you currently enrolled in or have you taken an Advanced Placement[®] course in science? Select **all** that apply.
- Ⓐ Yes, I am enrolled in or have taken Advanced Placement Biology.
 - Ⓑ Yes, I am enrolled in or have taken Advanced Placement Environmental Science.
 - Ⓒ Yes, I am enrolled in or have taken Advanced Placement Chemistry.
 - Ⓓ Yes, I am enrolled in or have taken Advanced Placement Physics C.
 - Ⓔ Yes, I am enrolled in or have taken Advanced Placement Physics 1.
 - Ⓕ Yes, I am enrolled in or have taken Advanced Placement Physics 2.
 - Ⓖ Yes, I am enrolled in or have taken Advanced Placement Computer Science A.
 - Ⓗ Yes, I am enrolled in or have taken Advanced Placement Computer Science Principles.
 - Ⓘ No, I have never taken an Advanced Placement science course.

27. Are you currently taking a science course?
- Ⓐ Yes
 - Ⓑ No

28. In your science class this year, how often have you done hands-on activities or projects on any of the following topics? Select **one** answer choice on each row.

	Never or hardly ever	Once in a while	Sometimes	Often	Very often	
a. Living things (for example, plants, animals, or bacteria)	(A)	(B)	(C)	(D)	(E)	VH639072
b. Electricity (for example, circuits, batteries, or light bulbs)	(A)	(B)	(C)	(D)	(E)	VH639074
c. Chemicals (for example, vinegar, baking soda, or hydrogen peroxide)	(A)	(B)	(C)	(D)	(E)	VH639073
d. Rocks or minerals (for example, diamond, iron, or lava rock)	(A)	(B)	(C)	(D)	(E)	VH639077
e. Technology and engineering (for example, robots, pulley systems, or ramps)	(A)	(B)	(C)	(D)	(E)	VH639076

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

	Never or hardly ever	Once in a while	Sometimes	Often	Always or almost always	
a. Read from a science textbook (print or digital)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639313
b. Read a book or magazine (print or digital) about science topics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639315
c. Used the Internet to learn about science topics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639314
d. Watched a short video clip, movie, or video about science topics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639312
e. Used a magnifying glass or microscope	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH887984
f. Used a thermometer or weighing scale for making measurements	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH639078

30. 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. Came up with research questions to explore how something works	(A)	(B)	(C)	(D)	(E)	VH639744
b. Made drawings that explain why or how something happens	(A)	(B)	(C)	(D)	(E)	VH639749
c. Came up with experiments that you could use to answer a research question	(A)	(B)	(C)	(D)	(E)	VH639753
d. Used tables or graphs to identify relationships between variables	(A)	(B)	(C)	(D)	(E)	VH639760
e. Used math equations to explain or support scientific conclusions	(A)	(B)	(C)	(D)	(E)	VH639763
f. Used evidence from experiments to explain why something happens	(A)	(B)	(C)	(D)	(E)	VH639765
g. Used information to disagree with someone about a scientific idea	(A)	(B)	(C)	(D)	(E)	VH639770
h. Combined information about science from multiple sources (for example, books, websites, or articles) for an assignment	(A)	(B)	(C)	(D)	(E)	VH639777

31. How much does each of the following statements describe you? Select **one** answer choice on each row.⁴

	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.	(A)	(B)	(C)	(D)	(E)	VH639080
b. I want to show others that science schoolwork is easy for me.	(A)	(B)	(C)	(D)	(E)	VH639082
c. I want to look smart in comparison to the other students in my science class.	(A)	(B)	(C)	(D)	(E)	VH639084
d. I want to get better grades than most other students in my science class.	(A)	(B)	(C)	(D)	(E)	VH860366

32. How much does each of the following statements describe you? Select **one** answer choice on each row.⁵

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I want to learn as much as possible in my science class.	(A)	(B)	(C)	(D)	(E)	VH639086
b. I want to become better in science this year.	(A)	(B)	(C)	(D)	(E)	VH639087
c. I want to understand as much as I can in my science class.	(A)	(B)	(C)	(D)	(E)	VH639089
d. I want to master a lot of new skills in my science class.	(A)	(B)	(C)	(D)	(E)	VH860369

⁴ Items 31a-31d are used to create the Students' Science Performance Goals index (NAEPID for index: SQCATS9; NAEPIDs for index items: K823501, K823502, K823503, K823504).

⁵ Items 32a-32d are used to create the Students' Science Mastery Goals index (NAEPID for index: SQCTS10; NAEPIDs for index items: K823601, K823602, K823603, K823604).

33. How much does each of the following statements describe you? Select **one** answer choice on each row.⁶

	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.	(A)	(B)	(C)	(D)	(E)	VH639117
b. I look forward to my science class.	(A)	(B)	(C)	(D)	(E)	VH639120
c. I am interested in the things I learn in science class.	(A)	(B)	(C)	(D)	(E)	VH639122
d. I think making an effort in science class is worthwhile.	(A)	(B)	(C)	(D)	(E)	VH639125
e. I think science will help me even when I am not in school.	(A)	(B)	(C)	(D)	(E)	VH639127
f. I think it is important to do well on science assignments.	(A)	(B)	(C)	(D)	(E)	VH639128

⁶ Items 33a-33f are used to create the Students' Interest/Enjoyment in Science index (NAEPID: SQCATS8; NAEPIDs for index items: K823801, K823802, K823803, K823804, K823805, K823806).

34. 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. Worked on science-related projects (for example, making a volcano, growing plants from seeds, or building simple rockets)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH859162
b. Used scientific tools (for example, microscopes, thermometers, beakers, or weighing scales)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH891927
c. Read about science topics in books or magazines (print or digital)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH638987
d. Attended clubs or programs that include science or engineering activities (for example, chemistry club, robotics club, or coding programs)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH893268

35. 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.⁷

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. Describe how the length of a vibrating string affects the sound it makes	(A)	(B)	(C)	(D)	(E)	VH638870
b. Design an experiment to show how sunlight affects the growth of a plant	(A)	(B)	(C)	(D)	(E)	VH638872
c. Decide which tool to use if you want to measure wind speed	(A)	(B)	(C)	(D)	(E)	VH638883
d. Design an experiment to test how the growth of a plant is affected by light, water, and soil quality	(A)	(B)	(C)	(D)	(E)	VH638877
e. Create a diagram that shows how bees and plants need each other for survival	(A)	(B)	(C)	(D)	(E)	VH638878
f. Describe how the combination of parental genes can result in different traits in their offspring (for example, eye or hair color)	(A)	(B)	(C)	(D)	(E)	VH638879

⁷ Items 35a-35f are used to create the Students' Confidence in Science Knowledge/Skills index (NAEPID: SQCATS7; NAEPIDs for index items: K823402, K823403, K823406, K823407, K823408, K823409).

36. 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

37. How likely are you to pursue a career in science?

- Ⓐ Not at all likely
- Ⓑ Not likely
- Ⓒ Somewhat likely
- Ⓓ Quite likely
- Ⓔ Extremely likely

38. In this school year, have you done any of the following activities to prepare for a career in science? Select **one** answer choice on each row.

	Yes	No	
a. Spoken with a guidance counselor or teacher about science-related careers	Ⓐ	Ⓑ	VH640754
b. Spoken with a guidance counselor or teacher about science-related college programs	Ⓐ	Ⓑ	VH640757
c. Shadowed a person who does science-related work at his or her job	Ⓐ	Ⓑ	VH640771
d. Worked as an intern or employee doing science-related work	Ⓐ	Ⓑ	VH640773