Science, Technology, Engineering, and Mathematics (STEM) Education Student Survey

10th Grade

Science, Technology, Engineering, and Mathematics Education

We are interested in knowing facts about you as well as some of your opinions about science and math. This information will be used to help us understand 10th graders and their experiences in and outside of school. Please read each question carefully and answer as accurately as possible. If you do not wish to answer a specific question, please skip it and move on to the next question. Ask the survey administrator for help if you do not understand something.

Section 1: Your Activities Outside of School

In the last twelve months, have you done any of the following activities ***outside of normal school hours***? Please circle yes or no.

	Yes	No
1. Participated on a school sports team?	Y	N
2. Participated on a non-school sports team?	Y	N
3. Visited a museum?	Y	N
4. Borrowed books from the community library (not including the school library)?	Y	N
5. Took art, music, dance, or theater classes or lessons outside of school?	Y	N
6. Participated in 4-H?	Y	N
7. Read books that were not required for school (including e-books on Kindle or other electronic devices)?	Y	N
8. Used a computer at home for schoolwork?	Y	N

Section 2: Your Goals with School

9. Choose only one option that best represents the **farthest** in school you expect to go.

_____ I don't expect to finish high school.

_____ Graduate from high school

_____ After high school, finish vocational/technical education (1 year or less)

_____ Finish community or junior college (2 years)

_____ Complete a four-year degree at a college or university

_____ Continue my education after a four-year degree by going to graduate school (medical school, law school, etc.)

_____ I don't know; I haven't thought much about it.

10. Choose only one option that best represents the **farthest** in school your parents expect you to go.

_____ They don't expect me to finish high school.

_____ Graduate from high school

_____ After high school, finish vocational/technical education (1 year or less)

_____ Finish community or junior college (2 years)

_____ Complete a four-year degree at a college or university

_____ Continue my education after a four-year degree by going to graduate school (medical school, law school, etc.)

_____ I don't know what they expect of me

11. What grade do you **usually** get in ENGLISH?

_____ A _____ B _____ C _____ D _____ F

12. What grade do you **usually** get in MATH?

_____ A _____ B _____ C _____ D _____ F

13. What grade do you **usually** get in SCIENCE?

_____ A _____ B _____ C _____ D _____ F

14. My effort in school is best described as… (select ONE answer)

_____ I work as hard as I can

_____ I do what I need to get the grade I want

_____ I do as little as possible

Section 3: Your Experiences with Math

Please circle the answer that indicates how much you agree or disagree with each of the following statements about **math**.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
15. I like **math**.	SA	A	D	SD
16. **Math** is harder for me than for most of my classmates.	SA	A	D	SD
17. Most of my friends like **math**.	SA	A	D	SD
18. I must do well in **math** to get into college.	SA	A	D	SD
19. I often study **math** with my friends.	SA	A	D	SD
20. **Math** is mostly about using formulas correctly.	SA	A	D	SD
21. **Math** is useful for solving practical problems in life.	SA	A	D	SD
22. **Math** is helpful for understanding more general problems in the world.	SA	A	D	SD
23. As an adult, I would like to have a job that uses a lot of **math**.	SA	A	D	SD

24. When I think of people who are good at math, I think of...

_____ Mostly girls

_____ Both girls and boys equally

_____ Mostly boys

Section 4: Your Experiences with Science

Please circle the answer that indicates how much you agree or disagree with each of the following statements about **science**.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
25. I like **science**.	SA	A	D	SD
26. **Science** is harder for me than for most of my classmates.	SA	A	D	SD
27. Most of my friends like **science**.	SA	A	D	SD
28. I think learning **science** will help me in my daily life.	SA	A	D	SD
29. I must do well in **science** to get into college.	SA	A	D	SD
30. I often study **science** with my friends.	SA	A	D	SD
31. **Science** is mostly about memorizing scientific principles, law, and theories correctly.	SA	A	D	SD
32. **Science** is useful for solving practical problems in life	SA	A	D	SD

Please circle the answer that indicates how much you agree or disagree with each statement about scientists and their work.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
33. Scientists are smart.	SA	A	D	SD
34. Scientific work is dangerous.	SA	A	D	SD
35. Scientific work is exciting.	SA	A	D	SD
36. Scientists are as cool as other people.	SA	A	D	SD
37. I would like to be a scientist.	SA	A	D	SD

Section 5: Your Experiences with School

Please circle the answer that indicates how much you agree or disagree with each statement about your school and school experiences.

	Strongly Agree	Agree	Disagree	Strongly Disagree
38. My social life at school is more important to me than what I learn in my classes.	SA	A	D	SD
39. Most of my friends at school encourage me to do well in my classes.	SA	A	D	SD
40. School is not very important for students like me.	SA	A	D	SD
41. I learn more useful things from friends and relatives than I learn in school.	SA	A	D	SD
42. There are not enough challenging **math** classes in school for me.	SA	A	D	SD
43. There are not enough challenging **science** classes in school for me.	SA	A	D	SD
44. I feel comfortable asking questions in most of my classes.	SA	A	D	SD
45. I am able to get help outside of regular class time if I need extra help with **math** or **science**.	SA	A	D	SD
46. I think I would be successful in taking online courses when I am in high school.	SA	A	D	SD
47. I get enough guidance and information about what specific careers require in terms of education and what the work involves	SA	A	D	SD

48. Have you **completed** an online course at the high school level?

_____ Yes

_____ No

Section 6: Adult Involvement with School

Please circle the answer that indicates how much you agree or disagree with each statement.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
49. The adults in my family are very interested in what I learn at school.	SA	A	D	SD
50. I wish adults in my family had more time to help me with homework.	SA	A	D	SD
51. I wish adults in my family knew **math** and **science** better.	SA	A	D	SD
52. If I need help with my **math** or **science** homework, I am able to get help in my home.	SA	A	D	SD

Please circle the answer that best reflects how often the adults in your household discuss the following topics with you.

	Often	**Sometimes**	**Rarely**	**Never**
53. My family talks with me about me going to college.	O	S	R	N
54. My family discusses the challenges of paying for my college education.	O	S	R	N
55. My family discusses plans to prepare for college admission exams, such as ACT and SAT.	O	S	R	N

Section 7: Your Thoughts about Science

Please circle the answer that indicates how much you agree or disagree with each statement about science.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
56. I should be able to choose what to believe and what not to believe from science.	SA	A	D	SD
57. I find it hard to know what to trust about science because science is always changing.	SA	A	D	SD
58. Idaho needs more scientists to help improve things for our state.	SA	A	D	SD
59. Scientists have personal agendas with their research that influence their findings.	SA	A	D	SD

There are several important institutions in this country that perform significant tasks. Circle how much confidence you have in the people who run the institutions listed below.

	Great Deal of Confidence	**Only Some Confidence**	**Hardly Any Confidence**	**Don't Know**
60. Major companies	G	S	H	DK
61. Education	G	S	H	DK
62. Labor unions	G	S	H	DK
63. Press (or the media)	G	S	H	DK
64. Medicine	G	S	H	DK
65. Scientific community	G	S	H	DK
66. Military	G	S	H	DK
67. U.S. Congress	G	S	H	DK

Section 8: Science Trivia

Circle true, false, or don't know for each of the following science trivia questions.

	True	False	Don't Know
68. Diamonds are made of carbon.	T	F	DK
69. Lasers work by focusing sound waves.	T	F	DK
70. Electrons are smaller than atoms.	T	F	DK
71. Antibiotics kill viruses as well as bacteria.	T	F	DK
72. All insects have eight legs.	T	F	DK
73. The oxygen we breathe comes from plants.	T	F	DK

Section 9: Your Ideas about the Future

74. If today you had to pick a career for the future, the career you would most likely pursue is _____

Please circle the answer that indicates how important or unimportant each of the following is to you when considering your job or career options for when you are an adult.

	Extremely Important	**Fairly Important**	**A Little Important**	**Not at All Important**
75. To have a job that earns a lot of money	E	F	L	N
76. To have a job that doesn't require a college degree	E	F	L	N
77. To have a job that the adults in my family really want me to have	E	F	L	N
78. To have a job that allows me to stay in my hometown	E	F	L	N
79. To have a job that is really physical and/or I could work with my hands	E	F	L	N
80. To have a job that doesn't require math beyond high school	E	F	L	N
81. To have a job that doesn't require science beyond high school	E	F	L	N

Please circle the answer that indicates how important or unimportant each of the following will be to you when considering whether to attend college.

	Extremely Important	**Fairly Important**	**A Little Important**	**Not at All Important**
82. The cost of college	E	F	L	N
83. The level of difficulty of classes you take in high school	E	F	L	N
84. Your high school grades	E	F	L	N
85. Your score on a college admissions exam (ACT or SAT)	E	F	L	N
86. The availability of financial aid, such as student loans, scholarships, or grants	E	F	L	N
87. Having the college close to home, even if you will not be able to live at home while attending school	E	F	L	N
88. Whether your friends are also planning to go to college	E	F	L	N
89. The ability of your parents to pay for college	E	F	L	N

Please circle the answer that indicates how much you agree or disagree with each statement.

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
90. I know what high school classes I need to take to be successful in college.	SA	A	D	SD
91. I know how to apply for college.	SA	A	D	SD
92. I know how to apply for financial aid to attend college.	SA	A	D	SD

93. What are some specific ways your school or community could improve **your** interest and abilities in science and/or math? Please use this space to write down your suggestions.

Section 10: Information about You

94. Are you…

    _____ Female

    _____ Male

95. Which of the following racial/ethnic backgrounds best describes you? You may select more than one response.

    _____ White

    _____ Hispanic or Latino/a

    _____ Black or African American

    _____ Asian American

    _____ American Indian or Alaskan Native

    _____ Other

    _____ I prefer not to answer

96. **At home**, how often do you speak a language other than English (NOT including language practice for a foreign language class).

    _____ Always

    _____ Almost always

    _____ Sometimes

    _____ Never

97. If you speak a language other than English at home, what is it?

    _____ Spanish

    _____ Other (specify) _____

98. Who are the adults that you live with at your home, not counting your brothers and sisters? (If you have more than one home, please refer to the home where you spend the most time.)

_____ I live with two or more adults (parents/guardians).

_____ My mom is the only adult at my home.

_____ My dad is the only adult at my home.

_____ Other (please describe) _____

99. How many hours per week do you usually look after younger siblings or look after relatives who need help at home? (Please enter 0 if this question does not apply to you.)

_____ Hours/week

100. Does one or both of your parents/guardians have a college degree?

_____ Yes

_____ No

101. How many hours per week do you usually work at a job during the school year? (Please enter 0 if you do not have a job during the school year.)

_____ Hours/week

Thank you! You are done with this survey!