

Power: Solving Problems through Engineering in Physical Sciences 3-8
Fall 2015

Name: _____ School: _____

Grade: _____ Teacher: _____ Gender: Male Female

1) Please rate how much you like each subject. Circle your answer.

	Don't Know	Not at all	A little	Some	A lot
English: Reading and Writing	DK	0	1	2	3
Mathematics	DK	0	1	2	3
Science	DK	0	1	2	3
Engineering	DK	0	1	2	3
History, Social Studies	DK	0	1	2	3
Physical Education	DK	0	1	2	3
Technology	DK	0	1	2	3

2) Please rate how much you like the following. Circle your answer.

	Not yet	Disagree	Agree	Strongly Agree
I like to learn about Life sciences like plants, animals, and humans.	0	1	2	3
I like to learn about Earth and Space sciences.	0	1	2	3
I like to learn about Physical sciences, like energy, chemistry, how things move, and tools.	0	1	2	3
I like to learn about science by reading.	0	1	2	3
I like to learn about science by doing an investigation or experiments.	0	1	2	3
I like to learn about engineering.	0	1	2	3
I like to learn about engineering by solving problems.	0	1	2	3

3) Physical Science has many parts. Indicate how curious or interested you are in each part by circling your response.

	Don't Know	Not at all	A little	Some	A lot
Structure and properties of matter	DK	0	1	2	3
Chemical reactions: how atoms and molecules interact.	DK	0	1	2	3
Inside atoms, nuclear processes	DK	0	1	2	3
Forces and motion	DK	0	1	2	3
How things interact	DK	0	1	2	3
Energy including light, sound	DK	0	1	2	3
Energy including magnetic forces, electricity	DK	0	1	2	3
Engineering: using science to solve problems	DK	0	1	2	3

4) In middle school or junior high, I am required to take a science class each year. When I get to high school I get to make some choices.
I plan to take (Circle one in each row):

Number of Science courses I will take in high school: 1 2 3 4

Number of Engineering courses I will take in high school: 1 2 3 4

5) In college, I plan to (Circle one):

a. Major in science b. Take some science courses c. Take no science courses

6) In college, I plan to (Circle one):

a. Major in Engineering b. Take some Engineering courses c. Take no Engineering courses

7) Right now, and it might change, my career goal is: _____

8) Who can become a scientist?

9) How is science used to solve problems in my house, community, and the world around me?

10) There are many types of engineers, describe the types of engineers you know about?

11) What do engineers do?

12) What skills do they use?

Draw a scientist

Draw an engineer