Pre-Unit Assessment

Part 1: Subject-Matter Questions

The following free-response questions cover topics you will be learning this semester. Answer all of the questions to the best of your ability.

1. What is engineering?

2. Name some types of engineering.

- 3. What skills do you think engineers have? From the list below, check the top five characteristics that best describe engineers:
 - ____welding skills
 - ____math skills
 - ____creativity
 - ____teamwork skills
 - ____technology skills
 - ____curiosity
 - ____really good at recalling facts
 - really good at science

- ____really good at communication
- ____really good at school
- ____really good at research
- ____really good at running a business
- ____really good at solving problems
- ____really good at working with tools
- know how to drive a train
- 4. What is environmental engineering?
- 5. What types of problems do environmental engineers solve?

6. What is contamination? Give some examples of contaminants.

7. What is remediation? Give some examples of ways to remediate.

8. Why are chemical properties important for separating chemicals? List some chemical properties.

Part 2: General Survey

Please circle the number that best represents how you feel about each of the following statements.

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
You must work hard to become an engineer.	1	2	3	4	5
I think I could be an engineer if I tried hard enough.	1	2	3	4	5
I think I can learn the skills necessary to become an engineer.	1	2	3	4	5
I like working on teams to solve problems.	1	2	3	4	5
There is usually only one correct way to solve a science or math problem.	1	2	3	4	5
I usually memorize equations and principles rather than make sense of what I'm learning.	1	2	3	4	5
I don't spend more than five minutes on a problem before giving up or asking for help.	1	2	3	4	5
I am not satisfied until I understand why something works the way it does.	1	2	3	4	5
I think science and math are disconnected.	1	2	3	4	5
I think about science and math in my everyday life.	1	2	3	4	5
Skills used to understand science or math can be helpful in my everyday life.	1	2	3	4	5