

Name _____

Date _____

Number _____

Cause and Effect

What made something happen? (Cause)	What happened as a result? (Effect)

Name _____

Scoring Rubric

Activity	Points
Engineering and Collaboration Worksheet - worksheet is complete and all questions are answered thoughtfully	/15
Completion of Goal - The team set a new, realistic goal and achieved that goal in the final machine	/3
Collaboration	
Focused Completion of Task	/4
Consideration of Others	/4
Contribution of Knowledge and Ideas	/4

Total ____/30

Name _____

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Total ____/30

Name: _____ Hour: _____

As you watch the powerpoint please fill in the blanks. Everything is in order of the presentation.

1. _____ is the using of science and math to solve a problem and improve the world around us.

2. _____ is creating a plan or drawing to show how something will look or work.

3. Name 2 of Engineering's Greatest Challenges

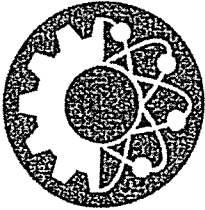
4. Which one of these types of engineers looks interesting to you? Why?

5. Which one of these types of engineers looks interesting? Why?

6. Steps of the Design Process are:

_____	_____
_____	_____
_____	_____

7. _____ What is the problem? What is my goal?
8. _____ Brainstorm..What could be a solution?
9. _____ How will I test it? Draw a diagram
10. _____ Build It! Test it!
11. _____ How can you change your plan or design?
12. _____ are the wants.. What you need to achieve. They are
_____ and _____
13. _____ are the limitations. What causes problems?
14. How are scientists and engineers different?



Name _____

ENGINEERING AND COLLABORATION MACHINES

1. Draw a flowchart of causes and effects for your first machine below. Use the example of Jiwi's toast machine to get you started.

2. Write down a goal for your revised machine (What are you trying to accomplish?)

Draw out a plan for your new and improved machine below. Label any cause and effects of the new machine

3. Reflect on your final machine. Explain why your group chose the specific changes they made. How is your final machine improved from your first machine?

Collaboration Reflection

How do you feel your team did on this activity? Do you feel like all members worked equally to achieve your goal? Explain and be honest (only teachers will see your answers)

Rank yourself (1-4) using our collaboration rubric

Focus on Completion of Task ____ Consideration of Others ____ Contribution of Knowledge ____