# Egg Drop Challenge – Student Worksheet

Once a spacecraft has successfully launched, the next step is landing it on another planet. In this activity you will use the Engineering Design Process to design, build, and test a lander for your spacecraft.



#### **Engineering Design Process:**

Identify the problem:

#### Engineering Constraints:

How much time will you have to build?

What are the other rules your lander must meet?



Brainstorm: Draw pictures of 2-3 ideas you have here.

*Choose a Solution:* Work with your group to come up with a design to build. Draw a picture here. What materials will you need?

## Build and Test your prototype:

What did you learn in your initial test?

What changes did you make?



#### Evaluate your solution:

What were the results of the final test?

Was your lander successful? Why or why not?

What problems did you have? How did you solve them?

## Present your solution:

What ideas did other groups have? Any similar ideas? Any unique ideas?

Which devices survived the most drops? Did they have anything in common?

What additional changes would you make?



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