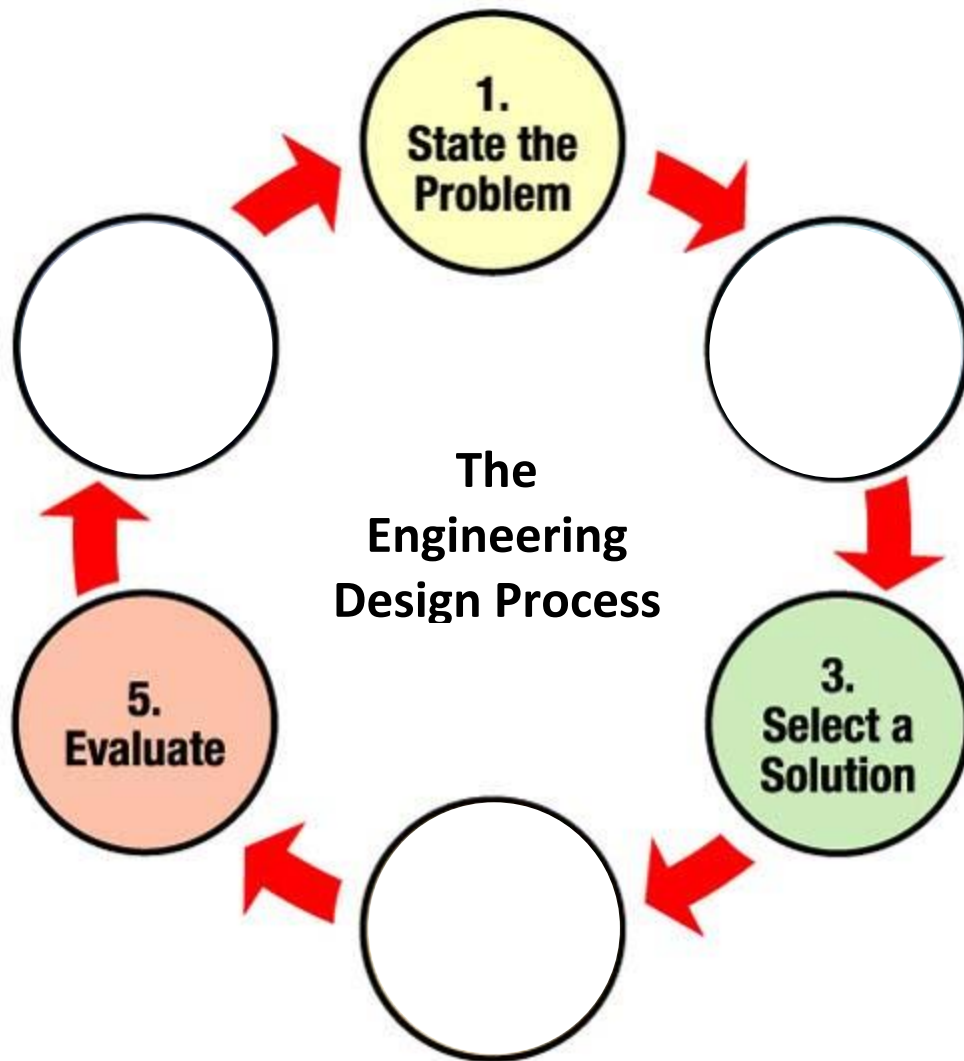


## Lesson 11: Brainstorm and Preliminary Design

Engagement Questions:



Why do we need the Engineering Design Process? \_\_\_\_\_

---

---

---

How will you use the Engineering Design Process when you build your Mars rover? \_\_\_\_\_

---

---

### Exploration Activity:

#### Team Information:

Who are the members on your team?

---

---

---

---

---

What is your team name? \_\_\_\_\_

What will each person do to help build your Mars Rover?

Team Member's Name	How will they help?

Teacher Checkpoint \_\_\_\_\_

**Exploration Activity:**

Work with your team to draw a sketch of what your rover will look like. Be sure to keep your mission in mind. Tape or staple extra pages into your Science Notebook as needed.

**Explanation:**

Show your completed concept map to your teacher for approval. Once it is approved, tape it neatly in the space below. (You may need to fold it so it will fit.)

Teacher Checkpoint \_\_\_\_\_

**Evaluation:**

Which step of the Engineering Design Process was the most difficult for your team?  
What made this step so challenging for you?

---

---

---

---

---

**Elaboration (optional):**

Once you are finished building your Mars Rover, make sketches of its top, front, and side views.

How does your original sketch compare with your actual prototype? What changes did you need to make? Why? \_\_\_\_\_

---

---

---

---