**Directions:**

Look at the descriptions in the lower left corner. Decide which one goes with which step of the engineering design process. Type the appropriate description in each box. Words will not cut and paste.

Continue on to page 2.

Save and submit when finished with both pages.

Identify the Problem

Make it Better

Try It Out

Explore

Create

Design

Name:

Block:

The Engineering Design Process

Type each description below into the appropriate colored box.

* Test your solution.
* Research what others have done. Discover what materials are available.
* Use your knowledge and creativity to come up with many solutions. Choose one idea and draw or make a model of it.
* Evaluate how the solution worked and think of how to improve your design.
* Make your solution.
* Describe the challenge to be solved, including limits and constraints.

The engineering design process helps engineers and other problem-solvers come up with creative solutions. You are an engineer. Choose ONE engineering problem below, and follow the steps to invent a solution.

1. **Your new pet kitten is trapped in a ten foot deep hole. You need a contraption to safely rescue your poor animal.**
2. **You are going on vacation for a month and can’t find anyone to water your plants while you’re gone. You need a device that will give your plants the right amount of water – not too much and not too little.**
3. **You like to read before you go to sleep, but you don’t have a bedside lamp. You need a way to turn off the light switch across the room without having to get out of bed.**
4. What problem did you choose?
5. Brainstorm and list 3 ways to solve the problem and list these possible solutions.
	1.
	2.
	3.
6. Use the steps of the process to **describe in detail** how you will solve the problem.

|  |  |
| --- | --- |
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