

# STEM Challenge MMXXI

BUILD:

## Maze Runner: Marble Maze Challenge

**CHALLENGE:** A **Maze** is a network or series of paths that are designed as a puzzle through which one has to find its way. Mazes come in many forms but are always filled with dead ends. You may have experience with solving a two dimensional maze, such as an illustration on paper that is solved with a pencil, or a three dimensional maze, such as a mirror, corn, or hedge maze that is solved by finding your way through a physical puzzle in person. Can you construct a three dimensional maze with recycled materials found at home? Use the Engineering Design Process to help you complete this challenge.

**BIG IDEA:** Mazes have been around for Centuries! The word "maze" dates back to the 13th century, meaning delusion or delirium. The world's first mazes were known as Labyrinths. Labyrinths are a bit different, and were designed as one winding path, instead of having multiple dead ends like a maze. The first Labyrinths date back to ancient Egypt.

### Materials:

Materials can be anything you find around your house. Some suggestions are:

**Straws**

**Toothpicks**

**Cardboard**

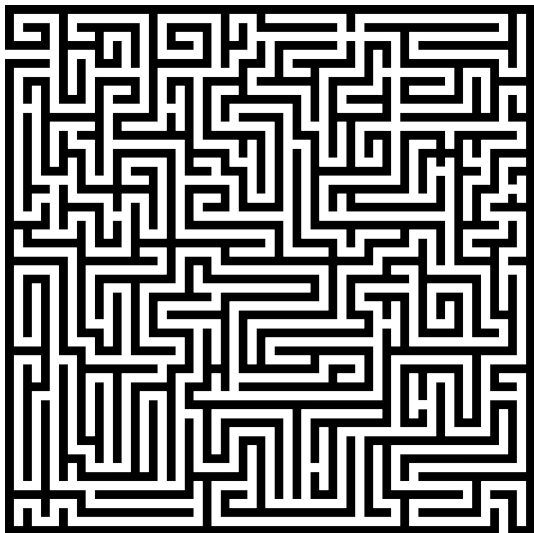
**Popsicle sticks**

**Paper towel rolls**

**Paper plates**

**A marble or small ball**

**Tape**



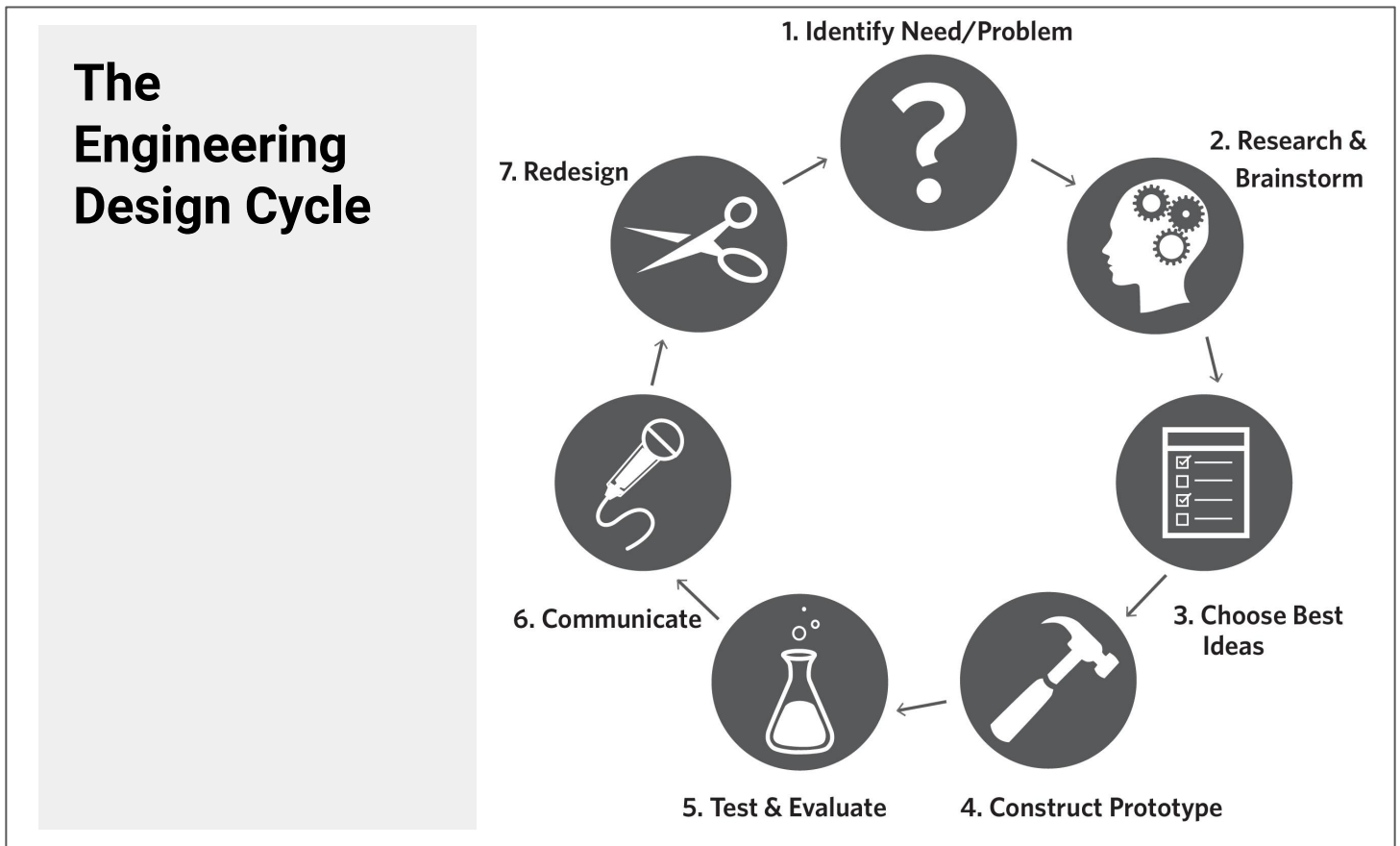
two dimensional maze



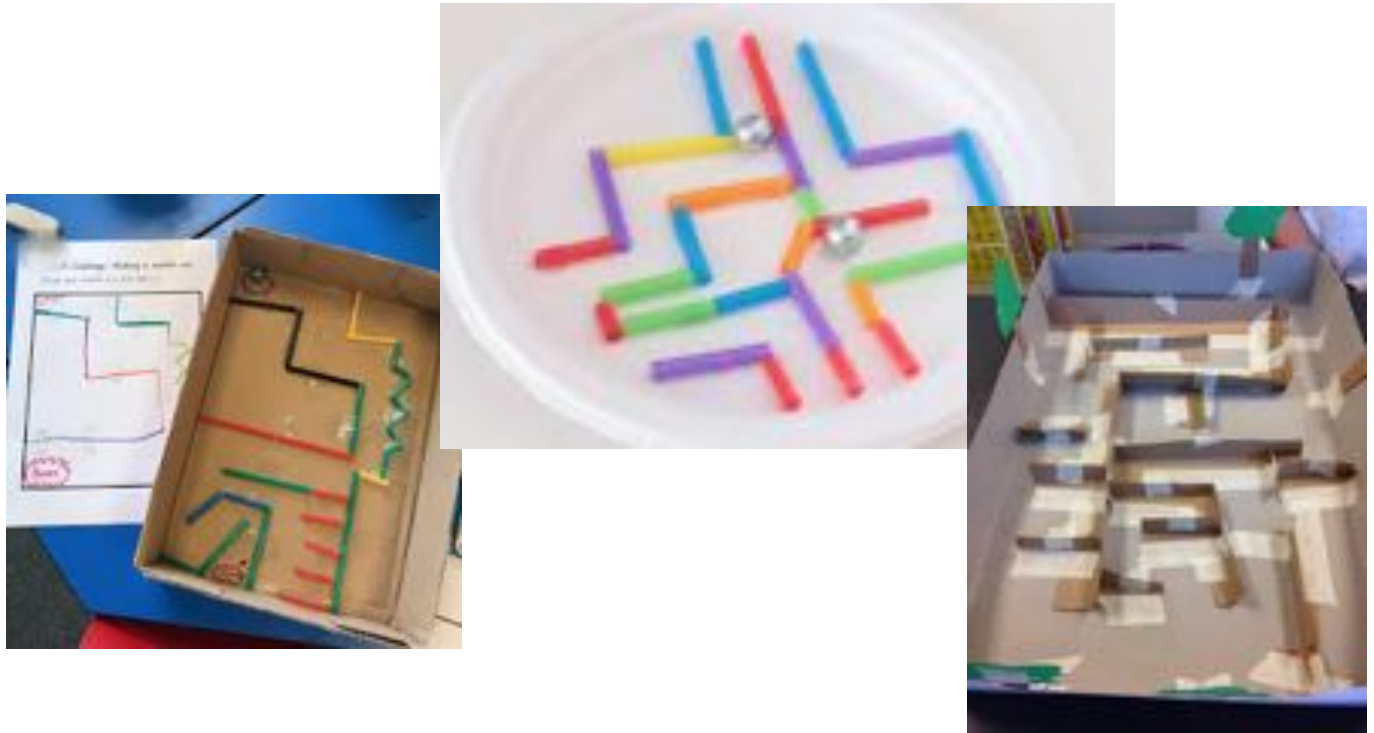
three dimensional maze

**INSTRUCTIONS:**

1. Collect materials from around your house to create your Maze.
2. **Plan the design of your structure:** How will you use straws or pipe cleaners?  
Hint: Engineers often draw their ideas
3. **Build your Design:** Cut, bend, twist, fold, and tape your materials together to create a maze!



Here are some examples of bridges that could be built at home.



**Want to know more?:**

[15 Most Confusing Mazes on Earth](#)

[Get Lost with the World's Master Maze Maker](#)

### **WE WANT TO SEE & SHARE YOUR CREATIONS!**

Send us a picture or video by March 31, 2021 and be entered into a drawing for a gift card! Three ways to share:

1. Tweet us using the hashtag **#aBitofSTEM**
2. Text us at **314-285-9663**
3. Email to [Schoolpartnership@wustl.edu](mailto:Schoolpartnership@wustl.edu)
4. Use this google form and we'll show off your creation. [Submit Here](#) ([tinyurl.com/STLsubmit](https://tinyurl.com/STLsubmit))

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