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 **Findley Oaks STEM Connect**

 **1st Grade Design Brief**

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| **Month****October** | **Challenge****Magnet Maze** | **Unit****Magnets** |

**Standard:**

Students should follow the engineering design process.

**Background/Problem:** During our study of magnets we’ve learned how they attract and repel, have a north and south pole and a magnetic field. We’ve learned which kinds of materials are magnetic.

**Design Challenge:** Use what we’ve learned about magnets to design and construct a magnetic maze and be able to guide an object through the maze using a magnet.

**Criteria:**

Your project must:

* Have a clear start and finish
* Be neat and colorful
* Include an object that is magnetic
* Include your signature on the outside of the maze

**Constraints:** You can only use the materials provided.

**Materials: per student**

* Things that are round - paper plates – different sizes – cardboard that could be cut into circles. Give students choices to select from.
* Templates/some students may be able to design a maze without a template.
* Magnets 2 each
* Cardstock

**Tools:**

Markers and / or crayons

Scissors

Paper (For design planning)

Pencils



Examples: Students should create their maze connect puzzles.

Dog – doghouse/bone

Bird – birdhouse

Bee – beehive

Penguin – igloo

Cat - mouse

Rabbit – carrot

Rocket ship - moon

