

Unit Name: Magnets

What are we doing? Children will be experimenting with magnets to see what objects are attracted to the magnets.

Purpose/Why? Taken from the WA State Early Learning and Development Guidelines

1. Children may use tools to explore the environment. For this lesson we will be using magnets.
2. Children may ask questions and identify ways to find answers. This lesson gives children the opportunity to ask what will happen when they place a magnet near an object.
3. Children may predict what will happen in science and nature. Children will have the opportunity to make predictions when using the magnets.

Materials:

Provided:

- 2 magnetic wands
- 1 horseshoe magnet
- 1 set of magnetic alphabet letters
- 1 magnet fishing pole
- 1 mini cookie sheet

You Will Need to Provide:

A variety of small items around your house (such as: pencil, penny, button, key, small toy, small car, spoon, paper, dice, screw and nut, paper clip, ball, straw...just about anything!) *Remember to be mindful of items that could be a choking hazard for young children.*

Books:

Rookie Science What Magnets Can Do? By Allan Fowler

Maria's Magic Magnet A Book about Magnets by Kerry Dinmont

What Makes a Magnet? By Franklyn M. Branley



Quick Start: Explore Magnets

Lay out the objects you gather together and the laminated activity page. Have your child select an item and test if the item is magnetic by using one of the magnets in the kit. If the item is magnetic (the magnet sticks to the item) have your child place that item on the ☺ side; if the item is not magnetic, place the item on the ☹ side.



Questions to ask:

- What do these objects have in common that might make them attracted to a magnet?
- Why isn't the magnet attracted to these objects?



Vocabulary Builder

In your discussion with the children use such words as:

- Magnets
- Metal
- Magnetized
- Materials



Deeper Dive

Encourage your child to "think like a scientist" by making a hypothesis! Before your child tests if the item will be magnetic or not ask them, "Do you think this item will be magnetic? Why or why not?" After the test, discuss your child's hypothesis. What did they learn?

Encourage your child to go on a Magnet Hunt! What other things can they find around the room/house that the magnet will be attracted to?



Quick Start: Magnetic Letters

Lay out some of the magnetic letters on the floor or in a shallow box or bowl. Have your child use the magnetic fishing pole to catch a letter. Ask them to name the letter and encourage them to make that letter's sound.

Use the mini-cookie sheet and the magnetic letters to spell your child's name; put the letters into ABC order; or sort the letters (such as ones with straight lines, ones with a hole-or two, ones with curvy lines).



Questions to ask:

- Why do you think the magnet on the letter sticks to the magnet of the fishing pole?
- How many letters can you pick up with the fishing pole at once? How many letters can you pick up with magnet wand? How many with the horseshoe magnet?
- Which magnets are the strongest?



Deeper Dive

Using the two magnet wands position them to attract each other (come together). Now turn one the wands the opposite direction and feel how they repel each other (push against each other).



Vocabulary Builder

- Attract
- Repel
- Poles