



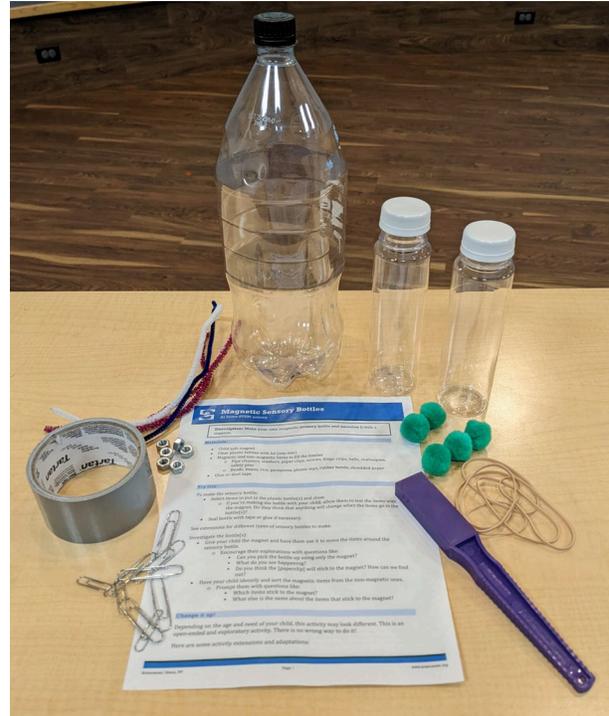
Sciencenter At-Home: Magnetic Sensory Bottles

What things can you move with a magnet?

In this activity, make a sensory bottle with magnetic and non-magnetic items and explore the bottle with a magnet.

Materials:

- Child safe magnet
- Clear plastic bottles with lid (any size)
- Magnetic items to fill the bottles
 - Pipe cleaners, washers, paper clips, bells, safety pins, etc.
- Non-magnetic items to fill the bottles
 - Beads, rice, pompoms, rubber bands, shredded paper, etc.
- Glue or duct tape



Try this:

Making the sensory bottles:

Select items to put in the plastic bottle and close.

If you're making the bottle with your child, allow them to test the items with the magnet. Do they think that anything will change when the items go in the bottle?

Seal bottles with tape or glue if necessary.

See the Change it up! section for different types of sensory bottles to make.



Investigate the bottles:

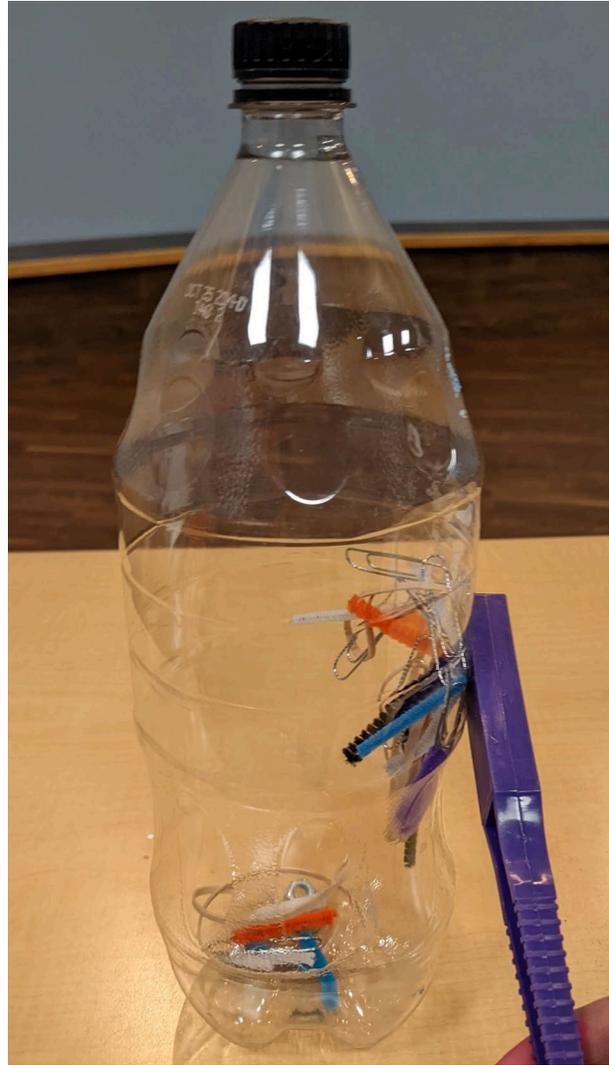
Give your child the magnet and have them use it to move the items around the sensory bottle.

Encourage their explorations with questions like:

- Can you pick the bottle up using only the magnet?
- What do you see happening?
- Do you think the [paperclip] will stick to the magnet? How can we find out?

Have your child identify and sort the magnetic items from the non-magnetic ones. Prompt them with questions like:

- Which items stick to the magnet?
- What else is the same about the items that stick to the magnet?



Change it up!

Depending on the age and need of your child, this activity may look different. This is an open-ended and exploratory activity. There is no wrong way to do it!

Here are some activity extensions and adaptations:

- Make several sensory bottles and fill each one with a single type of item. Investigate and sort the bottles! Which ones are filled with magnetic items?
- Use both magnetic and non-magnetic items in your sensory bottle. How can you sort and separate the items inside the bottle?
- Fill a bottle with baby oil and iron filings to observe a magnetic field.
- Make a scavenger hunt bottle using a filler like rice or sand and magnetic items to find.
- Remove the cap from on the sensory bottle and challenge your child to remove the items from the bottle using their magnet.

Science process skills

This activity focuses on building the skills to participate in science over the science content itself. This activity highlights making observations and using sorting skills as the participants explore with magnets.

We observe objects and events using our senses. While observations made only with the senses are qualitative, they help us gather information and learn about the world. Building observation skills help children expand on other science process skills like categorizing and making predictions. When guiding your child through this activity, ask your child what they notice about the items in the bottle. Encourage them to use multiple senses as they describe the bottles.

Sorting and grouping objects is a way of organizing our thinking. When we categorize, we separate and put things together to understand how they relate to each other. This may look like ranking items or splitting them into groups. This helps children recognize patterns and number sets, and reinforces math skills. When guiding your child through this activity, encourage them to find similarities between the items that are magnetic. Ask them: what do you think these items are made of?

This activity exists in many versions. This adaptation was inspired by Categorizing: Sensory Water Bottles from the Collaborative for Early Science Learning copyright 2021, Sciencenter, Ithaca NY.
Retrieved from: <http://www.sciencenter.org/perch/resources/categorizing-early-head-start.pdf>