Technology Activity
Shape It Up!

SETUP

• The goal of this activity is to introduce children to magnets and magnetic properties through exploration and play.

• Place assorted objects in a container, and have your child choose which objects he wants to start exploring.

DO IT TOGETHER

• Make sure your child has a few items on his paper plate. Let him choose what to explore. “What happens when you hold the magnet near the coin? Near the feather?”

• If needed, you can show your child how to hold the magnet and demonstrate that if you touch certain objects, they will stick to the magnet.

• “What did you see happen with the different objects? Did the magnet attract some things? Did some not stick at all? What happens if you hold more than one object up to the magnet?” Acknowledge your child’s ideas about why some objects stick and some don’t. With young children, there is opportunity to describe what happens and test out some new ideas. Ask your child to put the magnet close to an object. Now put it far away. What happens?

• Have your child guess which other objects on the table might stick, and have him try out his ideas. Try using all of the different magnets. “Do you notice any differences between what sticks to the magnets and what doesn’t?”

• If your child wants to know what magnets are, you can explain that they are a material that can be formed or found in nature that attracts one particular kind of metal: iron.

• It’s fine if a very young child just wants to play with the magnets and objects and see what happens.

• Challenge an older child to predict which objects will be attracted. Then you can ask, “Why do you think some objects are attracted and some aren’t?” See if your child discovers opposite polarity on his own. If he doesn’t, point it out to him with two magnets. Show him how some magnets repel each other.

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DO MORE OF IT!

- **Magnetic Explorer.** Play a game in which your child walks around a room and guesses which objects will be attracted to a magnet, then tests out his ideas. Objects can include jewelry, glasses, a table or even your body. You can extend the activity by sorting the objects into two groups according to their “sticky” and “nonsticky” properties.

- **Magnetic Power.** Experiment with using the magnet to move an object without actually touching it, or see if the magnet remains sticky through other things, such as a piece of paper or cloth. Try putting the magnets under a paper plate and see which magnets are strong enough to move which objects.

- **Refrigerator Magnets.** Buy number and letter refrigerator magnets to encourage your child to play with magnets in a different way. Leave some regular magnets on the refrigerator to encourage your child to explore on his own.

**BOOKS**

- *Sid the Science Kid: Earth Day Fun* by Jennifer Frantz
- *What Magnets Can Do* by Allan Fowler
- *The Science Book of Magnets* by Neil Ardley

**OTHER RESOURCES**

- Visit your local library.
- Visit your local museum, nature center, zoo, or aquarium.
- Check out Brain Building Zones for local events in Massachusetts at [http://brainbuildinginprogress.org/event-calendar](http://brainbuildinginprogress.org/event-calendar).
- Check out [www.resourcesforearlylearning.org](http://www.resourcesforearlylearning.org) and [www.peepandthebigwideworld.org](http://www.peepandthebigwideworld.org).

**MATERIALS**

- Assorted magnets
- Assorted objects that do and do not have magnetic properties. These can include buttons, coins, paper clips, corks, paper, cotton balls, cloth, and keys.
- Paper plates or trays

**Learning Guideline:**
PreK-LS1-4: Use their five senses in their exploration and play to gather information.