

## Objective

By the end of this lesson, the 4 year old homeschool student will be able to understand the basic concepts of magnets and their properties.

## Materials and Prep

- Magnetic objects (e.g. paperclips, fridge magnets, small metal objects)
- A magnet
- A whiteboard or large sheet of paper
- Markers or crayons
- Optional: Books about magnets

Before the lesson, familiarize yourself with the properties of magnets and how they work.

## Activities

- Activity 1: Magnetic or Not? - Gather a variety of objects and ask the student to predict whether each object is magnetic or not. Allow them to test their predictions using the magnet.
- Activity 2: Magnetic Art - Give the student a sheet of paper and markers or crayons. Encourage them to create a picture using the magnets as tools. They can move the magnets under the paper and watch as the iron filings create unique patterns on the surface.
- Activity 3: Magnetic Fishing - Fill a container with water and place several magnetic objects in it. Provide the student with a magnet attached to a string or a magnetic fishing rod. Let them "fish" for the objects using the magnet.

## Talking Points

- "Magnets are special objects that can attract certain materials like metal."
- "Magnets have two ends called poles - a north pole and a south pole."
- "Opposite poles attract each other, while similar poles repel each other."
- "When a magnet attracts a metal object, it is using its magnetic force."
- "Not all objects are magnetic. We can test if an object is magnetic by seeing if it sticks to the magnet."
- "We can use magnets to create beautiful patterns and art."
- "We can also use magnets to go fishing for objects that are attracted to them."
- "Remember, magnets are special and can do amazing things, but they are not toys. Always handle them carefully."