Objective

By the end of this lesson, the student will understand the basic principles of magnetism, including what magnets are, how they work, and their everyday uses. The student will also engage in handson activities to explore magnetic attraction and repulsion.

Materials and Prep

- Various magnets (if available, but can also use items like paper clips, coins, or fridge magnets)
- Paper and crayons or markers for drawing
- Small objects to test magnetism (like buttons, screws, or any other metal items)
- A safe space to explore and play with magnets

Before the lesson, it's helpful to know some basic facts about magnets, such as that they have a north and south pole and that opposite poles attract while like poles repel.

Activities

• **Magnet Exploration:** Let the student pick different items around the house to see which ones are attracted to the magnet. This will help them understand what materials are magnetic.

Ask the student to make a list of which items were attracted to the magnet and which were not. Discuss why some materials are magnetic while others are not.

• **Magnet Art:** Using paper and crayons or markers, have the student draw a picture of a magnet and label its poles. They can also illustrate something that is attracted to magnets.

This activity allows the student to be creative while reinforcing their understanding of magnets.

• Magnetic vs. Non-Magnetic Sorting Game: Create two piles with the found objects: one for magnetic items and one for non-magnetic items. The student can sort the items based on their findings from the exploration activity.

This will help the student categorize and understand the concept of magnetism better.

Talking Points

- "What do you think a magnet is? Can you guess how it works?"
- "Did you know that magnets have two ends called poles? One is the north pole and the other is the south pole!"
- "Opposite poles attract! That means if you put a north pole next to a south pole, they will pull towards each other!"
- "But if you put two north poles together, they will push away from each other. That's called repulsion!"
- "Magnets are used in many things around us, like in refrigerators to keep the doors closed!"
- "Can you think of other places where magnets might be used? Let's explore!"
- "Now that we've learned about magnets, what was your favorite part of today's lesson?"