

Smith Farm Elementary Lesson Plan

Teacher Name: Edwards	Grade Level: 4th Grade	Subject: Science
Date: April 10-14	Standards: 4.P.1.1 Explain how magnets interact with all things made of iron and with other magnets to produce motion without touching them. 4.P.1.2 Explain how electrically charged objects push or pull on other electrically charged objects and produce motion.	

	Monday, April 10	
Standards-aligned Materials and Resources:	Last Day of Spring Break - No School	
Clear Learning Goals (I Can statements):		
Vocabulary		
Build Background		
Direct Instruction (Teacher led)		Time: 5 min.
Student Practice		Time: 15 min.
Check for Understanding		Time: 5 min.

	Tuesday, April 11	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> • “Magnets and Magnetism” article (Newsela) • Graphic organizer 	
Clear Learning Goals (I Can statements):	I can explain the properties of a magnet and how they can be used.	

Vocabulary	magnet, magnetism, electromagnet, attract, repel, poles, magnetic field	
Build Background	Quick Write: On the top of your graphic organizer, answer the following questions: What is a magnet? What sorts of objects are attracted to magnets?	
Direct Instruction (Teacher led)	<p>Today we will focus on introducing magnets. The goal today is to remind students what magnets are, which metals are attracted to magnets, and what the properties of magnets are.</p> <p>Give each student a “Magnets and Magnetism” article and graphic organizer. Before we read, students should answer the activating questions at the top of the graphic organizer. Then, teachers should read the first section with students (What Causes Magnetism) and discuss it with them. After reading, model for students how to pick out the key details from the passage and record it on the graphic organizer.</p>	Time: 5 min.
Student Practice	<p>Students will read the remainder of the article in their table groups. For each section, students should pick out the key details and record them on their graphic organizers.</p> <p>After students have had time to read and complete their graphic organizers, review what they learned. Make sure to focus on the properties of magnets, including that like poles repel and opposite poles attract.</p>	Time: 15 min.
Check for Understanding	Students will answer the check for understanding question on the bottom of their graphic organizer. → Explain the properties of magnets, focusing on how the poles interact with each other.	Time: 5 min.

	Wednesday, April 12	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> ● Magnetism Interactive Notebook ● Science notebook 	
Clear Learning Goals (I Can statements):	I can explain the characteristics of magnetism, including how magnetic forces repel and attract.	
Vocabulary	magnetism, poles, electromagnet, repulsion, attraction	
Build Background	Show students the north pole and south pole of a magnet. Have them turn and talk about what will happen when these two poles are put together. Then, show	

	students either two north poles or two south poles. What will happen when two of the same poles are pushed together?	
Direct Instruction (Teacher led)	<p>*These interactive notebooks take a while because students have to cut and glue before we get started. Do what you can today, then finish it tomorrow.</p> <p>Remind students that yesterday we read a passage about magnetism and were introduced to the characteristics of magnets and which objects are attracted to magnets. Today our goal is to take the information we learned yesterday and complete an interactive notebook page in our science notebooks.</p> <p>This interactive notebook will consist of two parts. The first part will focus on what magnets are, their different poles, their uses, and electromagnets. The second part will focus on the magnetic forces of repulsion and attraction. Begin by showing students how to cut out the interactive notebook page and glue it into their science notebook.</p>	Time: 5 min.
Student Practice	<p>Once the interactive notebook pages are glued into the students' notebooks, we will begin filling them in with information about magnets.</p> <p>Using what we learned from our reading yesterday, we will work together to fill in the tabs, starting with what magnetism is. Then we will fill in information about magnetic poles and how they interact, the different uses for magnets, and what electromagnets are. After filling in the first part of the interactive notebook, we will move on to the second part and focus on how magnets can cause movement (repulsion and attraction).</p>	Time: 15 min.
Check for Understanding	Quick Write: Using what you know about repulsion and attraction, explain how magnets can produce motion without touching each other.	Time: 5 min.

	Thursday, April 13
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> ● Magnetism Interactive Notebook ● Science notebook
Clear Learning Goals (I Can statements):	I can explain the characteristics of magnetism, including how magnetic forces repel and attract.
Vocabulary	magnetism, poles, electromagnet, repulsion, attraction
Build Background	

Direct Instruction (Teacher led)	<p>Complete the magnetism interactive notebook from yesterday. There should be two interactive notebook pages to complete.</p> <p>The first page will focus on what magnets are, their different poles, their uses, and electromagnets. The second page will focus on the magnetic forces of repulsion and attraction.</p>	Time: 5 min.
Student Practice		Time: 15 min.
Check for Understanding		Time: 5 min.

	Friday, April 14	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> • Magnet wands • Various items (copper penny, paper clip, aluminum foil, pencil, nails, bobby pins, marbles, push pins) • Science notebook 	
Clear Learning Goals (I Can statements):	I can use my knowledge of magnets to predict how they will interact with various objects.	
Vocabulary	magnetism, predict, hypothesis, interact	
Build Background	<p>Quick Write: Create a list of 5-10 items that are magnetic. Let students share and compare their lists with their table groups when they finish.</p>	
Direct Instruction (Teacher led)	<p>Remind students that over the past few days, we have been learning about the characteristics of magnets and how they can create movement without touching each other. Today we are going to focus on how magnets interact with various objects.</p> <p>Explain to students that today we are going to do a hands-on activity with magnets to determine if various items are magnetic, and what that says about these objects. Before we begin testing these items, we need to predict what we think will happen when they come in contact with the magnets.</p> <p>Give each student a Magnetism Experiment graphic organizer. On this graphic organizer, there are 8 objects listed: copper penny, paper clip, aluminum foil, pencil, nail, bobby pin, marble, and a push pin. In the first column next to each item, students will need to make a prediction by writing whether or not they think it will be attracted to the magnet and WHY.</p>	Time: 5 min.

Student Practice	<p>In their table groups, students will explore each object with a magnet wand to determine if they are magnetic or not. Teachers can do this in one of two ways: either place objects at various points in the room and let table groups circulate to each one, or give all of the materials to each table group and let them work together while staying seated.</p> <p>As they are testing the magnetism of each object, students will continue to fill in the graphic organizer. They will write whether or not the item is magnetic, as well as WHY is it magnetic or not.</p>	Time: 15 min.
Check for Understanding	<p>Quick Write: On the back of their graphic organizer, students will make a list of 5 items that are magnetic and 5 that are not. *The items must be different from the ones we looked at today.*</p>	Time: 5 min.

Direct Instruction (Teacher led): *Examples - Modeling, providing new vocabulary, questioning, anchor charts, scaffolding, chunking content, etc.*

Student Practice: *Examples - Small group w/ teacher, pairs, individual; graphic organizers, writing prompts, think-pair-share, student-led discussions, student summaries, pictorial notes, mini-projects, etc.*

Check for Understanding: *Examples - ticket out the door, kahoot, white boards, four corners, turn and talk, thumbs up/down, parking lot/Windshield, summative assessment, project, performance, Pear Deck slides, Flipgrid, Padlet, etc.*