

# Lesson Title: The Force Field

<b>Date/ Time Frame</b>	15 instructional days (approximately)
<b>Type:</b>	5E
<b>Lesson in a Series</b>	Unit 3: Lesson 2 of 3 <a href="#">Lesson 2: The Force Field</a>
<b>Technology Integration</b>	Zoom FlipGrid Jamboard Google Classroom BrainPOP Zingy Learning
<b>NGSS Standard:</b>	<a href="#">MS-PS2-3</a> Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.  <a href="#">MS-PS2-5</a> Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.
<b>CA ELD Standards</b>	<u>Part 1.A, Collaborative,1:</u> Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic contexts.  <u>Part 1.B, Interpretive,6:</u> Reading closely of informational texts and viewing multimedia to determine how meaning is conveyed explicitly and implicitly through language.  <u>Part 1.C, Productive,10:</u> Composing/writing literary and informational texts to present, describe, and explain ideas and information, using appropriate technology.

<b>Learning Intention</b>	Students will learn about magnetic forces and how they interact.
<b>Success Criteria</b>	Students will be successful when they can ask questions about data and evaluate an experimental design that provides evidence of non-contact forces.
<b>Material: ( )</b>	Chromebooks Nails Wire D Batteries
<b>Questions</b>	<ul style="list-style-type: none"> <li>• <i>How do magnets work?</i></li> <li>• <i>Why do magnets repel? Attract?</i></li> <li>• <i>What is a magnetic field?</i></li> <li>• <i>How does a compass work?</i></li> </ul>
<b>Task - What do you want the students to do?</b>	<p><i>Conduct an experiment using an electromagnet. (optional in virtual learning)</i></p> <p><i>Create a presentation demonstrating knowledge of magnets and magnetic fields.</i></p>
<b>CFU / Rubric</b>	<p>BrainPOP quizzes</p> <p>Zingy Learning activities &amp; quizzes</p> <p>Student Evaluate presentations</p>