**Motion and Materials**

**Grade 1**

**Teacher’s Guide**

Lake Erie Nature & Science Center

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**Description**

In this hands-on inquiry field students will work together to solve a set of motion challenges using exciting and educational materials.

**Length:** 60 minutes. **Adult chaperones recommended:** 4-6

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**Content Standards**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Gr</th>
<th>Standard</th>
<th>Objective/”I can” Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Science</td>
<td>1</td>
<td>Objects can be moved in a variety of ways, such as straight, zigzag, circular and back and forth.</td>
<td>I can observe and explain ways that objects move in different directions.</td>
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</tbody>
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**Vocabulary**

- motion
- position
- pull
- push

**Books**

Pre-Trip Activities
Observe various ways that objects move in a straight line (vertical, horizontal).

Post-Trip Activities at School
- Have children choose a movement (zigzag, circular, straight) and race from one side of the class/gym.
- Make observations about motion in the natural world and explain why they are moving in that way (zigzag, circular, straight).

Extension Activities
- Build a Rube Goldberg machine to accomplish a simple task
- Implement a scientific investigation to determine: How can a ball be made to speed up (slow down or change direction)? With the class, list all the ways that were found.