ENERGY: SWINGING – PART I

Vocabulary

In the space below, write the definitions of energy, kinetic energy, potential energy, and speed. It’s okay if you don’t know the definition. Make your best guess or make up a silly definition for the words based on what it reminds you of or what it sounds like.

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Energy</td>
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<tr>
<td>Kinetic Energy</td>
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<tr>
<td>Potential Energy</td>
<td></td>
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<tr>
<td>Speed</td>
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</tbody>
</table>
Let’s Swing!

Find a playground with swings and hop on. Take turns swinging and watching someone else swing. Think about the energy involved with the action of swinging. Use what you notice to answer the following questions:

- When are you moving the fastest?
- When are you moving the slowest?
- How do you increase your speed while swinging?
- How do you decrease your speed while swinging?
- When do you feel like the swing has the most and least energy?
- What directions do you move in while swinging?
- What forces are acting on you while swinging?
- Describe the shape created by the path of the movement of the swing.
- Does the path of motion change or stay the same with each swing?

In the space below write a narrative describing your observations of the energy involved with swinging. Use as many of the vocabulary words on the first page as you can. Don’t worry if you are using the words correctly yet — you will have a chance to revise this writing again later.

What questions came to mind about energy while you were swinging? Write them in the space below.