Effects of Water on Sediment

Procedure

1. **Collaborate** Work with a partner. Use a hand lens to observe a mixture of sediment. On the lines below, record what you observe. **Safety:** Wear goggles.

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2. **Measure** Use a funnel to put about 2 cm of the sediment into a plastic soft drink bottle. Fill the bottle about two-thirds with water. Put the cap back on the bottle and tighten it firmly.

3. **Observe** Swirl around the material in the bottle for about 30 seconds. Then set the bottle down and do not move it again. Record what you observe in the chart below.

4. **Predict** Observe the contents of the bottle every 2 hours for the rest of the day. Record what you observe each time. At the end of the day, write a prediction about how the sediment will look in 24 hours.

<table>
<thead>
<tr>
<th>Sediment with water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
</tr>
<tr>
<td>After 2 hours</td>
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<tr>
<td>After 4 hours</td>
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<tr>
<td>Prediction</td>
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</table>
Conclusion

1. **Compare** How are the observations you made before swirling the bottle similar to the ones you made after swirling it? How are they different?

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2. **Infer** How do the effects you have observed relate to things that happen in nature?

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**Experiment**

Make a model to show what happens when water runs downhill over sediment. Measure the material that is moved. Repeat this three times. Average your results. **Infer** reasons for any differences.

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