Name(s): $\qquad$

Section: $\qquad$
Date: $\qquad$

## Force and Motion

## Activity 1: Speed

## http://sunshine.chpc.utah.edu/javalabs/

Record the name, distance and time for each snowmobile in the table below. You can view different snowmobiles by clicking on the arrows at the side of the pictures. Calculate and record their average speed. Predict and record the order of finish. Record all data before starting the race as trial times change for each race.

| Name | Distance | Time | Speed (d/t) | Predicted <br> Finish | Final <br> Standings |
| :---: | :---: | :---: | :---: | :---: | :---: |
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| Name | Distance | Time | Speed (d/t) | Predicted <br> Finish | Final <br> Standings |
| :---: | :---: | :---: | :---: | :---: | :---: |
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## Analysis Questions

1. Now that you've "raced" the snowmobiles, was your prediction about how they would finish right or wrong?
2. If Otter Pop gets to the destination first, what can you say about its average speed? (If you need to draw a sketch to clarify your ideas, go ahead.)
3. Now Sider and Mangler are traveling at the same average speed, but they are going to different places. Mangler takes longer to get to its destination. What can you say about Mangler's trip compared to Slider's? (Feel free to make a sketch if it will help you.)
4. What are the slowest and fastest things you can think of? (Name at least 2 for each.)
5. What two things are needed to find the speed of an object? Are they the same things you would need to find the speed of light?
6. Why do you think Galileo's method for finding the speed of light didn't work? How would you be able to fix their experiment by using some of today's technology?
7. How far does light travel in an hour?
8. How long will it take you to reach the amusement park?
