Webquest: Types of Forces

Part 1: force

Use the following link to answer the following questions: http://www.darvill.clara.net/enforcemot/forces.htm

- A. <u>Forces</u> Tab: Make sure you have clicked on the forces tab on the screen for the following questions.
- 1. Forces are measured in Newtons (N). Why are forces considered to be vectors?
- 2. List three things that can change a force?
- 3. Explain the force of *gravity*. (Is it a weak force or a strong force? Which direction does act on objects?)
- 4. What is weight?
- 5. What is the Earth's gravitational strength at ground level?

Read and answer the gravity questions on your own.

- 6. Explain what a balanced force and an unbalanced force.
- 7. Observe the parachute picture and answer the questions below:
 - What forces are acting?
 - What can you say about the size of the forces?
- 8. The resultant force is also called the net force. Explain resultant force.

Part II: Friction

- B. <u>Friction</u> tab: click on the friction tab on the screen and answer the questions below
- 1. What is friction?

- 2. What are the two main types of friction?
- 3. What does friction depend upon?

Watch and read the animation about fiction!!

- 4. What is fluid friction?
- 5. What does fluid friction depend upon?
- 6. What is drag?
- 7. What is a viscous liquid?
- 8. What is terminal velocity?

Click on the terminal velocity graph to watch what happens to the graph when the sky diver descends

- 9. List 3 to 5 ways to reduce friction.
- 10. List 3 to 5 ways to use friction to your advantage.

Read and answer the questions about friction on your own.

Friction Questions: (Click on the questions to reveal the answers)

- 1. What does dry friction depend upon?
- 2. What is another name for fluid friction?
- 3. What does fluid friction depend upon?
- 4. Why do we oil machinery? (use the word "friction" in your answer).
- 5. Why does a falling object reach a "terminal velocity"?