

Air Puck vs Block Investigation Part I

NOTE: Neither object is big enough or moving fast enough for Drag to be a factor.

1. Initial pushing stage: Block

- a) Was there a force on the block? If so, what kind?
- b) What kind of motion did the block have (roughly)?

2. Initial pushing stage: Air Puck

- a) Was there a force on the puck? If so, what kind?
- b) What kind of motion did the puck have (roughly)?

3. No longer pushing stage: Block

- a) Was there a force on the block? If so, what kind?
- b) What kind of motion did the block have (roughly)?

4. No longer pushing stage: Air Puck

- a) Was there a force on the puck? If so, what kind?
- b) What kind of motion did the puck have (roughly)?

Can you organize this information on your whiteboard so that it shows important patterns?

What is the essential difference between the block and the puck? (What does the blowing of the air accomplish?)

Air Puck vs Block Investigation Part 2

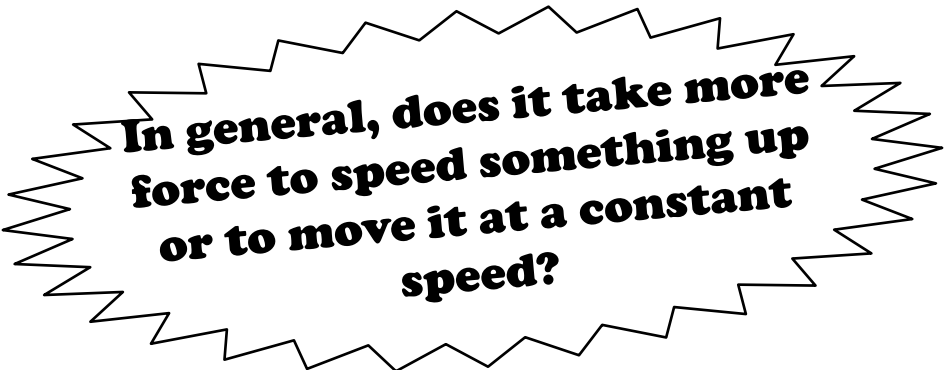
NOTE: Neither object is big enough or moving fast enough for Drag to be a factor.

1. Use the Dune Buggy and spring scale to pull the block.

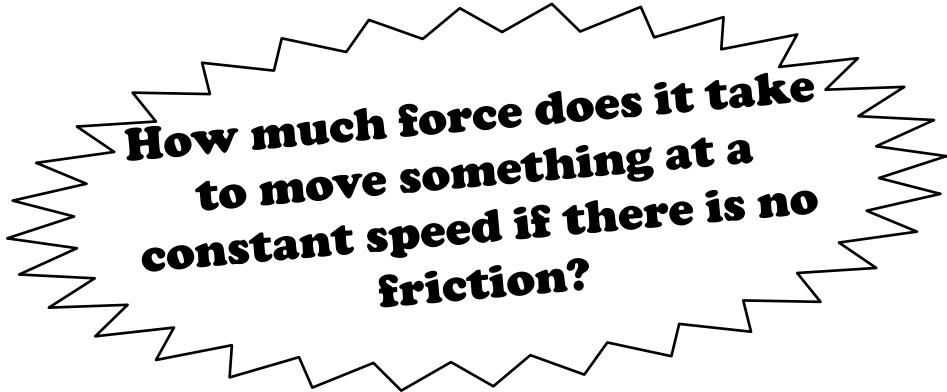
- a) What was the max reading during the speed-up?
- b) What was the reading during the constant (roughly)?

2. Use the Dune Buggy and spring scale to pull the air puck.

- a) What was the max reading during the speed-up?
- b) What was the reading during the constant (roughly)?



In general, does it take more force to speed something up or to move it at a constant speed?



How much force does it take to move something at a constant speed if there is no friction?