

**What causes objects to move or stay still?** Use observations from the Phet simulation.

**Claim:** \_\_\_\_\_

\_\_\_\_\_

**Evidence:** \_\_\_\_\_

\_\_\_\_\_

**Analysis Questions/Reasoning: (You can use evidence from the simulation to answer the questions or other examples you think of).**

**1. Give an example of a balanced force.** \_\_\_\_\_

\_\_\_\_\_

**2. Give an example of an unbalanced force.** \_\_\_\_\_

\_\_\_\_\_

**3. True or false? Balanced forces cause a change in motion. True/False**

**How do you know this?** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**4. True or False? Unbalanced forces cause a change in motion True/False**

**How do you know this?** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**5. Now that you have had a chance to experiment with the simulation, go back to the question at the beginning of the investigation. What do you think would be the best way to divide up your friends for the game of tug-of-war? Be sure to explain your reasoning.**

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