

Name: _____

Date: _____



GENIUS CHALLENGE

BALANCED & UNBALANCED FORCES

1. What 2 things do all forces have? _____

2. When playing tug of war and neither side moves, forces are...

- a. unbalanced
- b. balanced
- c. multiplied
- d. unequal

3. In tug of war, when one team moves toward the other, what can be said about the forces?

4. When floating a ping-pong ball with a hairdryer, which two forces are balanced?

Force pulling down: _____ Force pushing up: _____

5. If the hairdryer was put on full power, what would happen? Why?

6. When Dr. Jeff jumps on a skateboard and uses the fire extinguisher to move, which of these does he change to move BACK to where he started?

- a. amount of force
- b. type of force
- c. direction of force
- d. skateboard wheels

7. True or false: balanced forces are important for a hover board to float. _____

8. In Zoe's egg drop experiment, which two forces are balanced that keep the egg from moving before she hits the pan?

1. _____ 2. _____

9. True or false: the downward motion of the egg in Zoe's experiment is due to unbalanced forces.

10. When Izzy applied a force to the golf ball, it went in the right direction, so why didn't it go in the hole?
