

Newton's Laws Quiz A

Name _____
Block _____

1. If two people are pulling against each other with forces of 500 Newtons and 600 Newtons, there is a/an
 - a. balanced force
 - b. unbalanced force
 - c. universal gravitation

2. The force of attraction acting between two objects is called
 - a. inertia
 - b. universal gravitation
 - c. momentum
 - d. buoyancy

3. Rocket engines operate on the principle of
 - a. a balanced force
 - b. inertia
 - c. an unbalanced force
 - d. action and reaction

4. The tendency of matter to remain in constant motion unless acted on by an outside, unbalanced force is called
 - a. inertia
 - b. acceleration
 - c. momentum
 - d. force

5. Motion is produced by
 - a. all forces
 - b. unbalanced forces
 - c. balanced forces
 - d. the absence of force

6. According to Newton's Third Law, action and reaction are
 - a. equal and in the same direction
 - b. equal and in opposite directions
 - c. unequal and in the same direction
 - d. unequal and in opposite direction

7. The force of gravity between the Earth and a log is called
 - a. density
 - b. momentum
 - c. gravity
 - d. force

8. If you push on a wall with a force of 30 Newtons, the force acting on you is
 - a. 0 Newtons
 - b. 10 Newtons
 - c. 20 Newtons
 - d. 30 Newtons

9. If the mass of one object is doubled, what happens to its gravitational attraction?
 - a. Cut in half.
 - b. Doubled
 - c. Nothing. Gravity never changes.

10. Explain the results of the playing card/coin challenge in your own words.
What happened and why?

Newton's Laws Quiz B

Name _____
Block _____

- Motion is produced by
 - all forces
 - unbalanced forces
 - balanced forces
 - the absence of force
- If you push on a wall with a force of 30 Newtons, the force acting on you is
 - 0 Newtons
 - 10 Newtons
 - 20 Newtons
 - 30 Newtons
- The tendency of matter to remain in constant motion unless acted on by an outside, unbalanced force is called
 - inertia
 - acceleration
 - momentum
 - force
- Rocket engines operate on the principle of
 - a balanced force
 - inertia
 - an unbalanced force
 - action and reaction
- If two people are pulling against each other with forces of 500 Newtons and 600 Newtons, there is a/ an
 - balanced force
 - unbalanced force
 - universal gravitation
- If the mass of one object is doubled, what happens to its gravitational attraction?
 - Cut in half.
 - Doubled
 - Nothing. Gravity never changes.
- The force of gravity between the Earth and a log is called
 - density
 - momentum
 - gravity
 - force
- The force of attraction acting between two objects is called
 - inertia
 - universal gravitation
 - momentum
 - buoyancy
- According to Newton's Third Law, action and reaction are
 - equal and in the same direction
 - equal and in opposite directions
 - unequal and in the same direction
 - unequal and in opposite direction
- Explain the results of the jet car challenge in your own words.
What happened and why?

Newton's Laws Quiz C

Name _____
Block _____

1. If the mass of one object is doubled, what happens to its gravitational attraction?
 - a. Cut in half.
 - b. Doubled
 - c. Nothing. Gravity never changes.
2. If you push on a wall with a force of 10 Newtons, the force acting on you is
 - a. 0 Newtons
 - b. 10 Newtons
 - c. 20 Newtons
 - d. 30 Newtons
3. The force of gravity between the Earth and a log is called
 - a. density
 - b. momentum
 - c. gravity
 - d. force
4. According to Newton's Third Law, action and reaction are
 - a. equal and in the same direction
 - b. equal and in opposite directions
 - c. unequal and in the same direction
 - d. unequal and in opposite direction
5. The tendency of matter to remain in constant motion unless acted on by an outside, unbalanced force is called
 - a. inertia
 - b. acceleration
 - c. momentum
 - d. force
6. Motion is produced by
 - a. all forces
 - b. unbalanced forces
 - c. balanced forces
 - d. the absence of force
7. Rocket engines operate on the principle of
 - a. a balanced force
 - b. inertia
 - c. an unbalanced force
 - d. action and reaction
8. The force of attraction acting between two objects is called
 - a. inertia
 - b. universal gravitation
 - c. momentum
 - d. buoyancy
9. If two people are pulling against each other with forces of 600 Newtons and 600 Newtons, there is a/an
 - a. balanced force
 - b. unbalanced force
 - c. universal gravitation
10. Explain the results of the scooter tug of war challenge in your own words.
What happened and why?

Newton's Laws Quiz D

Name _____
Block _____

1. If you push on a wall with a force of 10 Newtons, the force acting on you is
 - a. 0 Newtons
 - b. 10 Newtons
 - c. 20 Newtons
 - d. 30 Newtons
2. If the mass of one object is cut in half, what happens to its gravitational attraction?
 - a. Cut in half.
 - b. Doubled
 - c. Nothing. Gravity never changes.
3. Rocket engines operate on the principle of
 - a. a balanced force
 - b. inertia
 - c. an unbalanced force
 - d. action and reaction
4. The tendency of matter to remain in constant motion unless acted on by an outside, unbalanced force is called
 - a. inertia
 - b. acceleration
 - c. momentum
 - d. force
5. Motion is produced by
 - a. all forces
 - b. unbalanced forces
 - c. balanced forces
 - d. the absence of force
6. According to Newton's Third Law, action and reaction are
 - a. equal and in the same direction
 - b. equal and in opposite directions
 - c. unequal and in the same direction
 - d. unequal and in opposite direction
7. The force of gravity between the Earth and a house is called
 - a. density
 - b. momentum
 - c. gravity
 - d. force
8. If two people are pulling against each other with forces of 500 Newtons and 500 Newtons, there is a/an
 - a. balanced force
 - b. unbalanced force
 - c. universal gravitation
9. The force of attraction acting between two objects is called
 - a. inertia
 - b. universal gravitation
 - c. momentum
 - d. buoyancy
10. Explain the results of the weighted stick challenge in your own words.
What happened and why?