

Forces & Motion (3 - 5)

These questions will enable you to conduct a pre-assessment and post-assessment of your students' knowledge of forces and motion. The questions are directly related to the subject matter taught in the program. An answer key is provided. Please comment on the value of this material when submitting the program evaluation form.

1. Friction is a force, what does it do? Give an example.
2. When you throw a ball into the air, what force pulls it back down?
3. How does a higher slope of an incline plane affect the speed of an object rolling down the slope? Why?
4. A push or a pull is a simple definition of a _____.
5. Name 2 simple machines you could use to help you lift a heavy object.
6. Isaac Newton is responsible for Newton's 3 Laws of _____.
7. A ball will sit on a tee until someone does what?
8. How do you make a ball move faster and further?
9. Will a heavier ball move faster or slower than a light ball, if they have the same force on them?
10. Describe how a balloon will move if you blow it up and let it go.

Answer Key

1. make moving objects slow down or stop / brakes on car, slow down ball rolling along floor, speed bumps in parking lot, shoe tread on a slippery floor, etc.
2. gravity
3. makes it go faster, takes advantage of the way gravity pulls
4. force
5. pulley, lever
6. Motion
7. hits it, pushes or pulls it
8. hit, kick, throw it harder, put more force behind it
9. slower
10. it will move opposite from the opening in the balloon where the balloon was blown up, circles around until air is all out of balloon