Forces and motion worksheet

3rd grade science · Physical Science

Name _____ Date _____

For grown-ups: 10 questions from our forces and motion practice, easier ones first. Read a question aloud if your child wants that, then check together with the answer key on page 2. Circle one answer for each problem.

1. **A force is a ___.**
   ○ Sound ○ Color ○ Push or pull

2. **What pulls things down toward the ground?**
   ○ Magnetism ○ Friction ○ Gravity

3. **You drop a ball. Which way does it go?**
   ○ Sideways ○ Up ○ Down

4. **Friction slows moving things down.**
   ○ Yes ○ No

5. **A magnet can pull on something without touching it.**
   ○ Yes ○ No

6. **Two kids push a box from opposite sides, equally hard. What happens?**
   ○ It stays still ○ It spins fast
   ○ It flies up

7. **Which surface has the most friction?**
   ○ Wet tile ○ Smooth ice
   ○ Rough carpet

8. **A rolling ball slows down and stops. What slowed it?**
   ○ More pushing ○ Nothing
   ○ Friction

9. **Without gravity, a thrown ball would not fall back down.**
   ○ Yes ○ No

10. **Why do you slide farther on ice than on grass?**
    ○ Ice is heavier
    ○ Ice has less friction
    ○ Grass has more gravity

Answer key: Forces and motion

3rd grade science · More practice and a guide for parents at tutorsaurus.com/learn/3rd-grade/forces-motion

1. **Push or pull**
   A force is a push or a pull. Forces make things start moving, stop, or change direction.
2. **Gravity**
   Gravity is the force that pulls everything toward the Earth.
3. **Down**
   The ball falls down because gravity pulls it toward the ground.
4. **Yes**
   True! Friction is a force between surfaces that rub together. It slows things down.
5. **Yes**
   True! Magnets pull on iron and steel from a distance. Gravity works without touching, too.
6. **It stays still**
   The two equal pushes balance each other, so the box does not move.
7. **Rough carpet**
   Rough carpet has the most friction. Rough, dry surfaces slow things down more than smooth or slippery ones.
8. **Friction**
   Friction from the floor and the air slowed the ball until it stopped.
9. **Yes**
   True! Gravity is what pulls the ball back down. Astronauts float in space because they are falling around Earth together with their spaceship.
10. **Ice has less friction**
    Ice is smooth, so there is less friction to slow you down. Grass is rough and stops you faster.