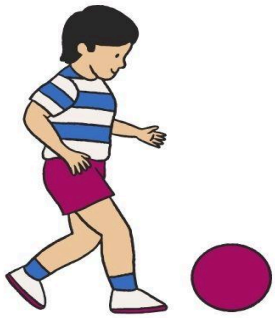
FORCE AND MOTION







Comprehension Check

For questions 1-6, match each type of simple machine to the correct description:

1. Inclined plane	a. a simple machine made of rope or chain wrapped around a spinning wheel
2. Lever	b. a simple machine shaped like a ramp
3. Pulley	c. a simple machine shaped like a ramp wrapped around a central shaft
4. Wheel and axle	d. a simple machine shaped like two ramps placed back-to-back with an edge that cuts or slices
5. Screw	e. a simple machine consisting of a rod or bar that rests and turns on a support called a fulcrum
6. Wedge	f. a simple machine with a big wheel attached to a post

1. Inclined plane –
2. Lever –
3. Pulley –
4. Wheel and axle –
5. Screw –
6. Wedge –

7. What is force? What is motion?

8. Miguel says acceleration only occurs when an object gains speed. Is he correct? Why or why not?

9. Describe the concept of inertia.

10. What is friction?

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1. Inclined plane – b
2. Lever – e
3. Pulley – a
4. Wheel and axle – f
5. Screw – c
6. Wedge – d

7. What is force? What is motion?
    a. A force is a push or pull. Mechanical force acts when two objects touch each other. Gravity is an invisible force that pulls everything toward the ground. Magnetism is another kind of invisible force that can push or pull to cause motion. Motion is a change in position. Motion includes two factors: speed,

which is the distance traveled in a certain amount of time; and direction, which describes the way an object is going.

8. Miguel says acceleration only occurs when an object gains speed. Is he correct? Why or why not?

    a. Miguel is incorrect. Acceleration is a change in motion caused by a force. Acceleration is any change in speed or direction. This change in speed can include speeding up but it can also include slowing down!

9. Describe the concept of inertia.
    a. Inertia is the term we use to describe the idea that objects tend to either stay in motion or stay at rest.

10. What is friction?
    a. Friction is the rubbing of one object or substance against another, which creates resistance between the two surfaces. Friction causes objects to slow down and produces heat.