Test 4 Study Page • Summary

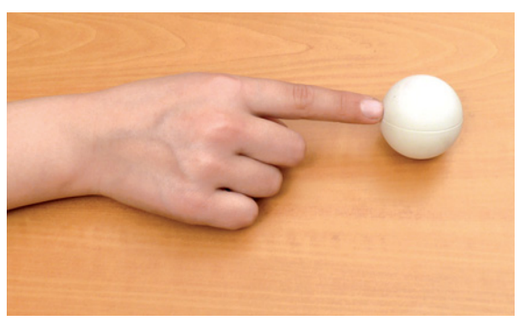
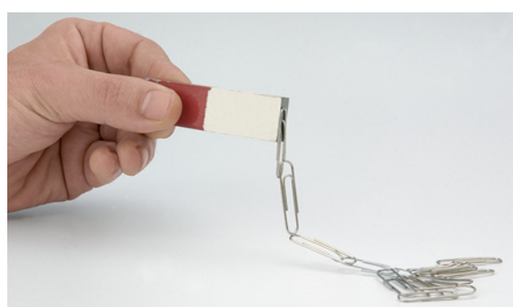
Name: _____ Grade: _____

Motion is defined as the change in position of a body—in other words, when a body changes its location in relation to a point of reference.

Some concepts that characterize movement are:

Trajectory	Displacement	Speed
This is the path a body travels along when it is in motion.	This corresponds to the straight line connecting the initial position of a body with its final position after movement.	This relates the distance a body has traveled to the time it takes to do so. Speed is calculated using this equation: $\text{speed} = \frac{\text{distance}}{\text{time}}$

Force is an interaction between two bodies. One body exerts force and another receives force. Forces can be classified as:

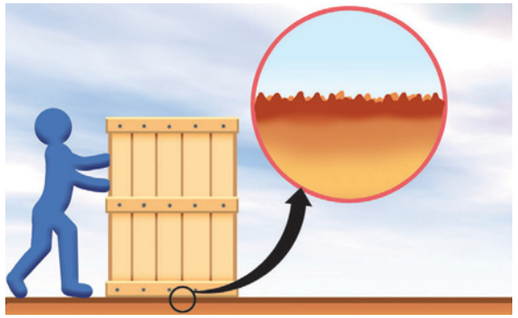
Contact Forces	Noncontact Forces
	

The application of force can cause different effects. For example:

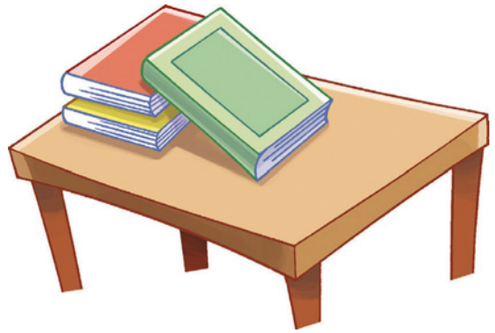
Change in Shape | Change in Direction | Change in Speed

Types of Force

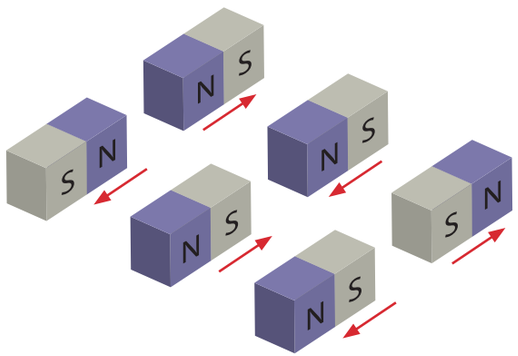
Frictional Force is the force that opposes a body's motion. It depends on the mass and characteristics of the bodies in contact.



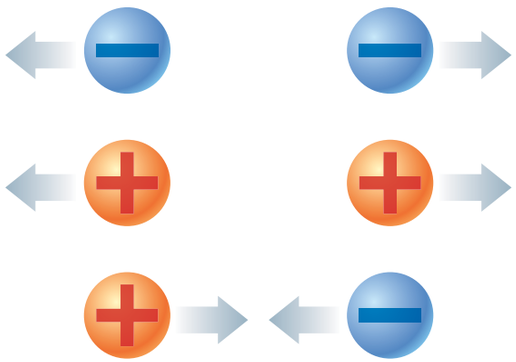
Gravitational Force, or weight, is the force with which the earth or another celestial body attracts objects to its surface.



Magnetic Force is the interaction of attraction or repulsion between magnets.



Electric Force is the interaction of attraction or repulsion between two electrically charged bodies.



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Test 4 Study Page • Review

Remove, answer, and glue in your notebook.

Section 1

1. Define the following concepts. Give one example of each.

Concept	Definition	Example
Trajectory		
Motion		
Speed		
Force		

2. Calculate the speed of a body whose motion is shown below.

Time (seconds)	Distance (meters)
2	4

Section 2

3. When you open a door, what is exerting force and what is receiving force?

_____

4. Mark wants to wash his soccer ball, so he puts it on the ground. When he sprays it with the hose, the water moves the ball. Why does it move? Explain.

_____

_____

Section 3

5. Look at the images and respond.

situation 1

situation 2

In which case would it be more difficult to move the pencil case? Explain why.

_____

_____

6. Give an example from your daily life in which each of these forces can be seen.

Frictional Force	Gravitational Force
_____	_____
_____	_____
Magnetic Force	**Electric Force**
_____	_____
_____	_____

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