Name _____ Date _____ Class _____

Content Practice A

LESSON 2

Newton's First Law

Directions: *On each line, write the term from the word bank that correctly completes each sentence. Some terms may be used more than once.*

balanced	**constant**	**direction**	**inertia**	**motionless**
net force	**reference direction**	**straight**	**unbalanced**	**velocity**

1. The combination of all forces acting on an object is the _____.

2. Because forces have a(n) _____, a(n) _____ must be specified when forces are combined.

3. Forces that combine to produce a(n) _____ of zero are _____; for a nonzero quantity, they are _____.

4. Newton's first law of motion states that if zero force is acting on an object at rest, the object will continue to be _____.

5. The same law states that a moving object subjected to zero force will continue in a(n) _____ line at a(n) _____ speed.

6. A(n) _____ set of forces cause a moving object to change its _____.

7. The tendency of an object to resist a change in its motion is called _____.

Name _____ Date _____ Class _____

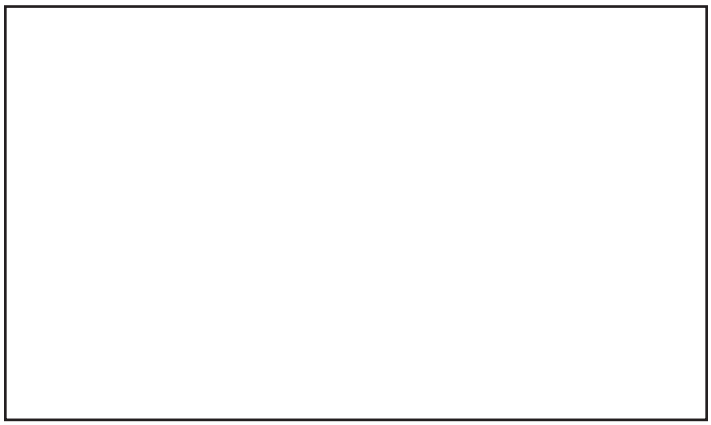
Content Practice B

LESSON 2

Newton's First Law

Directions: *In the box below, draw arrows showing a positive force of 400 N and a negative force of 200 N. Use "to the right" as the reference direction. Then write the net force on the line provided.*

1. net force: _____



Directions: *Answer each question on the lines provided.*

2. How much force would be needed to balance the force represented by the two arrows in the diagram above?

_____

3. What are balanced forces? What are unbalanced forces?

_____

_____

4. What is Newton's first law of motion?

_____

_____

_____

_____

5. What is inertia?

_____

_____