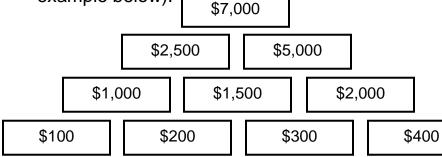
#### **Forces and Motion**

#### **Teacher Notes**

- Duplicate the word/point value pages back-to-back on card stock.
- Duplicate word bank cards on card stock. Cut apart, giving each student a card containing both Sets 1 and 2.
- Give each student a copy of the passage with the assessment items attached.
- Call on volunteers to read the words in the box. Don't define yet.
- Guide the students in reading the passage. (They can read it silently first and then orally or just orally.)
- Discuss the passage as desired, having students define the words in bold print in their own words, using context clues or prior knowledge.
- Use the vocabulary cards to play vocabulary games:
  - \$7,000 Pyramid
    - Lay the Set 1 cards face down in a pyramid shape (see example below). \$7,000



- Give each student a word bank card. Read over and discuss the words briefly.
- Divide the class into 2 groups.
- Set the timer for 3 minutes or use a stopwatch to time 3 minutes. (If this seems too short for your students, try 5 minutes.)
- Turn over the word with the lowest value. Give the definition to the first person on one team. (See definition list.) If the person guesses the correct word, that team gets the point value shown on the back of the card.
- Continue until the students reach the top of the pyramid or until time runs out. Students can pass on a word and come back if time allows.
- Add the money amount won by that team.
- Discuss any words passed or missed by the team.

- Have the other team attempt the pyramid with Set 2 cards.
- The winning team is the one with the greatest money total.
- If time and interest permit, switch cards so that each team gets the opportunity to try both sets.

#### o Most Expensive Sentence

- Divide the class into groups.
- Have each group create a sentence using one or more of the words from the word banks. The sentence must be scientifically correct and make sense! Give the groups 3 minutes to collaborate on their sentence.
- Have each group read their sentence out loud. Give them the point value for the words they used. (See the point values on the Teacher's Notes page.)
- Play three rounds. The group with the highest point total wins.

## **Definition Lists**

<u>Set 1</u>	
<b>\$100</b>	force—a push or a pull
\$200	<b>push</b> —to press against something with force in order to make it
	move
\$300	meter stick—a tool used to measure length or distance
\$400	<b>gravity</b> —a force that pulls objects towards the center of the
	Earth or towards each other
\$1,000	motion—a change in the position of an object
\$1,500	oppose—act against
\$2,000	<u>direction</u> —the line or course on which an object is moving
\$2,500	inertia—the tendency of an object at rest to remain at rest and
	the tendency of a moving object to keep moving
\$5,000	position—the place or area occupied by an object
\$7,000	acceleration—an increase or decrease in speed
•	<u> </u>

<u>Set 2</u>	
\$100	<b><u>pull</u></b> —use a force to draw back an object
\$200	tool—any object that helps one do work
\$300	magnetism—a force that pulls magnetic materials across a
	distance
\$400	weight—the measure of the pull of gravity on an object
\$1,000	<u>friction</u> —a force between two surfaces rubbing against each
	other; works to stop or slow motion
\$1,500	motion—a change in the position of an object
\$2,000	mass—the amount of matter in an object or substance
\$2,500	movement—the process of moving
\$5,000	<u>illustration</u> —a picture or diagram that helps make something
	clear
\$7,000	effort—the total work done by a force

### **Answer Keys**

# Answer Key—Multiple Choice Questions

- 1. B
- 2. A
- 3. D
- 4. B
- 5. D
- 6. D
- 7. A
- 8. C
- 9. A
- 10. **C**