

## Stations Activity

### Balanced/Unbalanced Forces Station

Watch the skydiving AND balanced/unbalanced forces video to answer the following questions (directions how to get videos on station table):

1. When forces are balanced, \_\_\_\_\_ remains constant, and the object stops \_\_\_\_\_.

2. When the forces are unbalanced, this changes the \_\_\_\_\_ or \_\_\_\_\_ of an object in motion.

3. Name another example of balanced forces:

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4. Name another example of unbalanced forces:

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### Calculating Speed, Distance, and Time Station

**Your overall score for this section is**

#### Correct Answers

You answered  questions correctly out of the  questions in this section.

#### Incorrect Answers

There were  questions where you used the *Tell Me* button.

There were  questions with wrong answers.

There were  questions you didn't attempt.

## BrainPop Force Station

Watch the BrainPop video on Force and answer the following questions while you are watching:

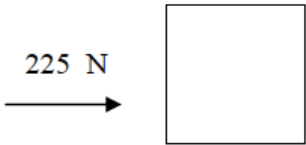
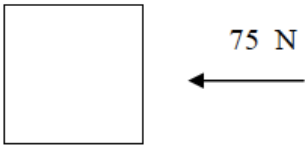

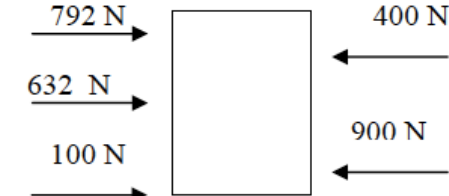
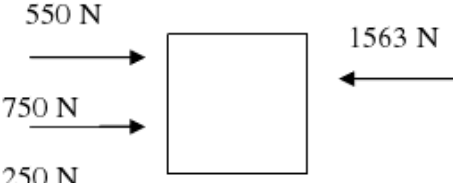
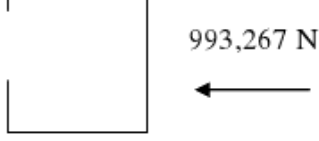
\*\*The directions to get to this video and the username and password is on the station table


1. A force is anything that makes an object \_\_\_\_\_.
2. Acceleration is the rate at which \_\_\_\_\_ changes and is measured in velocity per unit of \_\_\_\_\_.
3. If you slow down your acceleration will be a \_\_\_\_\_ number.
4. A change in the \_\_\_\_\_ that an object is moving is also considered an \_\_\_\_\_.
5. Anything that causes an object to speed up, slow down, or \_\_\_\_\_ is a force.
6. Force is expressed in \_\_\_\_\_.
7. Newton's 2<sup>nd</sup> Law of Motion: Force = \_\_\_\_\_ x \_\_\_\_\_
8. Two examples of forces are \_\_\_\_\_ and \_\_\_\_\_.

\*\*If you finish early you can take the quiz 😊

### Calculating Net Force Station:

Interpret each drawing of forces on the box. Calculate and write the resulting force on the blank below the box (make sure to include the correct unit of measure). On the next blank, write the word "balanced" or "unbalanced" and circle the arrow for the direction of the resulting force. See the example on the table at the station.

<p>A.</p>  <p>Net Force _____</p> <p>_____ → ←</p>	<p>B.</p>  <p>Net Force _____</p> <p>_____ → ←</p>
<p>C.</p>  <p>Net Force _____</p> <p>_____ → ←</p>	<p>D.</p>  <p>Net Force _____</p> <p>_____ → ←</p>
<p>E.</p>  <p>Net Force _____</p> <p>_____ → ←</p>	<p>F.</p>  <p>Net Force _____</p> <p>_____ → ←</p>

More on the next page 

<p>1.</p> <p>100 N</p> <p>50 N</p> <p>75 N</p> <p>Net Force _____</p> <p>_____ → ←</p>	<p>2.</p> <p>545 N</p> <p>732 N</p> <p>732 N</p> <p>545 N</p> <p>Net Force _____</p> <p>_____ → ←</p>
<p>3.</p> <p>61 N</p> <p>192 N</p> <p>192 N</p> <p>61 N</p> <p>Net Force _____</p> <p>_____ → ←</p>	<p>4.</p> <p>1231 N</p> <p>562 N</p> <p>562 N</p> <p>489 N</p> <p>956 N</p> <p>Net Force _____</p> <p>_____ → ←</p>
<p>5.</p> <p>653 N</p> <p>352 N</p> <p>352 N</p> <p>1000 N</p> <p>Net Force _____</p> <p>_____ → ←</p>	<p>6.</p> <p>8732 N</p> <p>Net Force _____</p> <p>_____ → ←</p>
<p>7.</p> <p>577 N</p> <p>2957 N</p> <p>Net Force _____</p> <p>_____ → ←</p>	<p>8.</p> <p>83 N</p> <p>96 N</p> <p>Net Force _____</p> <p>_____ → ←</p>