

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- Differentiate between distance and displacement.
- Calculate the displacement of an object that experiences a change in direction, both one- and two-dimensional.

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"

Answer the following.

1. Define displacement in your own words.

2. If you wake up in the morning, go to school, go to the grocery store, and then return to the same place where you woke up, what is your displacement for the day?

3. What kind of quantity is displacement, scalar or vector?

4. Can an object's displacement be negative? What does the sign indicate about the displacement?

5. Can the distance an object travels be negative?

6. If someone told you that they traveled 50 km east, are they describing the distance they traveled or their displacement? How do you know?

7. When will an object's displacement and distance traveled be different?

Answer the following.

8. Draw a vector diagram for a person that walks 3 m north and 5 m east. How would you determine the displacement for this person?

9. Define time interval in your own words.
