



Position, Reference Point, and Motion
22 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Reference point can also be described as what?

- | | | | |
|----------------------------|-----------------|----------------------------|------------------|
| <input type="checkbox"/> A | An ending point | <input type="checkbox"/> B | A starting point |
| <input type="checkbox"/> C | A description | <input type="checkbox"/> D | A location |

2. When it comes to describing the location based on the reference point, what must each description always include?

- | | | | |
|----------------------------|------------------------|----------------------------|------------------------|
| <input type="checkbox"/> A | Location and Position | <input type="checkbox"/> B | Distance and Position |
| <input type="checkbox"/> C | Direction and Location | <input type="checkbox"/> D | Distance and Direction |

3. When giving out descriptions of your location, they always help you in identifying your _____.

- | | | | |
|----------------------------|-----------|----------------------------|-----------------|
| <input type="checkbox"/> A | Direction | <input type="checkbox"/> B | Reference point |
| <input type="checkbox"/> C | Position | <input type="checkbox"/> D | Distance |

4. An object's position always depends on its what?

- | | | | |
|----------------------------|-----------------|----------------------------|----------|
| <input type="checkbox"/> A | Reference point | <input type="checkbox"/> B | Location |
| <input type="checkbox"/> C | Direction | <input type="checkbox"/> D | Distance |

5. You call a friend up, and the two of you agree to meet up at the mall before going to grab a bite to eat. What is the reference point in this scenario?

- | | | | |
|----------------------------|----------|----------------------------|----------------|
| <input type="checkbox"/> A | The mall | <input type="checkbox"/> B | The restaurant |
|----------------------------|----------|----------------------------|----------------|

6. You agree to meet up with your family at the front of the baseball field before going to watch your little brother's game. What is the reference point in this scenario?

☐ A The front of the baseball field ☐ B The baseball game

7. Your aunt recently flew into town and arrives at Terminal 34. You and your mother have agreed to pick her up at the front of the airport. Your aunt calls your mom asking for directions on how to get to the front of the airport. Based on this information, what is the reference point in this scenario?

☐ A Terminal 34 ☐ B The front of the airport

8. The location of a place or an object is called its....

☐ A position ☐ B motion
☐ C speed ☐ D reference point

9. The change of position over time is called

☐ A position ☐ B motion
☐ C speed ☐ D location

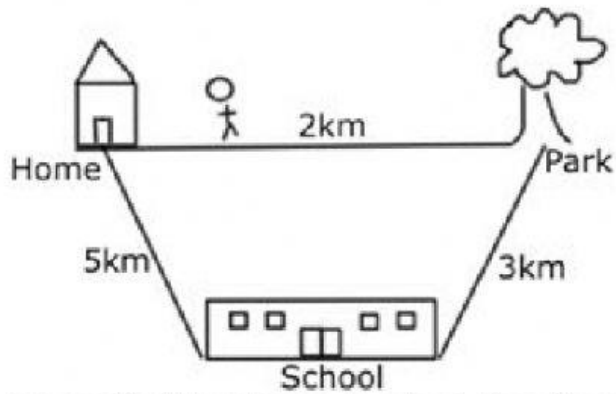
10. True or False:
The motion of an object can change over the course of its movement

☐ A true ☐ B false

11. Scott drives a Jeep 12 km east, then 4 km north, then finally 3 km west. He traveled a total distance of:

☐ A 5 km ☐ B 10 km
☐ C 13 km ☐ D 19 km

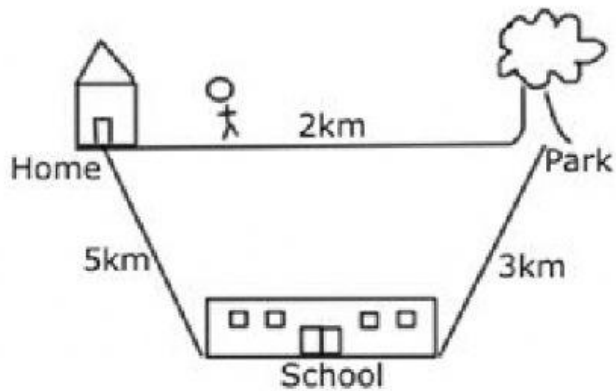
12.



Jerry walked from home to school, then from the school to the park. What is his total displacement?

- | | | | |
|----------------------------|------|----------------------------|-------|
| <input type="checkbox"/> A | 2 km | <input type="checkbox"/> B | 5 km |
| <input type="checkbox"/> C | 8 km | <input type="checkbox"/> D | 10 km |

13.



Jerry walked from home to school, then from the school to the park. What is his total distance?

- | | | | |
|----------------------------|------|----------------------------|-------|
| <input type="checkbox"/> A | 2 km | <input type="checkbox"/> B | 5 km |
| <input type="checkbox"/> C | 8 km | <input type="checkbox"/> D | 10 km |

14. David walks 3 km north, and then turns east and walks 4 km. What is the distance?

- | | | | |
|----------------------------|------|----------------------------|------|
| <input type="checkbox"/> A | 7 km | <input type="checkbox"/> B | 3 km |
| <input type="checkbox"/> C | 4 km | <input type="checkbox"/> D | 1 km |

15. A car drives 84 meters forward. Its displacement and distance would be the same.

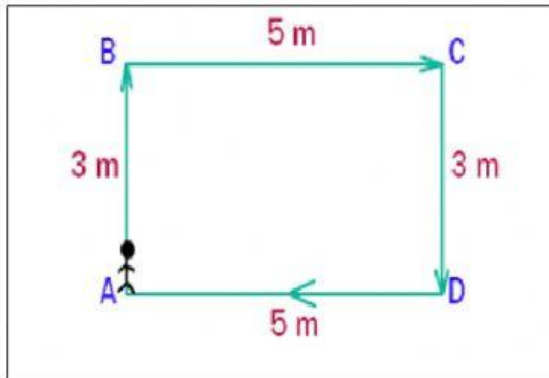
☐ A

True

☐ B

False

16.



Sara walks from Point A to Point B. Which is true?

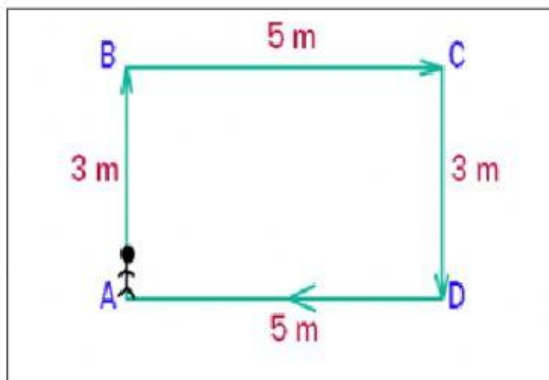
☐ A

Distance and displacement are EQUAL

☐ B

Distance is less than displacement

17.



Find the distance Sara walks from A to B, B to C then C to D?

☐ A

11m

☐ B

3m

☐ C

5m

18. After completing one trip on a roller coaster, the roller coaster's _____ is zero.

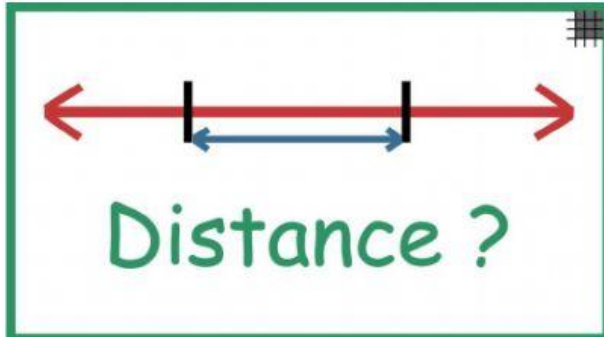
☐ A displacement

☐ B reference point

☐ C length

☐ D distance

19.



The scientific (SI) unit for measuring distance is the _____.

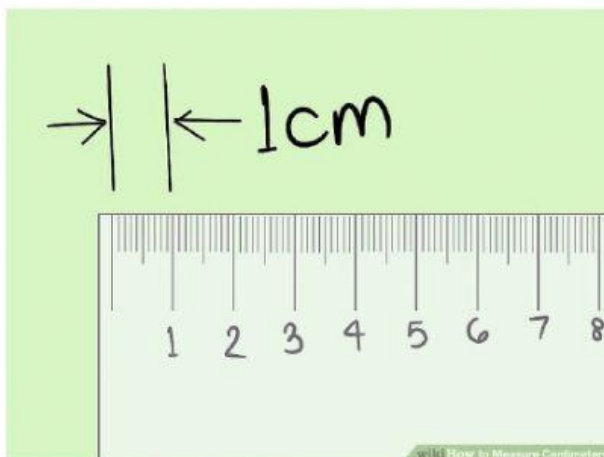
☐ A mile

☐ B foot

☐ C kilometer

☐ D meter

20.



There are ____ centimeters in a meter.

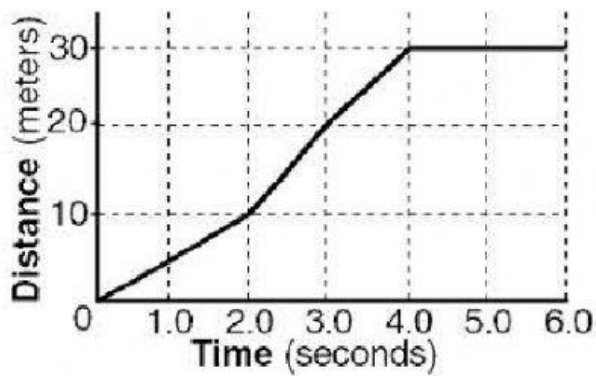
☐ A 10

☐ B 100

☐ C 1,000

☐ D 10,000

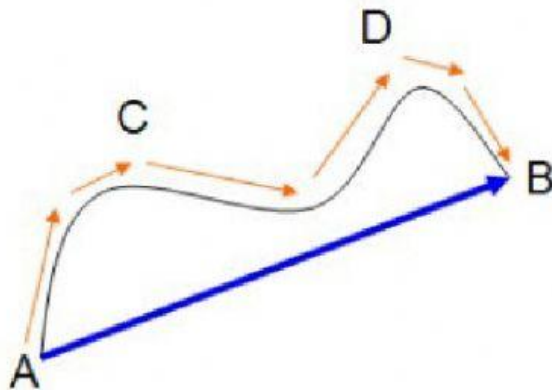
21.



What is the total displacement of the object represented in this motion graph?

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> A 0 meters | <input type="checkbox"/> B 20 meters |
| <input type="checkbox"/> C 30 meters | <input type="checkbox"/> D 60 meters |

22.



Which of the following describes distance and displacement correctly?

- | | |
|--|--|
| <input type="checkbox"/> A The blue arrow shows distance and the orange arrows show displacement | <input type="checkbox"/> B The blue arrow shows displacement and the orange arrows show distance |
| <input type="checkbox"/> C Both arrows show distance only | <input type="checkbox"/> D Both arrows show distance and displacement |