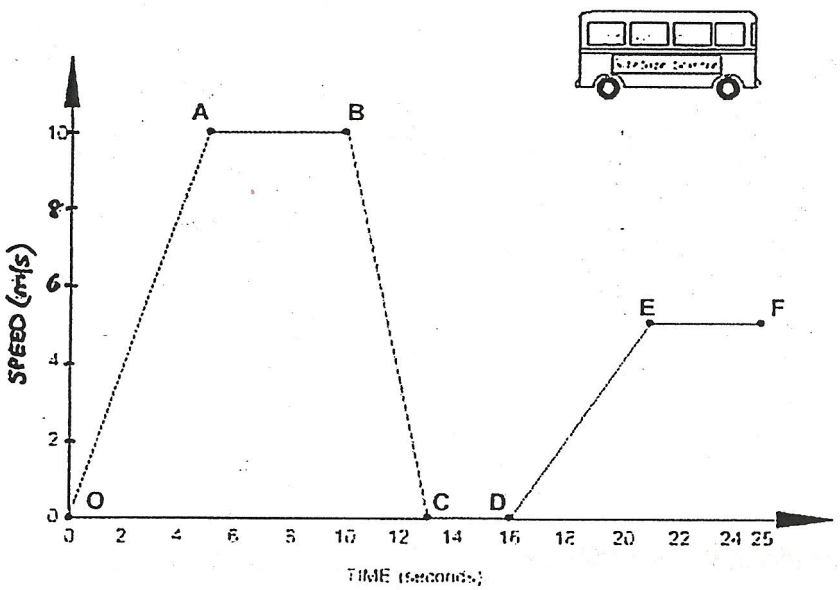
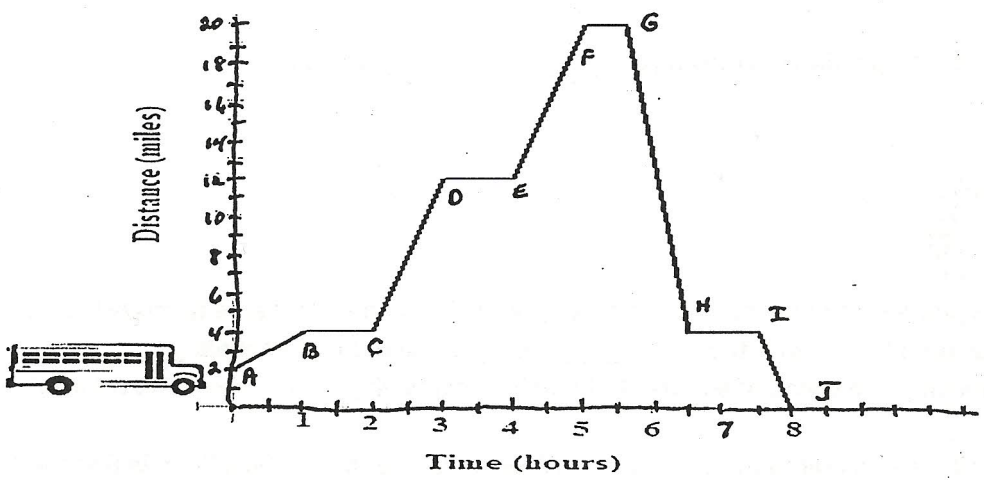
Force and Motion Study Guide Name:_____

Complete the study guide with your partner. Use the study guide, your notes, and your class activities to study for your test.



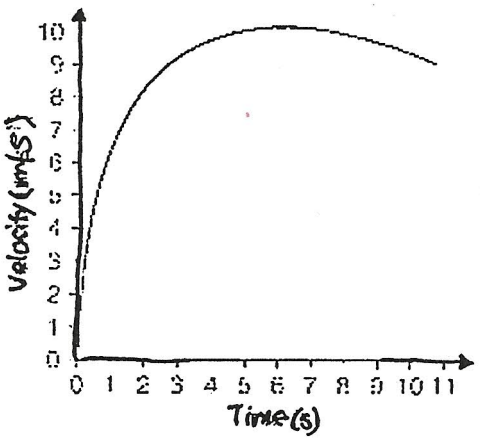
Describe the motion of the bus for each segment.

1. O-A is _____.
2. A-B is _____.
3. B-C is _____.
4. C-D is _____.
5. What happened between 16 and 21 seconds? _____.
6. What happened between 21 and 25 seconds? _____.

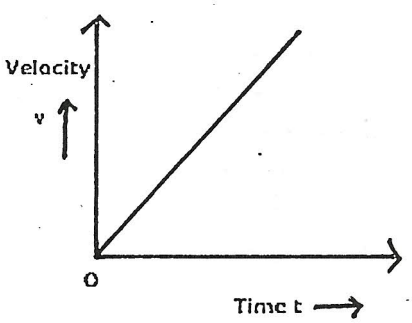


7. A distance-time graph can be used to measure the _____ of an object.
8. The bus traveled at a _____ speed during the first hour.
9. From hour one to hour two, the bus was _____.

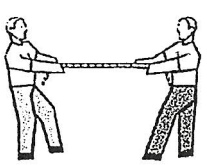
10. How does the speed of the bus compare between Segments C-D and E-F? _____.
11. The bus traveled at its greatest speed during segment _____.
12. How long did it take the bus to return to school? _____.
13. How many times did the bus stop? _____.



14. Describe the acceleration of the object in the graph above. _____.



15. The object in the graph above is moving at a _____ velocity.



16. Two students pull on the opposite ends of a rope, but neither student is able to move the other. They each pull on the rope with the _____ force, so the net force equals _____.
17. An object is moving at a speed of 40 m/s. If the object is traveling south, what is its velocity? _____.
18. In a 100 m sprint, Usain Bolt ran the first 50 m in 5 seconds. He ran the final 50 m in 6 seconds. How would you describe his motion during the race? _____.