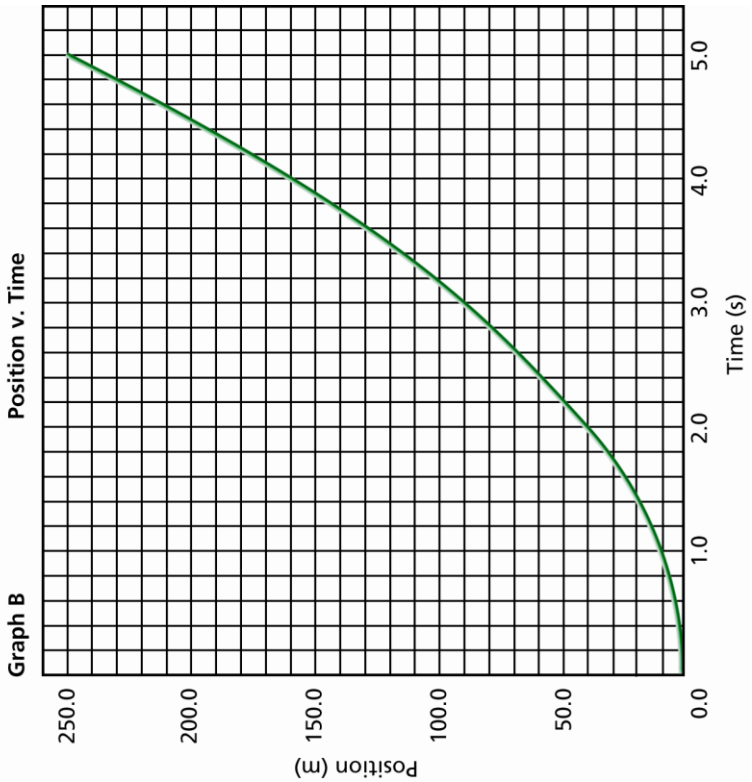
POSITION v. TIME

Constant Velocity

Position v. Time	
Time (s)	Position (m)
0.0	0.0
1.0	20.0
2.0	40.0
3.0	60.0
4.0	80.0
5.0	100.0



Constant Acceleration

Position v. Time	
Time (s)	Position (m)
0.0	+0.0
1.0	+10.0
2.0	+40.0
3.0	+90.0
4.0	+160.0
5.0	+250.0

Date _____ Period _____ Name _____

CHAPTER 2 VISUAL 4

POSITION v. TIME

1. On graphs A and B, what is the independent variable? The dependent variable?

_____

2. Which graph represents a linear relationship between the variables? A parabolic relationship?

_____

3. What is the slope of the line in graph A? What does this slope represent?

_____

4. For graph A, what is the total displacement between 3 s and 5 s?

_____

5. For graph A, determine the object's total displacement at 10 s.

6. For graph B, compare the displacement between 0 s and 1 s with the displacement between 1 s and 2 s. What does this indicate about the velocity of the object?

_____

7. Compare the change in velocity of the objects represented in the two graphs.

_____

8. At what time(s) are both objects at the same position?

_____

9. For graph B, determine the average velocity between 0.0 s and 3.0 s.