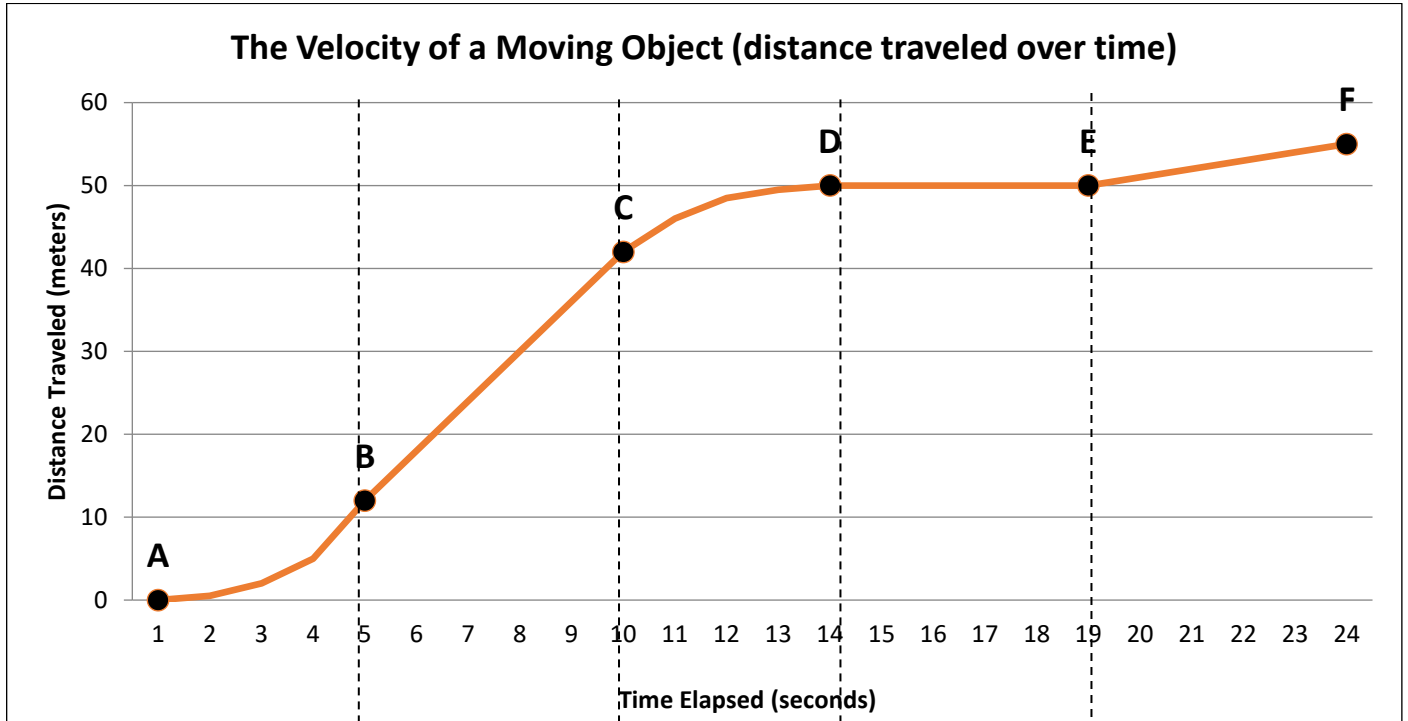


# Motion Graph Analysis Worksheet



## Instructions:

1. Cut out the entire graph area above along the outside solid border line.
2. Make a horizontal fold across your graph near the top (under the title). The title of the graph should be folded down with the crease of your fold **at exactly the 60 meter mark** of the graph area.
3. Now fold the title back up so it's visible again, but now you should have a creased line along the top just above the vertical dotted lines.
4. Next, carefully cut along all four vertical dotted lines up to your fold, but no more! You should have cut the graph into sections flapping freely from the top, but still attached to the title.
5. Last, tape your graph into your journal along the top edge along the title. The flaps should not be taped so they can open freely.

## Analysis Questions: Answer the following questions in your journal below your foldable graph.

1. On your journal, underneath each flap, write down the type of motion that is occurring for each section of the graph (ie. constant velocity, positive acceleration, negative acceleration, no motion, etc.)
2. Between which two letters is the rate of speed the fastest? Why?
3. The least amount of distance covered occurs between which two letters?
4. Identify the type of motion occurring between letters C and D? Give evidence to support your reasoning.
5. During the total journey, how many total seconds pass when the object not in motion?
6. Calculate the average speed between letters B and C.
7. How much distance did the object cover over the entire journey?
8. Calculate the average speed for the entire journey from point A to point F.
9. Write a short story (3-5 sentences) that describes a situation with the motion experienced in the graph.