

Motion Diagram - 5a

<p>(a) Construct a motion diagram of a car traveling horizontally after its engine is turned off.</p>	
<p>(b) Construct a motion diagram of a car traveling up an incline at constant speed.</p>	
<p>(c) Construct a motion diagram of a car traveling up an incline at increasing speed.</p>	
<p>(d) Construct a motion diagram of a car traveling up an incline at decreasing speed.</p>	

Motion Diagram – 5b

<p>(a) Construct a motion diagram for a ball rolling along the floor toward the right at a constant speed.</p>	
<p>(b) Construct a motion diagram of a ball rolling down an incline at a constant speed.</p>	
<p>(c) Construct a motion diagram of a ball rolling down an incline at an increasing speed.</p>	
<p>(d) Construct a motion diagram of a ball rolling up an incline at a decreasing speed.</p>	

Motion Diagram – 6a

(a) Construct a motion diagram of a car sitting at an intersection when the light turns green. The car speeds up until it reaches the speed limit and then maintains that speed. (How many diagrams do you think you need to represent this trip?

_____)

(b) Construct a motion diagram of a car traveling at a constant speed, but then speeds up to pass a slower car. (How many diagrams do you think you need to represent this trip?

_____)

(c) Construct a motion diagram of a car approaching an intersection at constant speed when the light turns red. The car comes to a complete stop. (How many diagrams do you think you need to represent this trip?

_____)

Motion Diagram – 6b

(a) Construct a motion diagram of a runner starting in the “blocks” and then accelerating to a constant speed. (You will need two diagrams, one for each part of the trip.)

(b) Construct a motion diagram of a runner running at constant speed who then speeds up at the finish line.

(c) Construct a motion diagram of a runner crosses the finish line and then slowing down afterwards.

Motion Diagram - 7

<p>(a) A pole vaulter clears the bar, falls toward the pad underneath and then come to a complete stop on the pad. Construct a motion diagram for the pole vaulter's trip from after clearing the bar to coming to a complete stop.</p>	<p>(b) A block sits on a compressed spring. When the spring is released, the block is first pushed upward at increasing speed. After the block leaves contact with the spring, it moves upward at decreasing speed. Construct a motion diagram for the block's trip. (You will need two diagrams, one for each part of the trip.)</p>

Motion Diagram - 8

(a) Construct a motion diagram of

(b) Construct a motion diagram of a