

Name: \_\_\_\_\_

Period: \_\_\_\_\_

<p>1. <math>\Delta x</math>, <math>\Delta y</math>, <math>t</math>, <math>v_i</math>, <math>v_f</math>, or <math>a</math>?</p> <p>___ 2 sec            ___ How far..            ___ How long did it take?          ___ 3 m/s            ___ <math>4 \text{ m/s}^2</math>            ___ How high...          ___ 6 m right        ___ How fast...</p>	<p>6. Choose the correct kinematic equation for the following:</p> <p><u>Variables:</u>  <math>a = 2 \text{ m/s}^2</math>  <math>V_i = 6 \text{ m/s}</math>  <math>V_f = - 6 \text{ m/s}</math>  <math>\Delta x = \text{___}</math></p> <p>What's missing from the list:  <u>So use this equation:</u></p>
<p>2. A person swims to the other end of a 20 m long pool and back. What is their displacement?</p> <p>3. A rock falls 15 m.          Is this vertical or horizontal motion?          What is the displacement of the rock?</p> <p>4. A car moving 12 m/s stops in 3 seconds.  <math>V_f =</math></p> <p>5. You throw a rock into the air and catch it as it returns.          What is the displacement of the rock?</p>	<p><u>Variables:</u>  <math>a = 4 \text{ m/s}^2</math>  <math>t = 10 \text{ s}</math>  <math>V_f = - 2 \text{ m/s}</math>  <math>\Delta x = \text{___}</math></p> <p>What's missing from the list:  <u>So use this equation:</u></p> <p><u>Variables:</u>  <math>a = -3 \text{ m/s}^2</math>  <math>V_i = 6 \text{ m/s}</math>  <math>V_f = - 12 \text{ m/s}</math>  <math>t = \text{___}</math></p> <p>What's missing from the list:  <u>So use this equation:</u></p>
<p>7. In 10 seconds a car accelerates <math>4\text{m/s}^2</math> to 60 m/s. How fast was the car going before it accelerated?</p> <p><u>Variables:</u>            <u>Equation and Solve:</u></p>	<p>8. A object moving 2 m/s experiences an acceleration of <math>3\text{m/s}^2</math> for 8 seconds. How far did it move in that time?</p> <p><u>Variables:</u>            <u>Equation and Solve:</u></p>
<p>9. An object at rest starts accelerating. If it travels 40 meters to end up going 20 m/s, what was its acceleration?</p> <p><u>Variables:</u>            <u>Equation and Solve:</u></p>	<p>10. A model rocket climbs 200 m in 4 seconds. If was moving 10 m/s to begin with, what is its final velocity?</p> <p><u>Variables:</u>            <u>Equation and Solve:</u></p>
<p>11. A car stops in 120 m. If it has an acceleration of <math>-5\text{m/s}^2</math>, how long did it take to stop?</p>	<p>12. An object drops 20 m from a cliff. If it started at rest and is going 20 m/s just before it hits the ground, what is its acceleration?</p>