**P3 Quiz**

**Speed**

1. Speed = ? / time
2. A horizontal line on a distance- time graph means an object is ...
3. The gradient of a distance-time graph shows how \_\_\_\_\_ something is moving.

**Changing Speed**

1. A horizontal line on a speed- time graph means an object is ...
2. Acceleration = change in speed/ ?
3. Rearrange this equation to show how we would calculate the change in speed.

**Forces and Motion**

1. What is the name given to the distance travelled between putting your foot on the brake and the car stopping?
2. Why does the thinking distance increase with speed?
3. Why does drinking alcohol cause the thinking distance to increase?

**Work and Power**

1. Work done = ? x force
2. What is the name given to the units we use to measure work?
3. Car A runs at 5 miles per gallon; car B at 12. Which has the best fuel consumption?

**Energy on the Move**

1. Why does running an electric car often still require burning of fossil fuels?
2. What is the name given to movement energy?
3. Which two factors affect the amount of this energy?

**Crumple Zones**

1. What is the difference between passive and active safety features?
2. Give two examples of each.
3. What is the function of a crumple zone?

**Falling Safely**

1. Name two forces acting on a falling parachute.
2. What is the name of the speed at which these forces are balanced and the speed will remain constant?
3. Give three things car manufacturers can do to reduce drag.

**The Energy of Games and Theme Rides**

1. What is the name of the type of energy an object held above the ground will have?
2. What affects this energy?
3. When a coaster car rolls downwards, this energy is changed to what sort of energy?