**WAVES INVESTIGATION 1 ANSWERS**

1. Describe what happens at a given point on the spring as the pulse passes? (2 marks)

As the pulse passes, the point increases in amplitude (positive or negative) with the added energy. After the pulse has passed, the point returns to its rest position.

1. Does the amplitude of the pulse change as the pulse moves from one end of the spring to the other? (1 mark)

It changes, due to friction.

1. Does the speed of the pulse vary as the pulse moves along the spring? (1 mark)

The speed only varies as a result of friction.

1. Is the speed of the pulse affected by changes in the tension of the spring? (2 marks)

Yes; increased tension results in increased wave speed; decreased tension in decreased wave speed.

1. What change occurred in a pulse as it was reflected from the fixed end of the spring? From a free end? (2 marks)

From a fixed end: This is fixed end reflection, the wave amplitude is reversed.

From a free end: This is free end reflection, the wave is unchanged.