# Mechanical Waves Demo Notes

***Instructions****: Please write in your predictions as instructed when viewing the video demos. While watching the demos, please indicate if your prediction was correct and write in your observations.*

1. **Tension’s Effect on Wave Speed**

A length of rubber tubing is attached to a wall. A sharp pulse on one end of the tubing creates a transverse wave.

PREDICT: If we pull the rubber tubing so that the tension increases, how will the speed of the wave pulse be affected?

OBSERVATIONS: Was your prediction correct? YES NO

Explanation:

1. **Wave Speed and Mediums**

A wave machine creates waves by attaching metal rods in parallel at fixed intervals. To create a wave, the spine is twisted so the rods pivot like a see saw.

PREDICT: If the rods are shortened, how will the wave speed be affected?

OBSERVATIONS: Was your prediction correct? YES NO

Explanation:

1. **Longitudinal Slinky Waves**

A slinky will be used to demonstrate particle motion in longitudinal waves.

PREDICT: Do particles move along with a wave, or do they just sway as the wave passes by?

OBSERVATIONS: Was your prediction correct? YES NO