

Colored Springs

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Time Taken: ~ 5 min

Objectives: (optional)

The students will:

- Understand the concept of the restoring force
- Understand the meaning of the spring coefficient
- Gain insight into simple harmonic motion

Materials:

- Ring stand (provided)
- Assortment of springs (provided)
- Masses

Vocabulary: (optional)

- Spring constant
- Restoring force
- Newton

Procedures:

- Spring constant
 - Place two different springs on the ring stand and let the students know the spring constant.
 - Ask them if the same mass was placed on the each spring, which one will stretch more?
- Harmonic motion
 - Place mass on spring, just let it drop and watch the mass oscillate up and down
 - (Optional) ask about period frequency etc.