Energy

Potential Energy – Energy at rest
Kinetic Energy – Energy in motion

Pom-Pom Shooters

- When you pull back the balloon it is **Potential** energy.
- By letting go of the balloon the **Potential** energy becomes **Kinetic** energy.
- The **Kinetic** energy is then transferred to the Pom-Pom which then has motion.

Pom–Pom Shooters

Need:

- Toilet Paper Tube
- Balloon
- Pom-Pom
- Crayons - (Optional Decoration)
- Stickers - (Optional Decoration)

Directions:

1. Decorate the Tube with stickers or crayons if you wish.
2. Cut the end of off the balloon. (See Ex. #1)
3. By putting the tube on a flat surface, pull the balloon over one end. (See Ex. #2)
4. Put in your pom-pom.
5. Pull back on the balloon and see how far the pom-pom flies. (Helps to hold the sides of the tube to keep the balloon on when pulling back. (See Ex. #3)

Ex. #1

Ex. #2

Ex. #3

Catapults

A catapult is a ballistic device used to launch a projectile a great distance without the aid of gunpowder or other. A catapult uses the sudden release of stored potential energy to propel its payload.

Need:

- Popsicle Sticks (6)
- Plastic Spoon
- Rubber Bands (3)
- Projectile (Pom-Pom, marshmallow, or a ball of foil)

Directions:

1. Take 5 sticks and stack them, securing one end with a rubber band. You'll need to wrap the rubber band around several times to make it nice and secure. (Ex. #1)
2. Slide one more stick between the bottom stick and the rest of the stack.
3. Secure the other end with a rubber band. (Ex. #2)
4. Place the spoon on top and attach the end of the spoon to the end of the single stick with the last rubber band. (Ex. #3)

Ex. #1

Ex. #2

Ex. #3