STATIC ELECTRICITY ORNAMENT

SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything while doing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a CHOKING HAZARD. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

INGREDIENTS

- Polystyrene Beads
- Clear Plastic Craft Ornament

INSTRUCTIONS

STEP 1: Remove the cap and hook from the clear plastic craft ornament. Fill the ornament one-fourth of the way with polystyrene beads. Place the cap and hook back onto the ornament.

STEP 2: Rapidly shake the ornament and observe. Describe the cause and effect relationship of electric interactions between the polystyrene beads and the clear plastic craft ornament.

EXPLANATION

The polystyrene beads cling to the sides of the ornament due to static electricity, which is a buildup of an electric charge. Rapidly shaking the ornament builds up negative charges on the beads. These charges attract to the positive charges on the ornament, causing the beads to cling to the ornament.

SCIENCE BACKGROUND

The small particles that make up matter have electric charges, which exert forces. The forces created by an electric charge do not require a pair of objects to be in contact. Protons are positively charged, while electrons are negatively charged. Opposite charges attract and like charges repel. Some objects become charged when they touch other objects. Static electricity is a buildup of an electric charge.

I CAN STATEMENT

- ✓ I can ask questions to determine cause and effect relationships of electric interactions between two objects not in contact with each other.

NEXT GENERATION SCIENCE STANDARDS CONNECTION

3 – Forces and Interactions