

# Constructing Explanations

## Activity #2: Balloons & Skewers

*To be completed AFTER the [Asking Questions Activity #1: Balloons & Skewers](#)*

**General Objective:** To provide an opportunity for students to construct explanations in science based on observing a phenomenon and asking questions.

The facilitator does the following:

1. Once students have seen the Balloon & Skewer phenomenon, asked questions, and successfully done the phenomenon themselves, have them construct an explanation of the phenomenon.
2. Students should be able to construct their explanation both in written and verbal form.
3. Finding an explanation for this phenomenon may require outside research, since this is a RESEARCHABLE explanation. Explanations should include, but not be limited to: properties of polymers; chemical bonds; elasticity; application to wounds caused by impaled objects; nails in tires; etc.
4. Resources can include, but are not limited to, science textbooks, encyclopedias, and the internet.

Many sources demonstrate this phenomenon in different ways. Some suggest using knitting needles; oil or water on the needle/skewer; or twisting the skewer in a particular fashion. Students should discover these techniques on their own rather than being told.

## **Related Crosscutting Concepts:**

- [Cause & Effect](#)
- [Stability & Change](#)

## **Related Disciplinary Core Ideas:**

- [Core Idea PS1: Matter and Its Interactions](#)
  - [PS1.A: Structure and Properties of Matter](#)
- [Core Idea PS2: Motion and Stability: Forces and Interactions](#)
  - [PS2.A: Forces and Motion](#)
  - [PS2.B: Types of Interactions](#)
  - [PS2.C: Stability and Instability in Physical Systems](#)