What is NOS?

What is SI?

Activities

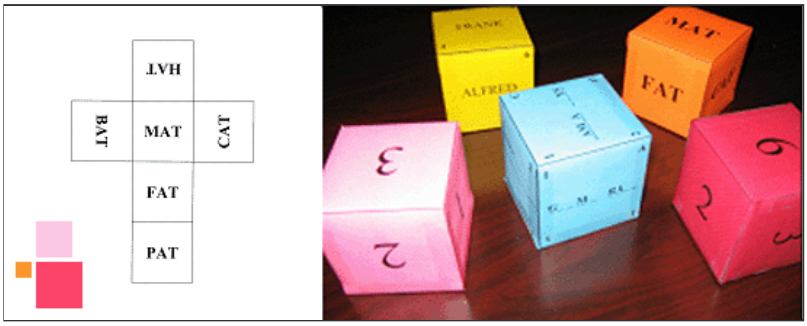
- Tube
- Cube
- Tricky Tracks
- Fossils
- Periodic Table
- Owl Pellet
- Disarticulated skeletons
- Mystery Bones
- The Cans
- Penny
- Sunflower Seeds
- Finger Print
- Never Ending Lab
- Milk
- Pendulum
- Bird
- Twirly
- Banana

Sample Lessons

Reading Resources

How to Assess NOS and SI?

Cube Activity



Scientists often search the data they collect for certain patterns or regularities. Based on these regularities, scientists can, for instance, extrapolate their data in order to predict possible future behaviors of the phenomena under investigation.

Whether some patterns or regularities *actually* exist in nature, is a question similar to asking whether the models that students build to account for the cube phenomena that they investigated are actual copies of what exists on the cube. The main point to emphasize to your students is that patterns are partly based on evidence, but are also partly the product of the scientists' imagination and creativity.

Student groups are given a cube that has a pattern. They can see all the side of the cube except the bottom. They are asked to find out what is on the bottom of the cube.

The NOS discussion focuses on the notions that scientific knowledge is *partly a product of human inference and creativity, is empirically based* (based on and/or derived from observation and experiment), and *tentative* (subject to change).

Materials: One of cubes

Video Clips: NOS discussion 1 2

Possible Scenario