

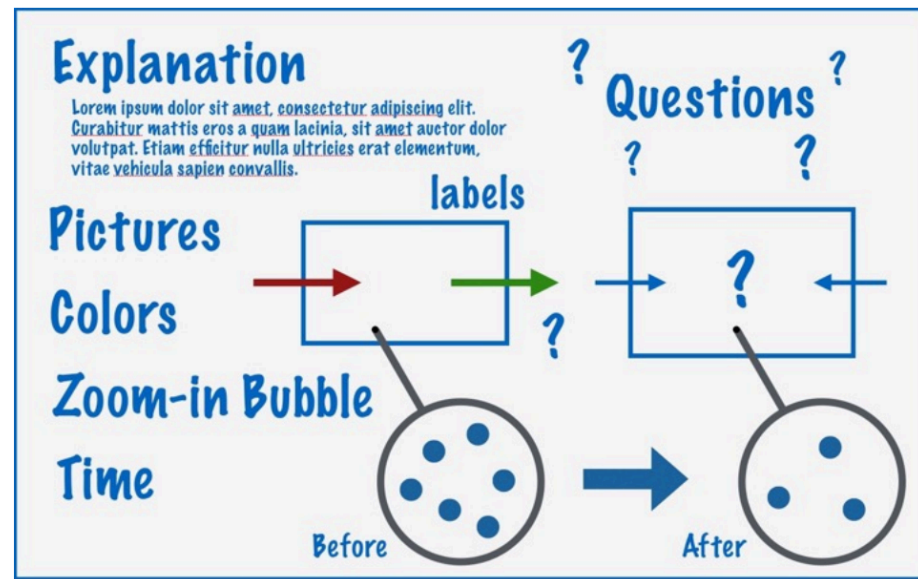
These are components of a great model. Models show your current thinking and understanding. They are supposed to explain a phenomenon. Your models should change and be revised over time, as your thinking changes!

Notice that good models include:

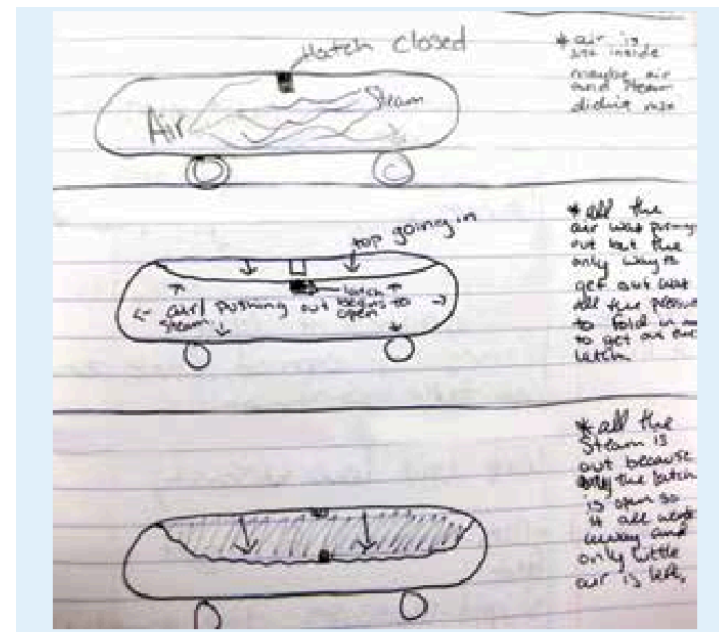
- ❑ Changes over time
- ❑ Zoom-in's to show what the eye cannot see
- ❑ Dots to represent particles (molecules or atoms)
- ❑ Arrows can show change, or movement
- ❑ Labels on the pictures
- ❑ Relationships between items

This is an example of a basic model. It shows a process - **changes over time**. The images are **labeled**, and additional text describes what is happening in this phenomenon.

## Elements of a Scientific Model



<https://thewonderofscience.com/documents>



This is a better example. Notice how the student uses dots to represent **particles** (molecules or atoms). They also use **arrows** to show the movement of particles.



This is **NOT** a good example of a model. It is more like a poster. While the artwork is nice, it does not convey meaningful understanding. For example there is no representation of the concepts of “pressure” and “compaction.” It does not show a mental picture of unseen scientific processes, nor does it explain a phenomenon.

