**Definition:**

Using the 5 senses to find out about objects and events: their characteristics, properties, differences, similarities, and changes. Observation can be made directly with the senses or indirectly through the use of simple or complex instruments.

Observation is a fundamental science process skill that is often overlooked. However, like all skills, it can be developed with practice and feedback. Observing is the key to understanding objects and phenomena in the world and interactions between objects or phenomena. It can also be a “hook” for further inquiry – looking closely can generate new questions, which lead to further investigations.

**STUDENTS**

**Observing is…**

* using all 5 senses to thoroughly understand an object’s natural state
* detecting details that go beyond that of a casual observer
* building understanding by connecting to past experiences
* not limited to sight or touch
* not using simple overused words with little descriptive value
* not attributing cause to the observations
* not the same for every students

**TEACHERS**

**Observing is…**

* prompting students to use all 5 senses
* encouraging students to use descriptive vocabulary including scientific terms
* encouraging students to make connections to past experiences
* providing multiple opportunities to practice
* giving students problems that require them to decide what evidence (observations) are relevant, and to interpret the evidence
* not telling students to notice specific aspects of an object or phenomenon, or explaining observations
* not expecting every student to notice the same set of details

**WHAT THIS SKILL SHOULD LEAD TO**

Systematic observation develops an enhanced descriptive vocabulary that becomes important as student practice other science skills, such as writing or reviewing. As students become better observers, they will become better able to detect patterns, classify information, predict events, and make inferences. Observing leads to discussions of the role of bias when observations are interpreted by different observers.