The Scenario

Show an image on a screen and ask students to make detailed observations. The image needs to be graphically complex. It can be related to the curriculum or simply be visually stimulating (high-speed photography images work well).

Open-Ended Inquiry Questions

What is the difference between an observation and an inference? How do observations support inferences?

Process Skill(s)

Observing, Inferring

Instructions

The ability to make detailed observations is a critical skill that students must have before they can move on to other aspects of scientific inquiry. The NASA image on the reverse often elicits the observation of Earth. Ask what observations the student used to infer that Earth is in this photograph. In this photo the blue hazy line over a white triangle beside a large black area are observations that support the inference that it is Earth. This leads to a discussion on the difference between observation and inference. Prompt students to "zoom in" and make very detailed observations.

Curriculum Connections

Observations and inferences can lead to a literacy activity such as writing a narrative, experimentation or technological problem-solving. The image should be related to the science curriculum and it can be used as a starting point for further investigation. (Asking questions that lead to research, experimentation, or technological problem solving)