



# Observing Properties

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## Materials:

- Access to the outside
- Objects in the home or classroom

*Note: This lesson involves two activities. The activities can be done in the same sitting, or separately.*

## Activity 1 Directions:

1. Gather materials in the home or classroom that are or contain minerals. Some examples include aluminum foil, pencils or pens, and technology/devices.
  - a. Begin with making basic observations as a group, such as which components seem hard or soft, heavy or light, or might have hidden components inside.
  - b. Discuss what minerals might be inside these common objects.
    - i. Encourage participants to make hypotheses, and explain how they came to those conclusions. i.e. “I think the tablet probably has metal inside because electricity needs metal to work.”
  - c. Discuss if there are any objects that are not made entirely out of a mineral, and why this improves its purpose. i.e. “I think the tablet has a plastic case because the plastic protects it when it’s dropped.”
  - d. Pose questions such as, “Why do you think the tablet is made of plastic that can break when materials such as rock or metal exist?”



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### Activity 2 Directions:

2. Go outside and collect rocks. Observe their qualities and how they compare to the minerals observed in the common objects previously found inside.

- a. Begin with basic observations that mirror the previous activity, such as if they seem hard or soft, heavy or light, or if they might be made of more than we can initially observe.
- b. Encourage participants to make more hypotheses, even if they are unsure of what the rocks are made of.
- c. Ask participants to make predictions about what they think humans could use the rocks for, or what they have seen other people use rocks to help them with.