



Elaborate: Take a Note

Energy Sources Module

Use this guide to provide students with the opportunity to further develop the science processing skills demonstrated in the online Take a Note activity.

This teacher support document can be completed in conjunction with the online Take a Note.

Why science processing skills?

The purpose of the Take a Note activity is to provide students with the opportunity to apply and extend their scientific reasoning and processing skills while utilizing formal definitions and explanations. Teaching scientific reasoning and processing skills in the early elementary classroom is often overlooked. Students need to have exposure and practice with making and recording accurate observations and building communication skills. In the Take a Note Activity students will have the opportunity to read and interpret information in a variety of formats, such as data tables, graphs, pictures, charts, and analogies. Incorporating these skills into a digital format where they are heavily scaffolded makes them more accessible for early learners.

In this activity, students practice connecting energy-related objects to form analogies. This includes solar, electrical, battery, and food energy. To provide additional instructional support, an embedded mini lesson “What is an analogy?” is included for review or clarification.

Reveal student knowledge and understanding

Use the following questions during the activity to encourage your students to think about what they now know about energy sources. These questions are designed to reveal student knowledge of the concepts. Incorrect responses or misunderstandings should be addressed and corrected at this time.

- Use the following questions while the students are engaged in the activity:
 - What relationship does sunlight have to plants?
 - What relationship does food have to people and other animals?
 - How are electricity and objects like light bulbs, computers, and televisions related?
 - Why does a remote control car need a battery?
 - What does the word “opposite” mean?
 - What does an analogy do?

Enhancing the skill

To enhance the scientific processing skills presented in this activity, it is important to provide students with the opportunity to make real life observations, discuss those observations with their peers, share their ideas, and finally summarize their experience.

Use the format and suggested activity below to further enhance scientific processing skills.

- **Do:** Provide students with the opportunity to work with their peers.
- **Discuss:** Encourage students to exchange ideas while within their groups.
- **Communicate:** Help students to share observations and findings with the class.
- **Collaborate:** Provide students with the opportunity to summarize their experience and draw conclusions through a closing activity or discussion.



Suggested extension activity: In small groups, have students find objects in the classroom that are linked by an energy connection. Challenge them to create analogies with the objects they have found. Have them extend their understanding of analogies by a) linking animals and the group to which they belong (mammal, bird, reptile, fish, amphibian, insect) and then b) finding objects, colors, temperatures, and textures which are opposites. Have student groups share the three types of analogies they have created. (Energy sources, animals, opposites) Extend this activity by having students groups make analogies by combining one of their comparisons with that of another group.