

Intermediate Activity: Energy in the Round - Solar

A QUICK LOOK AT ENERGY IN THE ROUND

Energy in the Round is a quick, fun game to reinforce information about energy sources, forms of energy, and general energy information from the Intermediate Energy Infobook.

GRADES: 5-8

PREPARATION: LOW

TIME: 20-30 MINUTES

GET READY

- Copy one set of the Energy in the Round cards onto card stock and cut into individual cards. Have a class set of the Intermediate Energy Infobooks available for quick reference.

GET SET

- Distribute one card to each student. If you have cards left over, give some students two cards so that all of the cards are distributed.
- Have the students look at their bolded words at the top of the cards; give them five minutes to review the information about their words using the infobooks.

GO

- Choose a student to begin and give the following instructions:
- *Read the question on your card: The student with the correct answer will stand up and read the bolded answer, "I have _____."*
- *That student will then read the question on his/her card, and the round will continue until the first student stands up and answers a question, signaling the end of the round.*
- If there is a disagreement about the correct answer, have the students listen to the question carefully (forms versus sources, for example) and discuss until a consensus is reached about the correct answer.
- More topics and cards can be found on the website at www.need.org.

<p>I have energy.</p> <p>Who has two major gases that make up the sun?</p>	<p>I have the speed of light.</p> <p>Who has the form of energy that sunlight is converted to when it is absorbed by the Earth?</p>	<p>I have a passive solar home.</p> <p>Who has a home with solar collectors and other solar equipment to heat it?</p>
<p>I have hydrogen and helium.</p> <p>Who has the process in which hydrogen atoms combine to form helium and energy?</p>	<p>I have thermal energy.</p> <p>Who has the color that absorbs more sunlight than other colors?</p>	<p>I have an active solar home.</p> <p>Who has the energy produced by uneven heating of the earth's surface?</p>
<p>I have nuclear fusion.</p> <p>Who has the form of energy emitted into space during fusion?</p>	<p>I have the color black.</p> <p>Who has a system that captures solar energy and turns it into usable heat?</p>	<p>I have wind.</p> <p>Who has organic matter that has absorbed energy from the sun?</p>
<p>I have radiant energy.</p> <p>Who has the amount of time it takes the sun's energy to reach the earth?</p>	<p>I have a solar collector.</p> <p>Who has the process of using the sun's energy to heat buildings?</p>	<p>I have biomass.</p> <p>Who has the energy sources that can be replenished in a short time?</p>
<p>I have eight minutes.</p> <p>Who has 186,000 miles per second?</p>	<p>I have solar space heating.</p> <p>Who has a home that relies on orientation and construction materials to capture the sun's energy for heat?</p>	<p>I have renewable.</p> <p>Who has the source of energy that is stored in fossil fuels?</p>

<p>I have solar energy.</p> <p>Who has the process that traps the sun's energy in the atmosphere and makes life on Earth possible?</p>	<p>I have concentrated solar.</p> <p>Who has the word that means light?</p>	<p>I have silicon.</p> <p>Who has the system 1.5 million U.S. homes use to increase the thermal energy in their water?</p>
<p>I have the greenhouse effect.</p> <p>Who has the process plants use to convert radiant energy into chemical energy?</p>	<p>I have photo.</p> <p>Who has tiny bundles of light from the sun?</p>	<p>I have solar water heater.</p> <p>Who has the direction solar collectors should face in the U.S.?</p>
<p>I have photosynthesis.</p> <p>Who has evaporation, condensation, and precipitation driven by the sun?</p>	<p>I have photons.</p> <p>Who has the form of energy directly produced by solar cells?</p>	<p>I have south.</p> <p>Who has a major reason that capturing sunlight is difficult?</p>
<p>I have the water cycle.</p> <p>Who has an object that can be used to cook food on a sunny day?</p>	<p>I have electrical energy.</p> <p>Who has the technical word abbreviated as PV?</p>	<p>I have solar is spread out.</p> <p>Who has the renewable energy source that is NOT produced by the sun's energy?</p>
<p>I have a solar oven.</p> <p>Who has the system that uses mirrors to capture the sun's energy?</p>	<p>I have photovoltaic.</p> <p>Who has the common ingredient used to make a PV cell?</p>	<p>I have geothermal.</p> <p>Who has the ability to do work or make a change?</p>