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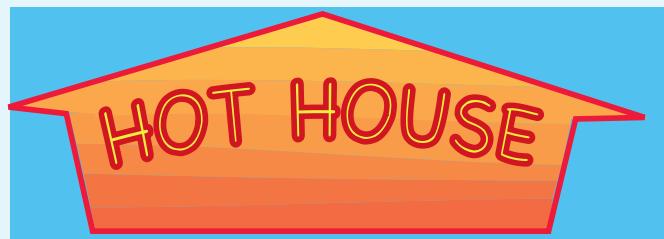
How can you make fuel from a soybean?



You will need:

1 cup soybeans, gallon resealable plastic bag, newspaper, hammer, glass jar, hot water, spoon, paper, pencil

- Examine the soybeans closely. Take a bean apart and study the inside. Draw the parts of the soybean and record your observations.
- Put the soybeans in the resealable bag, squeeze out the air and seal the bag.
- Place the bag between layers of newspaper and pound gently on the beans with the hammer until they are crushed.
- Examine the soybeans again. Record your new observations.
- Put the crushed soybeans into the glass jar cover them with hot water and stir. Record your observations today and again tomorrow.
- What was released from the soybeans when you crushed them that might be used for fuel?



What happens when heat is trapped in our atmosphere?



You will need:

2 clear plastic containers with open tops, soil, rocks and ice, 2 thermometers, clear tape, plastic wrap, bright sunshine, timer, paper, pencil

- Using the soil, rocks and ice, create identical environments in each container.
- Tape a thermometer to the inside of each container so that you can read it from the outside.
- Cover the top of one container with plastic wrap.
- Record the starting temperature in each container. Write a detailed description of the contents of each container.
- Put the containers next to each other in bright sunlight.
- Record the temperature on each thermometer every minute for 30 minutes. What do you observe?
- Record any changes you notice in the two environments. What would you expect to happen if these conditions continue?
- Excess carbon dioxide in the air traps the Sun's heat in the Earth's atmosphere like the plastic wrap does over your covered environment.



How big is your carbon footprint?



You will need:

computer with internet access

- Visit astc.org's IGLO (International Action on Global Warming) program.
- Click on the IGLO Toolkit's Carbon Footprint Calculator to discover how your family's lifestyle produces carbon dioxide.
- What can you do to reduce the amount of carbon dioxide you are creating and help stop the effects of climate change?
- The increased temperatures caused by excess carbon dioxide in the air create a host of problems for our environment. Talk to family and friends about some of these effects and how this issue can be addressed.
- Try some of the Toolkit's activities for all ages to learn more about global warming.