

# SUSTAINABILITY GROUPING CARDS

Use this set of 24 cards to group students in pairs, 3's, or 4's,  
while simultaneously reinforcing sustainability concepts.



## PRINT!

Use thick paper if you  
won't be laminating



## CUT!



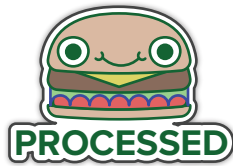
## LAMINATE!

Now you can use dry-erase markers  
to write on the backs of the cards!

## BEFORE YOU BEGIN:

- Remove extra cards if needed. Take out pairs, a group of three, or a group of four.
- Use the grouping cheat sheet on the next page as a reference to the combinations.
- Form groups at random, or assign cards based on a student's ability level.
- Consider letting the student keep the card all day, all week, or for a full unit.

# FOOD



To make groups of 2, say:  
“Burgers, pair with a broccoli.”

# MATERIAL



To form groups of three, say:  
“Make groups of 1 metal, 1 glass, and 1 paper.”

# ENERGY



To form groups of four, say:  
“Make groups of 1 solar, 1 wind, 1 gas, and 1 coal.”



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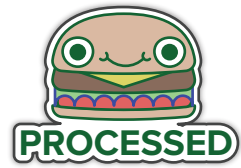
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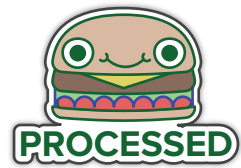
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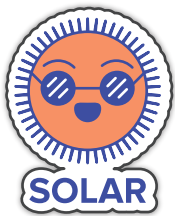
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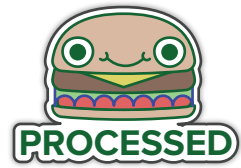
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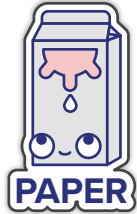
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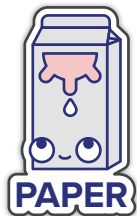
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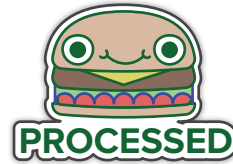


Fresh foods are foods that have not been processed although they may have been washed or cooked.

Fruits, vegetables and some protein products like fresh meats and eggs are some examples of fresh foods.

Fresh foods contain more naturally-occurring vitamins, fiber, and minerals and they are known to increase energy levels and reduce weight gain.

Resource: University of Texas



Processed foods are foods that have been altered from their natural state in some way. They could be frozen, manufactured, canned, or baked.

Fast food, chips, and frozen chicken nuggets are examples of processed foods.

Sometimes foods are better if they are processed. Pasteurizing milk removes harmful bacteria, and pressing seeds lets us use their oils.

Resource: National Health Service, U.K. Gov



Pure metals are found in the earth's crust. We often mix pure metals with other metals to make them stronger.

Most of our recyclable metal is made of aluminum and steel. Soda cans are usually made from aluminum, while our canned food usually comes in steel cans.

It requires 95% less energy and water to recycle a metal can than is needed to create a can from new metal material.

Resource: Recycle Across America; Recycling Guide; Sustainable Design Award



Glass can be recycled an infinite amount of times without losing its quality.

Making glass from recycled glass is cheaper than using raw materials.

Glass is reusable. You can wash out glass containers and refill them with other materials.

Resource: Recycle Across America; Environmental Protection Agency; Recycling Guide



Fiber of some sort is needed to make paper. Most paper is made of wood pulp, but rice, water plants, and cotton can also be used to make paper.

Magazines, newspapers, office paper, food cartons, and cardboard are all different kinds of paper that can be recycled.

You can reduce your paper use by opting out of junk mail, setting your printer to print on both paper sides, and reusing paper around the house as scrap paper.

Resource: Recycling Guide



In just one hour, the amount of sunlight hitting the Earth produces enough energy to power the entire world for a whole year.

Solar energy can be used for heating and electricity.

There are certain trade-offs to consider with solar energy. Using solar energy doesn't emit pollutants or greenhouse gases, but the manufacture of solar panels involves toxic materials and chemicals.

Resource: National Geographic; U.S. Energy Information Administration



The uneven heating of Earth's surface by the sun produces wind. Wind has kinetic energy, which is the energy of motion.

People have harnessed wind energy for a long time. 7,000 years ago, people used wind to propel boats along the Nile River. 1,000 years ago, people began to use windmills to mill grain and produce food.

Today we use wind turbine technology to produce electricity.

Resource: U.S. Energy Information Administration



"Gas" can refer to gasoline: a fuel made from crude oil and other petroleum liquids. We use it mostly to power our vehicles.

"Gas" can also refer to natural gas: a gas made of mostly methane. It exists deep beneath the earth's surface. We use it to make fuel, materials, and chemicals.

Gasoline and natural gas are kinds of fossil fuels, which are nonrenewable energy sources.

Resource: U.S. Energy Information Administration



**Coal is a kind of sedimentary rock that can be burned to create useable energy.**

**We identify coal as a nonrenewable energy source because it takes millions of years to form.**

**Almost all our electricity in the United States, which we use to turn on our lights and electronics, is powered by coal.**

**Resource: U.S. Energy Information  
Administration**