## K-12 IYS Activity



## How is Soil Connected to the Products We Use?

Soil is the basis for many of the natural resources used in the products we use in our every-day life. Some are more obvious (our food grows in soil) and some are less so (how plastics connect to the soil).

Have your students look around the classroom (or another environment if this is a homework assignment) and select ten items. Then, have them write a sentence on how that product (or part of that product) is connected to the soil.

There will be many different items! Here is a sample of how products we use are connected to the soil:

- Some growers and restaurants have started a movement, called Farm to Table, to
  help educate the public about the importance of soils—and farms—to our nutrition.
  This helps reconnect society to the source of their food.
- The clay used in making pottery, figurines, and china is a type of soil. Clay is a soil
  composed of very small particles. It's very sticky, and holds together very well. That
  makes it a great material for producing plates, urns and building materials such as
  bricks.
- Adobe is a type of building material used for houses in many areas. It is made of clay, mixed with organic materials such as straw, and sometimes even sand, another type of soil, is added. Adobe homes were very common among the early settlers to the United States, as well as among Native Americans.
- Mud or clay masks have been used for many centuries to detoxify, deeply cleanse, and soothe skin. These therapeutic types of treatments are still given in modern spas, including hot spring soaks and mud baths.
- For everyone who appreciates clothing, cotton is used to make jeans and most shirts; and linen comes from flax; cotton and flax are both plants that grow in the soil.
- · Wool and leather come from animals that eat plants that grow in soil.
- Gasoline, diesel, natural gas, and plastics can also be connected to the soil. They
  are made with petroleum products that formed many millions of years ago from decaying plants that grew in the soil. Today, ethanol and some plastics are made using
  plant products.
- Trees that grow in soil are a source of lumber to build homes, wood to make pencils, and pulp to make paper.
- Crystal, glass, and glasses are made from quartz derived from sand, a type of soil.
- · Water is purified as it passes through many layers of soil.
- Computer chips in game controllers, laptops, tablets, and phones contains silicon processed from our planet's plentiful sands.
- Soda has sweeteners and diapers may use cellulose that comes from corn.
- Some cat litter is made from special clays that absorb a lot of water, while some cat litters use wheat stalks, which again, grow from soil!
- Drywall, or sheetrock, which is used in walls of buildings is made from gypsum, a
  mineral that occurs in some soils.

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Have a question about how a product relates to the soil? Ask a Soil Scientist at http://www.soils4teachers.org/ask