

# Creative Reinvention

Guess what these things are made of!



## Try this!

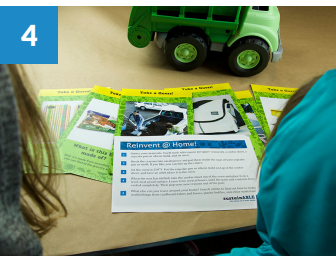
These materials show how a plastic water bottle can be turned into fabric. First, used bottles are cut into flakes. Next, the flakes are melted into pellets. Then, the pellets are stretched into fibers. Finally, the fibers are woven into cloth.



Plastic bottles can also be turned into other things, such as this toy truck! This process of reusing materials to make new things is sometimes called the *circular economy*.



Take a look at the cards on the table. Can you guess what the different products are made from? Flip them over to find out! (You can do as many as you like.)



Can you think of creative ways to reuse some common waste materials in your home?

# Sustainability solutions address today's biggest challenges to create the future we want.

**By thinking creatively, we can reuse materials and save resources.** The raw materials for everything we make and use have to be grown, harvested, or mined from the ground. And when we're done using things, they often become waste and go into landfills.



Caterpillar Inc. has an extensive remanufacturing program.

Today, some companies are designing products to avoid waste during all stages of their "life cycle." They start with recycled materials, find creative ways to use any scraps they make, and think ahead to how the product can be recycled or reused when we're done with it. This idea is sometimes called the *circular economy*, and it's one way to create a more sustainable world. Sustainability means healthy people, communities, and environments, now and in the future.



## **We all have a role in building a more sustainable future!**

The New Jerusalem Children's Home in Midrand, South Africa, is made of 28 used shipping containers. Children who live here participate in a sustainable lifestyle. The home uses solar power, and the gardens are watered with recycled gray water.



The Children's Home building is made from used shipping containers.