

### Matter Cycles at Home

In order to explore the matter cycles at home with your child, go outside and observe them at work.

#### The Water Cycle

See if you can observe the different parts of the water cycle.

#### Here are some questions to discuss with your child:

1. How do you interact with the water cycle every day?
2. How does the amount of sunlight affect the water cycle?
3. Does more evaporation take place at night or during the day? Why?
4. In the area where you live, what form does precipitation usually take: rain, sleet, snow, or hail?

#### The Carbon Dioxide-and-Oxygen Cycle

To explore the carbon dioxide-and-oxygen cycle, go on a photo safari of your neighborhood. Work with your child to find examples of organisms in your neighborhood that produce oxygen. Take photographs of as many examples as you can find. If a camera is not available, have your child draw sketches and write brief descriptions. Look for organisms that make their own food through a chemical process, such as trees, houseplants, vines, moss, and grasses.

Next, take photographs or draw sketches of as many carbon dioxide producers as you can. To find examples of carbon dioxide producers, look for organisms that consume and break down food, such as humans, dogs, birds, or mushrooms. Remember, plants also produce carbon dioxide.

When you have finished finding examples, you may wish to print the photographs. This will allow you to spread them out and draw connections between them to demonstrate how carbon dioxide and oxygen cycle through your neighborhood ecosystem.

#### Here are some questions to discuss with your child:

1. Did you find more examples of oxygen-producing organisms or carbon dioxide-producing organisms?
2. How are plants a unique member of the carbon dioxide-and-oxygen cycle?
3. How could you add more oxygen to your neighborhood ecosystem? Did you find more examples of oxygen-producing organisms or carbon dioxide-producing organisms?