

Carbon Activity 2 – Carbon Around Me

Your students already know that trees need carbon to build their body. In the 2nd carbon activity they will:

- Learn about the existence of the carbon cycle and its main parts.
- Discuss, what carbon pools and fluxes (flows) can be found in your area.
- Think about local sources of carbon.

Basic information

Carbon is the basic building block of life. Carbon atoms are found everywhere on Earth. Carbon accounts for 45-50% of the total mass of the biosphere and is also stored in the ocean, the atmosphere, and the crust of the planet. A carbon atom could spend millions of years moving through Earth in a complex cycle.

The global carbon cycle characterizes the movement of carbon between Earth's spheres. It is a key regulator of Earth's climate system and is central to ecosystem function.

Carbon Around Me Activity

- Watch an animation that provides an illustration of the various parts of the Carbon cycle: <https://svs.gsfc.nasa.gov/10494> (created by NASA/Goddard Space Flight Center/UMBC). In the animation, purple arrows indicate the uptake of Carbon; yellow arrows indicate the release of Carbon.
- Let your students think and discuss about carbon release and uptake of carbon in your surroundings. Are there any major sources of carbon? Are there any pools?
- Create a carbon map of your neighborhood based on the results of your discussion. You can use the map from the next page or create your own.
 - Use a different color for uptake and for release flows.
 - Add a legend on the map.

Optional

- Think about your role in the carbon cycle. Which of your activities contribute to the carbon production?
- With older students do research about carbon cycle sources and storage in your neighborhood.

Share your carbon map on the campaign discussion forum

