

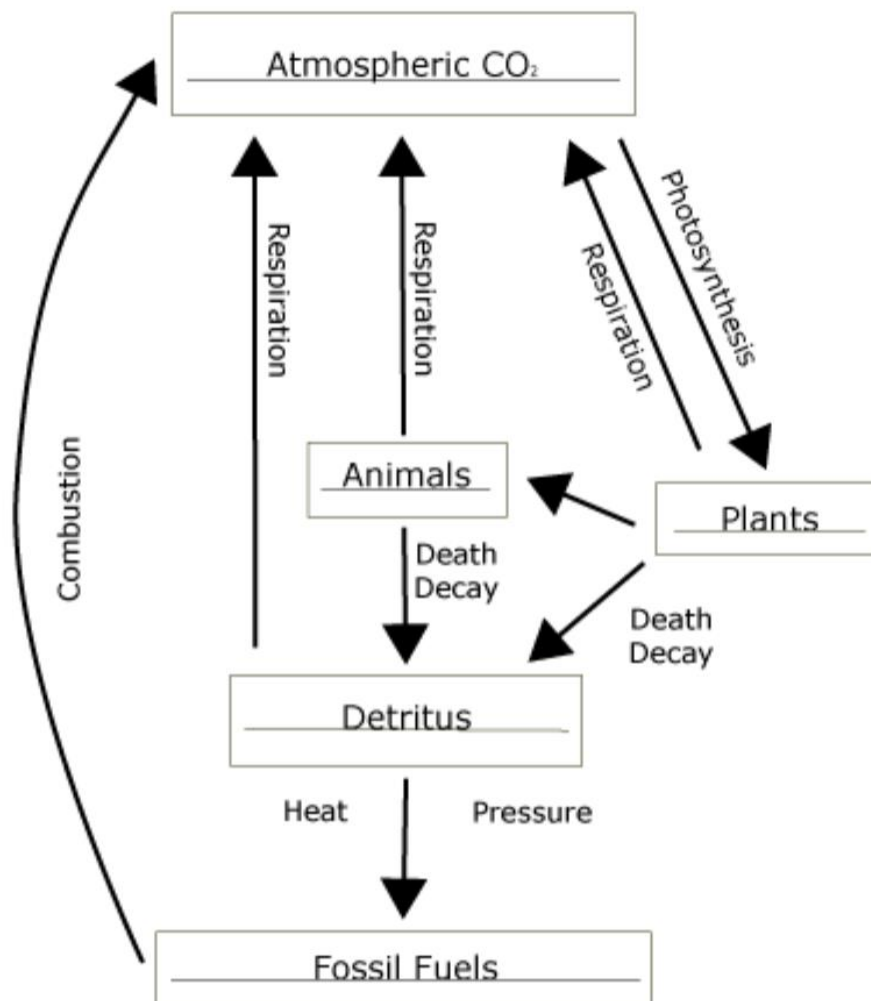
The Carbon Cycle

Real World Ecosystems Learner Worksheet



Part A

Label the diagram, using the terms given in the table to the right of the diagram. Terms can be used one time only, unless otherwise specified. For example, if a term says (x3) after it, that term can be used in three places on the diagram.



Part B

In the table below, fill in the blanks in the charts. You must identify if the carbon vapor clue is a sink or source and then describe how the carbon is transformed or released into the next form.

Carbon Caper Clue	Is it a source or a sink?	The carbon is released or transformed by...?
Oceans are a carbon...	Sink	Oceans absorb large amounts of carbon dioxide from the atmosphere.
Carbon rocks are a carbon...	Source	Carbon can be released by drilling
When wood or trees are burned they are a carbon...	Source	Carbon is released when trees burn or when they decay after dying.
When wood decomposes in the forest it is a carbon...	Source	Decomposition releases carbon into the atmosphere
When volcanoes erupt they are a carbon...	Source	Carbon is released into the atmosphere when volcanoes erupt.
When we cut down trees they become a carbon...	Source	The trees are no longer able to use CO ₂ for photosynthesis. Often wood is burned and releases carbon.
When we travel by car the exhaust is a carbon...	Source	Greenhouse gas emissions from transportation primarily comes from the burning of fossil fuels.
Trees and plants are a carbon...	Sinks	Plants absorb more carbon than they release.

Now that you have thought about sinks and sources, think about the carbon sources in your life. You may be enhancing the sources by the way you travel to school, use electricity, buy products, use paper, and create waste. Then think of an activity to reduce your carbon sources! Fill out the table below.

Enhancing the sources	Me personally	What can I do?
I use electricity	Watch TV and play computer games every day.	Play outside, reduce the time I play computer games and watch TV, and make sure I turn it off when it is not in use.
I travel to school	My family uses a car as their main mode of transportation	Use alternative transportation: Carpool, bus, train, walk or bike to close destinations.
I buy plastic products	I use plastic bags, water bottles and straws.	Buy a reusable water bottle, reusable straws and opt for a reusable bag when shopping.
I eat fast food	Order takeout, eat a lot of junk food and meat.	Eat more fruit and vegetables and choose organic and local foods.
I create waste	Buying products with a lot of packaging, buying fast fashion, throwing out food.	Buy products from environmentally responsible companies that use less packaging, buy vintage or recycled clothing, meal prep in advance.