



THE CARBON CYCLE

What Is Carbon?

- An element
- The basis of life of earth
- Found in rocks, oceans, atmosphere

Carbon Cycle

- The same carbon atoms are used repeatedly on earth. They cycle between the earth and the atmosphere.



Plants Use Carbon Dioxide

- Plants pull carbon dioxide from the atmosphere and use it to make food — photosynthesis.
- The carbon becomes part of the plant (stored food).



Animals Eat Plants

- When organisms eat plants, they take in the carbon and some of it becomes part of their own bodies.



Plants and Animal Die

- When plants and animals die, most of their bodies are decomposed and carbon atoms are returned to the atmosphere.
- Some are not decomposed fully and end up in deposits underground (oil, coal, etc.).

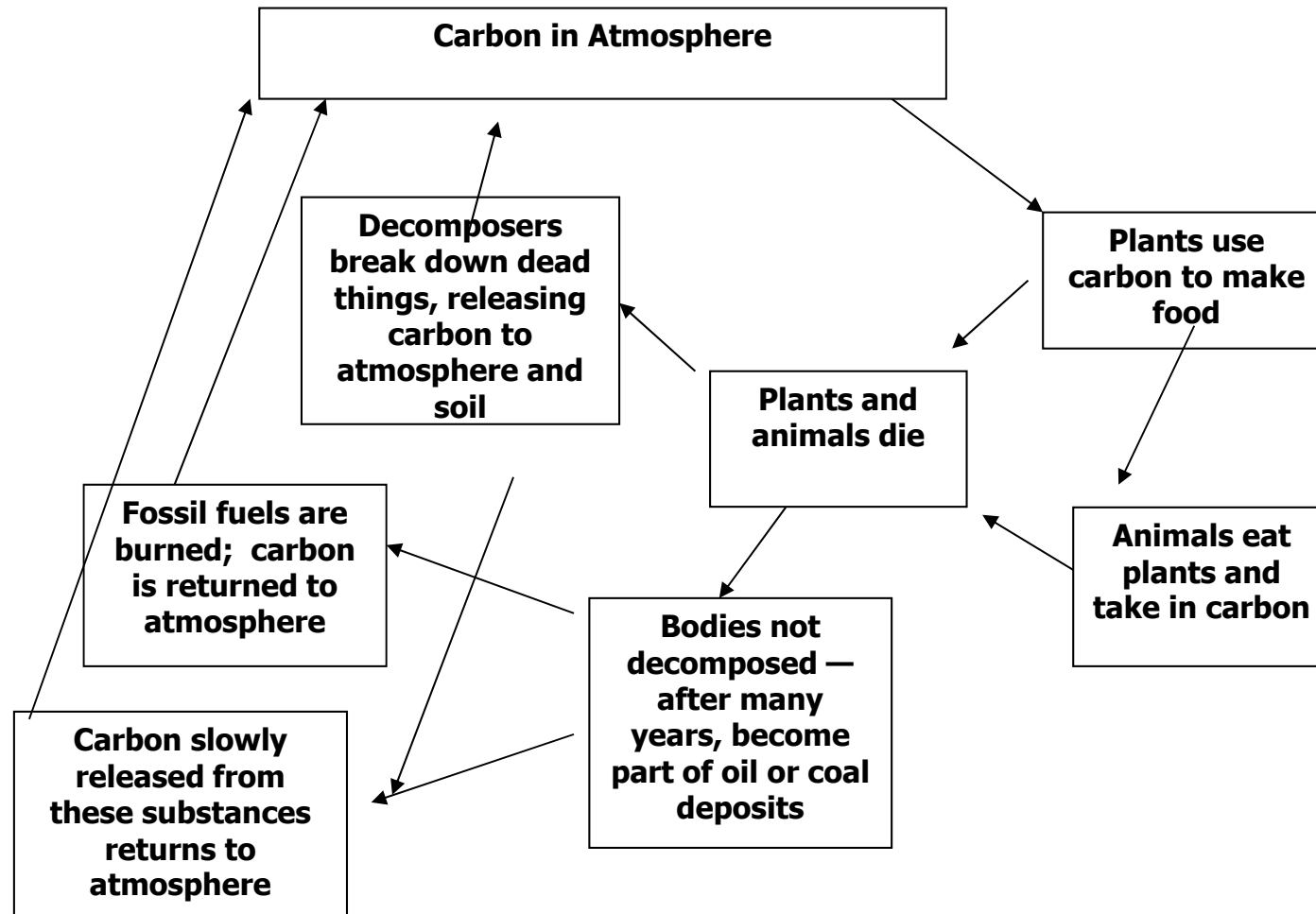
Carbon Slowly Returns to Atmosphere

- Carbon in rocks and underground deposits is released very slowly into the atmosphere.
- This process takes many years.



Cycle – Repeats Over and
Over and Over and Over ...

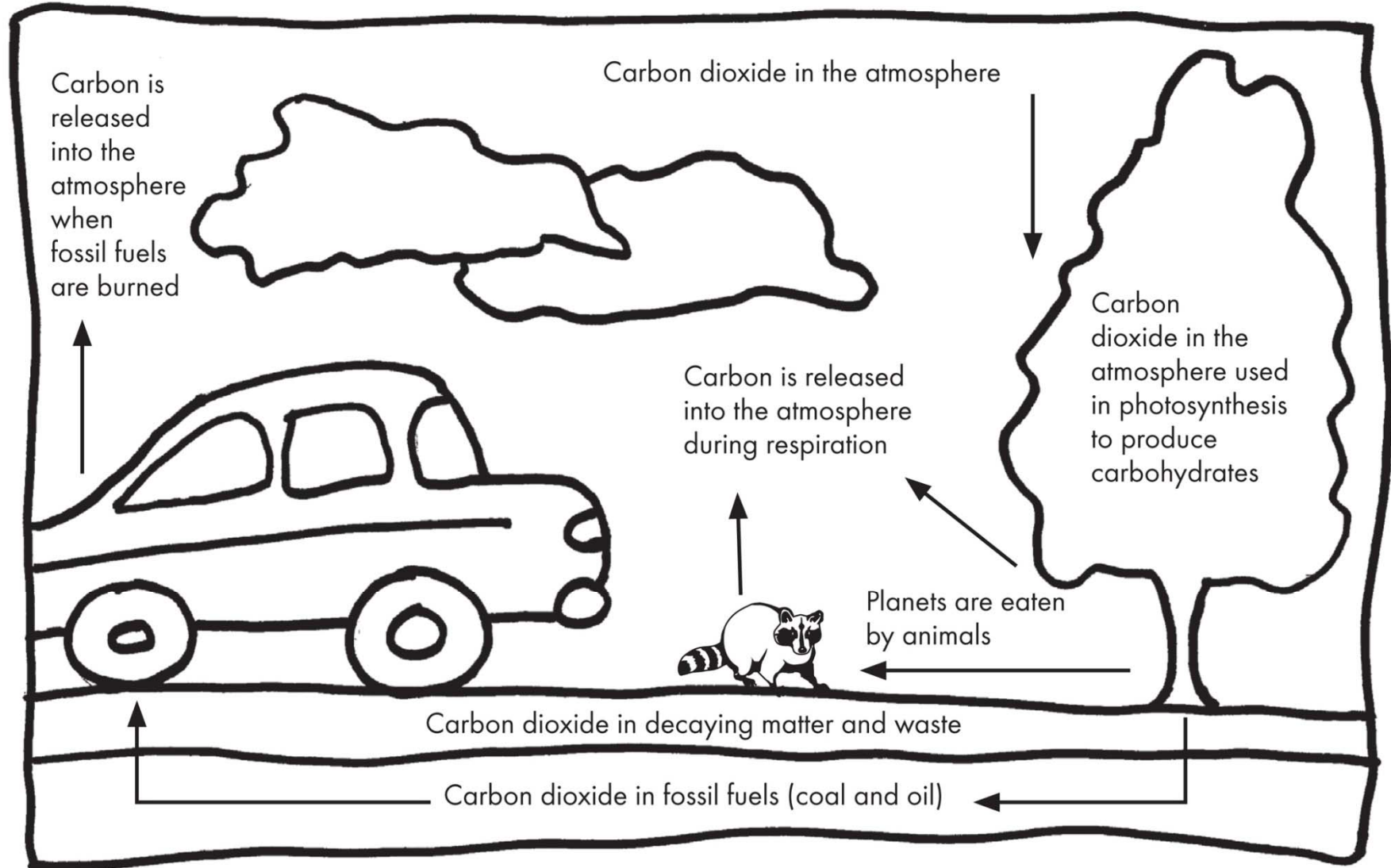
Carbon Cycle Diagram



Carbon in Oceans

- Additional carbon is stored in the ocean.
- Many animals pull carbon from water to use in shells, etc.
- Animals die and carbon substances are deposited at the bottom of the ocean.
- Oceans contain earth's largest store of carbon.

The Carbon Cycle



Human Impact

- Fossil fuels release carbon stores very slowly
- Burning anything releases more carbon into atmosphere — especially fossil fuels
- Increased carbon dioxide in atmosphere increases global warming
- Fewer plants mean less CO₂ removed from atmosphere

What We Need to Do

- Burn less, especially fossil fuels
- Promote plant life, especially trees

