

# Carbon Cycle Station Cards

Each station includes two pages: one photograph and one set of directions for movement among stations. The numbered instructions correspond to the roll of the die.

# Atmosphere

1. You continue to circulate through the atmosphere. **Stay at Atmosphere.**
2. You continue to circulate through the atmosphere. **Stay at Atmosphere.**
3. In a forest, a pine tree needle absorbs and uses carbon dioxide during photosynthesis. **Go to Forest.**
4. In a forest, a pine tree needle absorbs and uses carbon dioxide during photosynthesis. **Go to Forest.**
5. Near the East coast, you dissolve into the waters of the Atlantic Ocean. **Go to Surface Ocean.**
6. Near the East coast, you dissolve into the waters of the Atlantic Ocean. **Go to Surface Ocean.**



# ATMOSPHERE



# Forest

1. Through respiration, a tree uses your sugar molecule for energy. **Go to Atmosphere.**
2. The pine cone where you have been stored is eaten by an Eastern fox squirrel. **Go to Animals.**
3. You become sequestered in a tree's trunk. After several years, your tree gets cut down. **Go to Wood Products.**
4. You become sequestered in a tree's trunk. After several years, your tree gets cut down. **Go to Wood Products.**
5. You become sequestered in a tree root which dies and decays. **Go to Soil Carbon.**
6. A fire moves through the forest and burns the tree where you have been stored. **Go to Atmosphere.**



# FOREST

# Soil Carbon

1. As the organic matter decomposes, you become carbon dioxide through soil respiration. **Go to Atmosphere.**
2. As the organic matter decomposes, you become carbon dioxide through soil respiration. **Go to Atmosphere.**
3. An insect eats the rotting material where you are located. **Go to Animal.**
4. An insect eats the rotting material where you are located. **Go to Animal.**
5. You become buried in layers of leaf litter and soil. **Stay at Soil Carbon.**
6. You become buried in layers of leaf litter and soil. **Stay at Soil Carbon.**



SOIL CARBON

# Animals

1. A bird eats you for dinner. **Stay at Animal.**
2. You are stored in animal fat cells. **Stay at Animal.**
3. You get released as carbon dioxide during respiration.  
**Go to Atmosphere.**
4. You get released as carbon dioxide during respiration.  
**Go to Atmosphere.**
5. When the animal produces waste, you find yourself on the forest floor in a pile of poop. **Go to Soil Carbon.**
6. The animal dies and begins to break down on the forest floor.  
**Go to Soil Carbon.**



# ANIMALS



# Wood Products

1. The lumber where you are sequestered is used to build a house. **Stay at Wood Products.**
2. The lumber where you are sequestered is used to build a house. **Stay at Wood Products.**
3. After many years, the lumber gets thrown in a pile of old wood and begins to rot and break down. **Go to Soil Carbon.**
4. You are eaten by termites. **Go to Animals.**
5. After many years, the lumber where you are sequestered gets burned for firewood. **Go to Atmosphere.**
6. After many years, the lumber where you are sequestered gets burned for firewood. **Go to Atmosphere.**



# WOOD PRODUCTS



# Surface Ocean

1. Through wave action, you mix with air and come out of the water – leaving solution as carbon dioxide gas. **Go to Atmosphere.**
2. Through wave action, you mix with air and come out of the water – leaving solution as carbon dioxide gas. **Go to Atmosphere.**
3. You continue mixing in water near the surface of the ocean. **Stay at Surface Ocean.**
4. Water currents and ocean mixing send you deeper within the ocean. **Go to Deep Ocean.**
5. An algae plant takes you in during photosynthesis. **Go to Marine Life.**
6. An algae plant takes you in during photosynthesis. **Go to Marine Life.**



# SURFACE OCEAN

# Deep Ocean

1. Ocean mixing and water currents send you toward the surface.  
**Go to Surface Ocean.**
2. Ocean mixing and water currents send you toward the surface.  
**Go to Surface Ocean.**
3. Ocean mixing and water currents send you toward the surface.  
**Go to Surface Ocean.**
4. Ocean mixing and water currents send you toward the surface.  
**Go to Surface Ocean.**
5. Water currents send you deeper within the ocean.  
**Stay at Deep Ocean.**
6. Water currents send you deeper within the ocean.  
**Stay at Deep Ocean.**



DEEP OCEAN

# Marine Life

1. You are eaten by a tiny marine animal, called zooplankton. **Stay at Marine Life.**
2. You are eaten by a tiny marine animal, called zooplankton. **Stay at Marine Life.**
3. You are exhaled through respiration. **Go to Surface Ocean.**
4. You are exhaled through respiration. **Go to Surface Ocean.**
5. The organism you are part of dies. You break down and sink through the waters of the Atlantic Ocean. **Go to Deep Ocean.**
6. The organism you are part of dies. You break down and sink through the waters of the Atlantic Ocean. **Go to Deep Ocean.**



# MARINE LIFE

