Materials and the Earth
Lesson 9: The Carbon Cycle

Science

Chemistry - Key Stage 3

Miss Willett

What have you learnt already?

1. What is sediment?

2. How did photosynthesis affect oxygen levels in the atmosphere?

3. What is condensation?

Carbon

True or false?

Carbon dioxide is released during photosynthesis

Living tissues contain carbon

Carbon dioxide is passed through the food chain

The importance of carbon

Complete the sentences:

1. Carbon is found in..

2. Carbon enters plants by..

3. When animals eat the plants, the carbon..

4. When an organism dies, the carbon..

5. We can use carbon in fossil..

Removing carbon dioxide:
Question time!

1. **By what process do plants removes carbon dioxide from the atmosphere?**

   P...

2. **Where does some carbon dioxide dissolve?**

   Into the o....

3. **What can the carbon then help form?**

   S..... s.........

Adding carbon dioxide:
Question time!

1. **Which process do all organisms carry out, that releases carbon dioxide?**

    R...

2. **What is the proper word for 'burning fuel'?**

    C...

3. **What is the role of microbes in the carbon cycle?**

    D............ organisms and r...............................

Adding and removing carbon dioxide

Complete the table to show the correct processes:

Adding carbon dioxide:	Removing carbon dioxide:

The carbon cycle

Complete your carbon cycle showing key stages:

ATMOSPHERE

PLANTS

MICROBES

ANIMALS

FOSSIL FUELS

OCEANS

SEA SHELLS
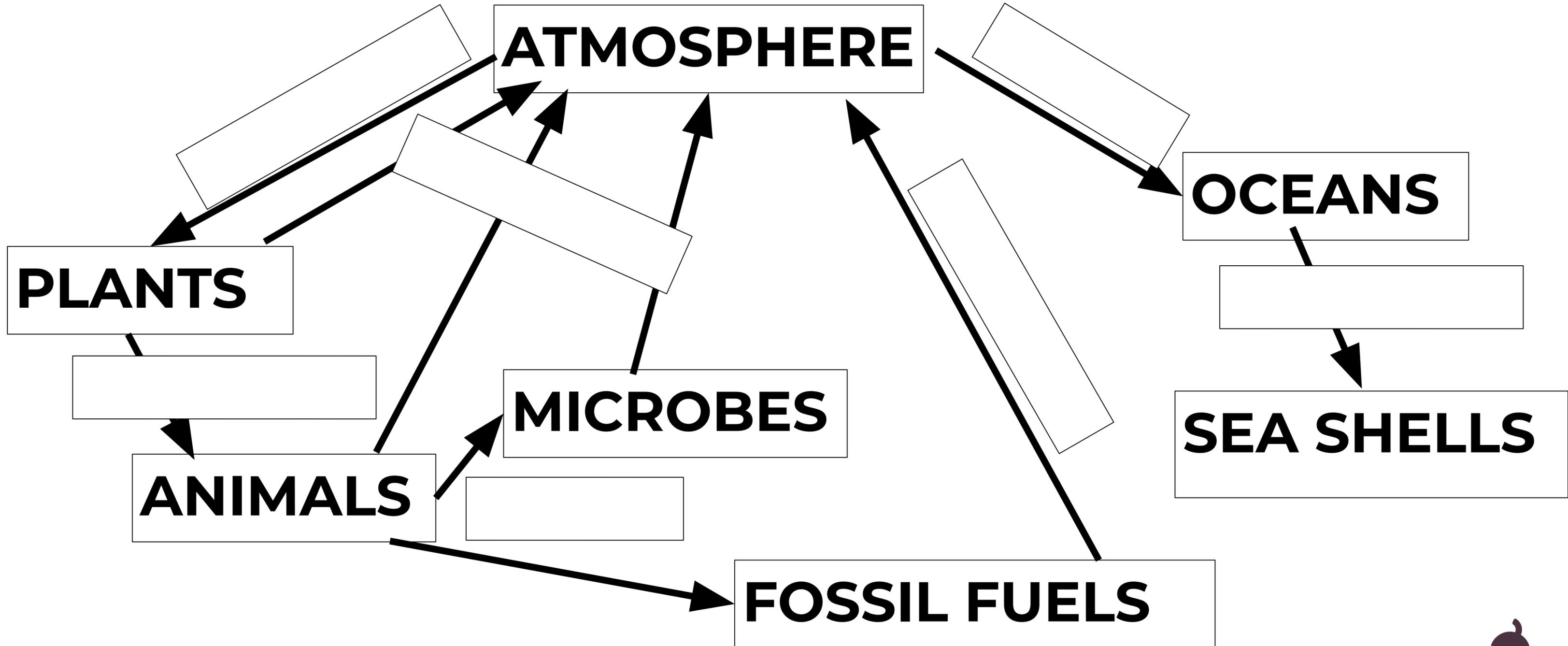
The carbon cycle

Complete your carbon cycle showing key stages:
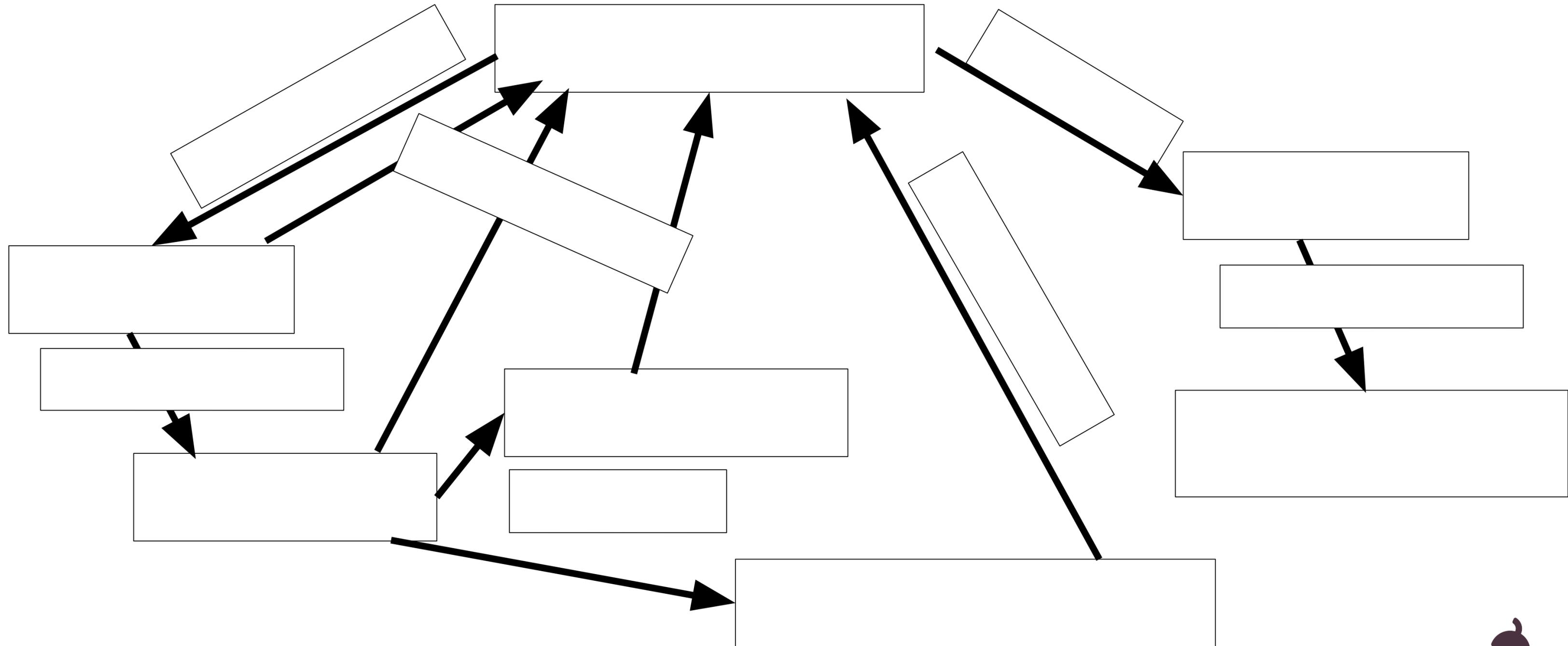
Bringing it together..

Pretend you are a carbon atom in carbon dioxide in the atmosphere. You are moving through the carbon cycle. Write your story as you move through plants, animals, and ending with being used as a fuel.

- First, I entered a plant so I could be used for…

- I was then eaten…

- Some of my friends went back to the atmosphere when..

- When the animal died, some of us ….

- I, though, turned into..

- Millions of years later, I was drilled from the sea bed, and…

Bringing it together..

Answer space: