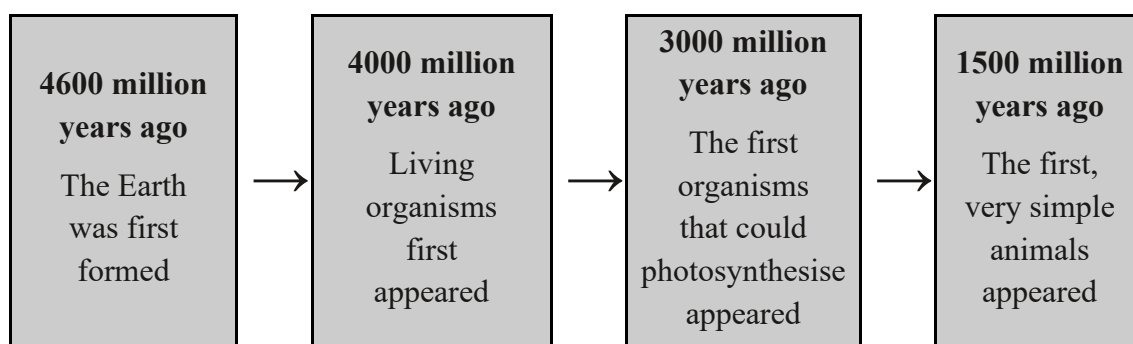


Name _____ Date _____

Worksheet 1.1A

The beginning of photosynthesis

Here are some important events that occurred during the very early history of the Earth:



1 How long ago do we think that the Earth was first formed?

2 For how many years have there been living things on Earth?

3 How long ago did photosynthesis begin?

4 There was almost no oxygen in the Earth's atmosphere until 3000 million years ago.

Then oxygen began to build up in the air.

Suggest why.

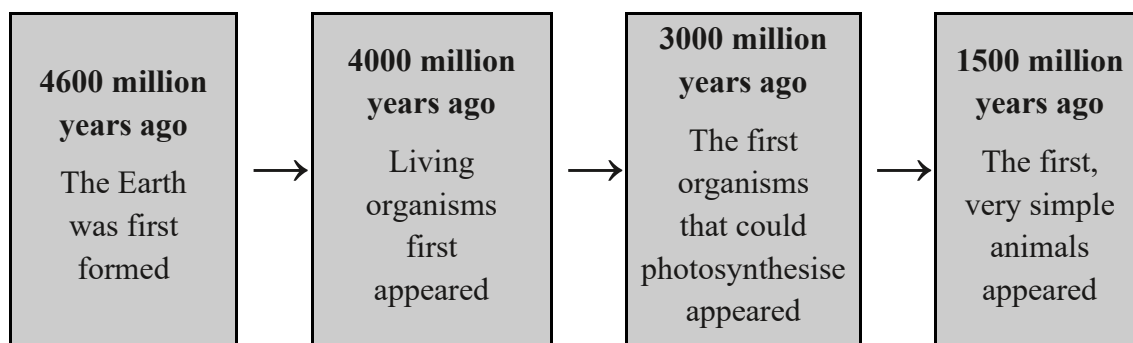
- 5 Suggest why animals did not appear until after there was oxygen in the Earth's atmosphere.

Name _____ Date _____

Worksheet 1.1B

The beginning of photosynthesis

Here are some important events that occurred during the very early history of the Earth:



- 1 How long after the formation of Earth did the first life appear?

- 2 Suggest how we can work out when the different kinds of organisms first appeared on Earth.

- 3 Up to about 3000 million years ago, there was no oxygen in the Earth's atmosphere.
Today about 20% of the atmosphere is oxygen gas.
Use the information in the events diagram to explain why.

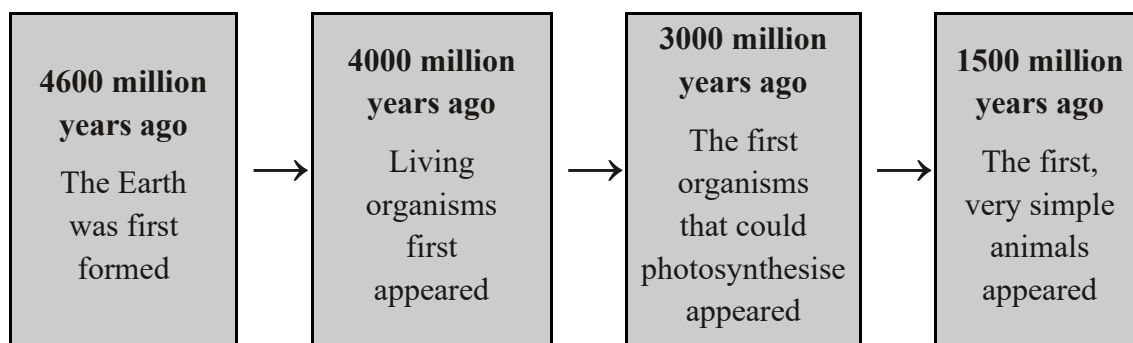
- 4 Suggest why animals did not appear on Earth until after the first organisms that could photosynthesise appeared.

Name _____ Date _____

Worksheet 1.1C

The beginning of photosynthesis

Here are some important events that occurred during the very early history of the Earth:



- 1 How long after the formation of Earth did the first life appear?

- 2 Suggest how we can work out when the different kinds of organisms first appeared on Earth.

- 3 Up to about 3000 million years ago, there was no oxygen in the Earth's atmosphere.
Today about 20% of the atmosphere is oxygen gas.
Use the information in the events diagram to explain why.

- 4 Suggest why animals did not appear on Earth until after the first organisms that could photosynthesise appeared.

- 5 Until 3000 million years ago, all life on Earth was adapted to live without oxygen. Some scientists say that the addition of oxygen to the atmosphere was the greatest pollution event that ever happened on Earth.

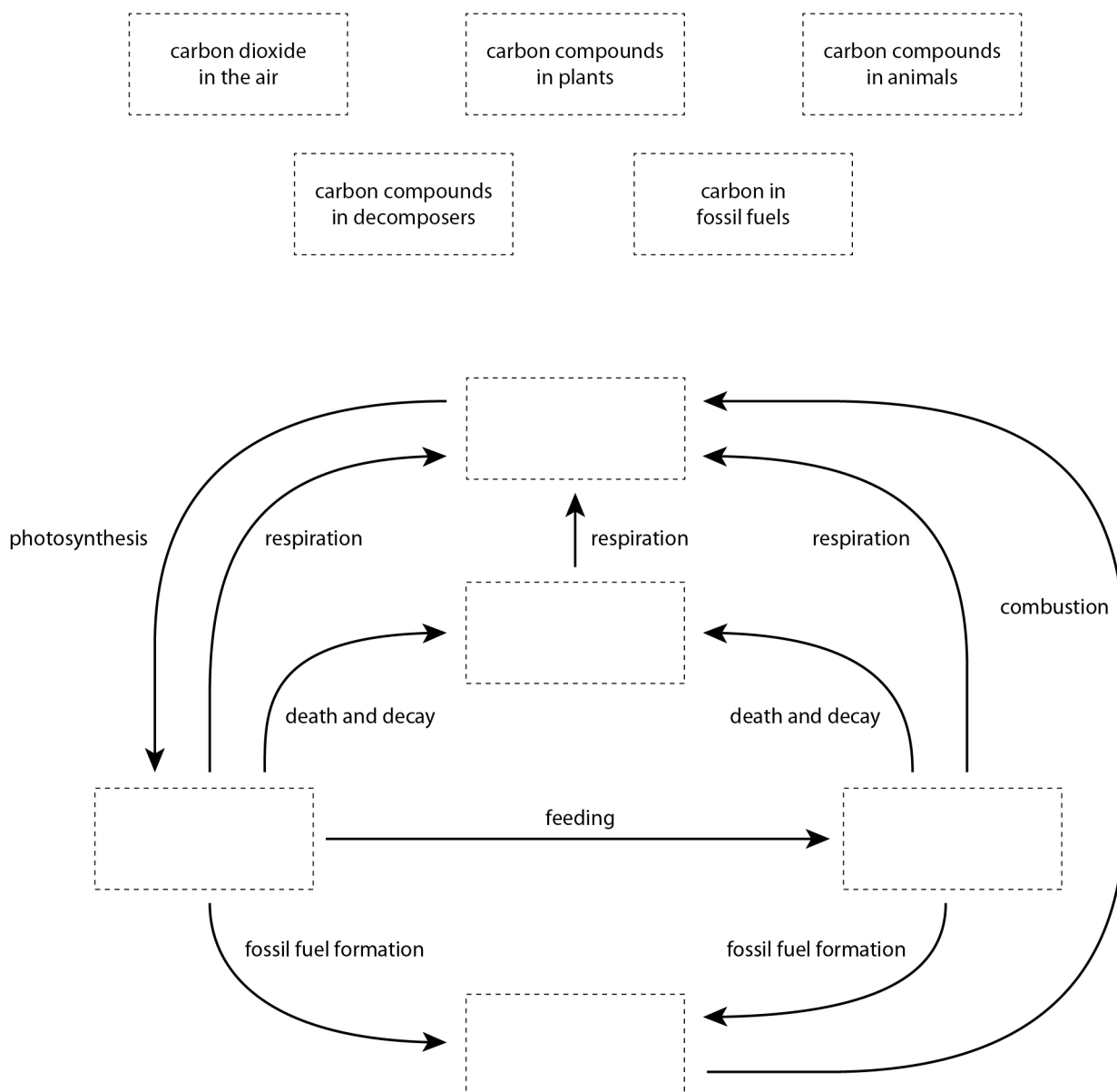
Suggest why the scientists describe this as the greatest pollution event.

Name _____ Date _____

Worksheet 1.3A

Building a carbon cycle

Cut out the boxes. Then stick them into the correct places on the diagram of the carbon cycle.



Name _____ Date _____

Worksheet 1.3B

Building a carbon cycle

- 1 Cut out the boxes. Then stick them onto a clean sheet of paper to make a carbon cycle.

carbon
dioxide in the
air

carbon
compounds in
plants

carbon
compounds in
animals

carbon
compounds in
decomposers

carbon in fossil
fuels

- 2 Draw arrows between the boxes and label them with these words:

photosynthesis

respiration

respiration

respiration

death and decay

death and decay

fossil fuel formation

fossil fuel formation

combustion

feeding

Name _____ Date _____

Worksheet 1.3C

Building a carbon cycle

- 3 Cut out the boxes. Then stick them onto a clean sheet of paper to make a carbon cycle.

carbon
dioxide in the
air

carbon
compounds in
plants

carbon
compounds in
animals

carbon
compounds in
decomposers

carbon in fossil
fuels

- 4 Draw arrows between the boxes and label them appropriately to show how carbon atoms move around in the carbon cycle.

Name _____ Date _____

Worksheet 1.4

Impacts of climate change

The diagram shows some of the impacts of climate change.



Imagine you are one of these people:

- A farmer who grows beans to sell: Beans need lots of water to grow, but in the last few years the rains have come late and there has not been enough water to give a good yield.
How is this affecting your life? What will you do?
- A 14 year old girl living on a small island in the Pacific Ocean: The sea has been advancing onto the land and soon there will not be enough space for everyone to live and grow their crops.
How is this affecting your life? What will you do?
- Any other person of your choice who is affected by climate change.
How is it affecting your life? What will you do?