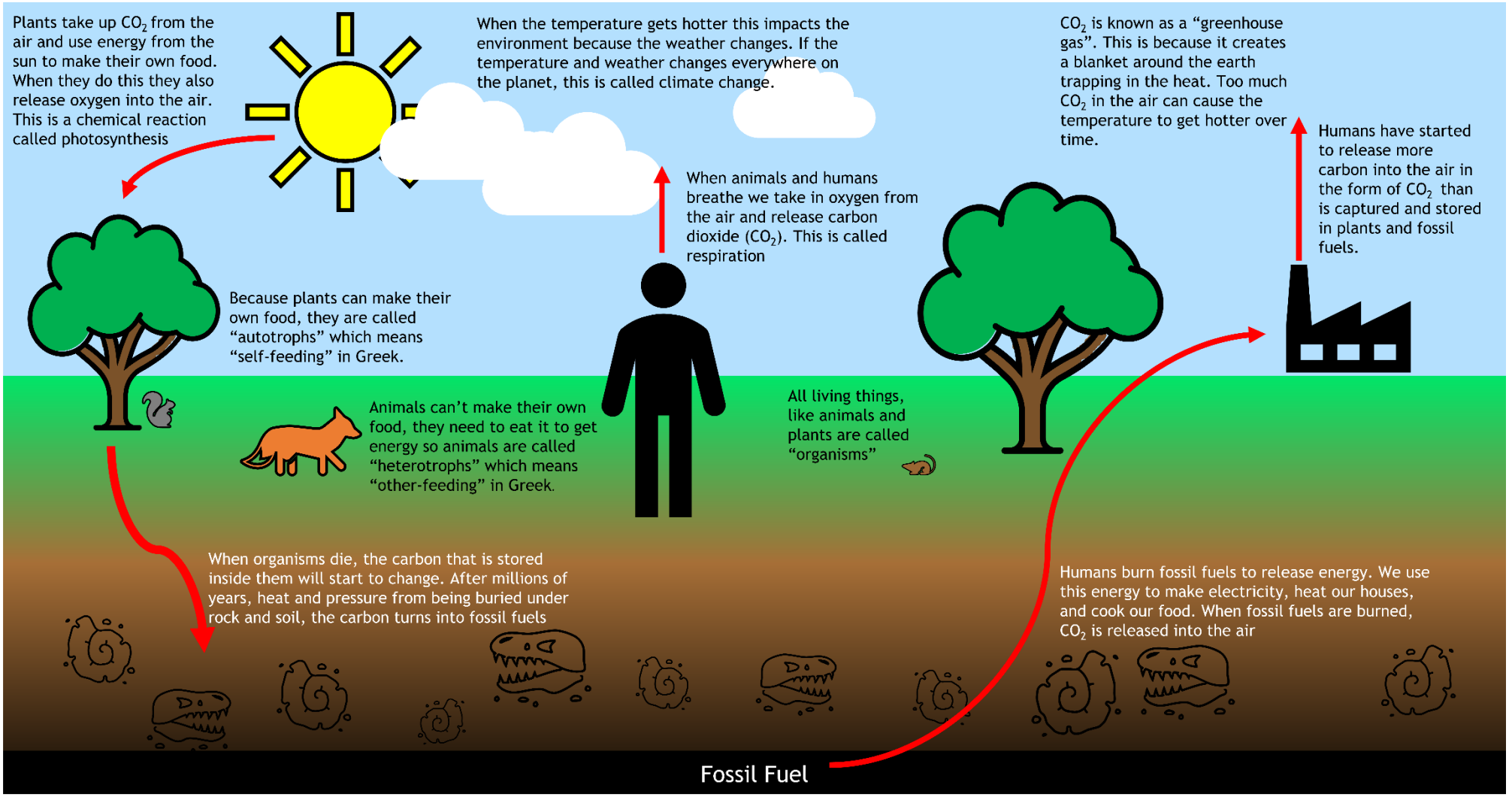
CARBON CYCLE CROSWORD PUZZLE

SOCIETY FOR
EXPERIMENTAL
BIOLOGY

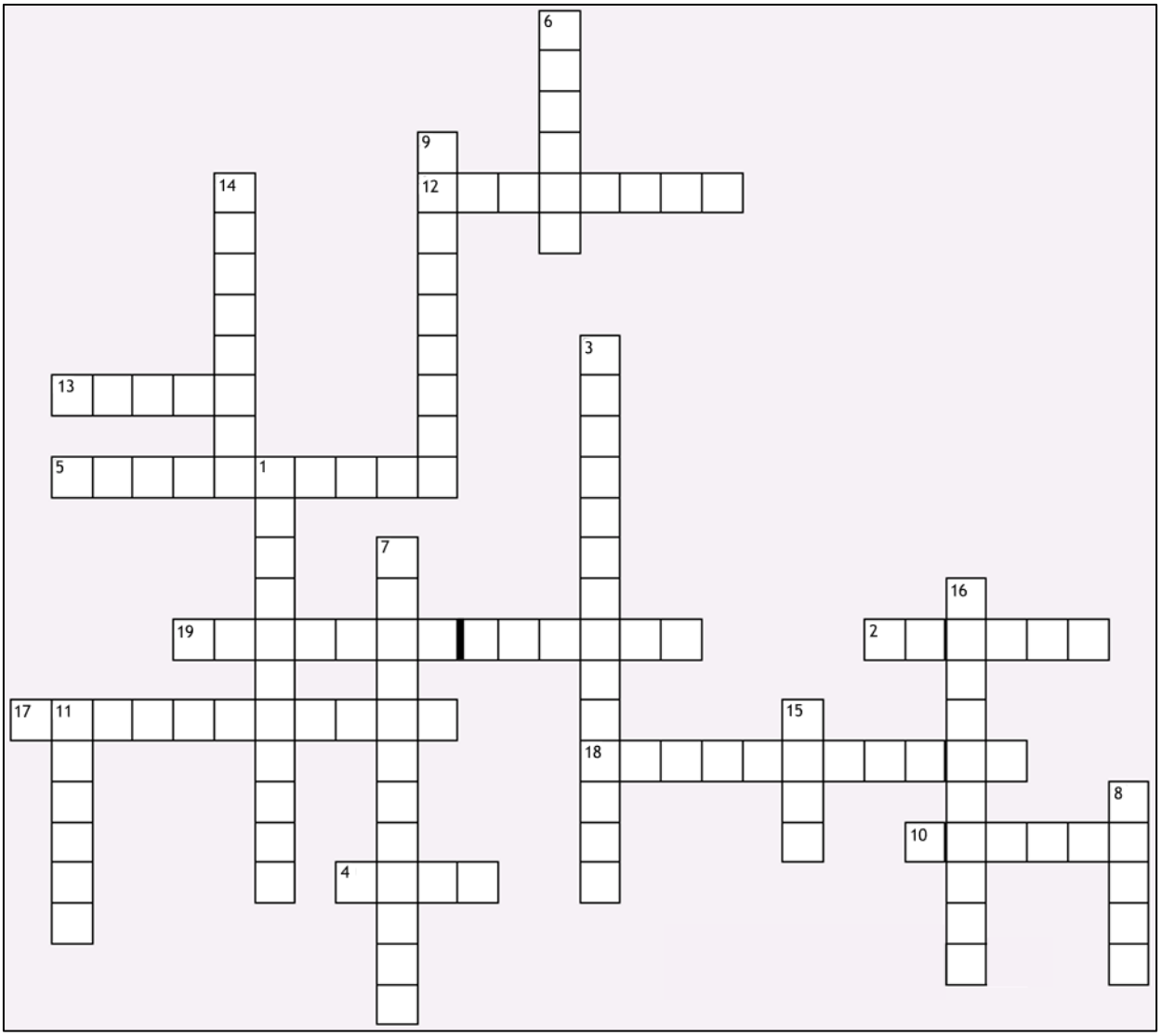


This picture shows the carbon cycle. This is what we call the movement of carbon between the air, the earth, living organisms, and fuel.

CROSSWORD PUZZLE

Look at the picture showing the carbon cycle. This shows how carbon moved between the air, the earth, plants, and animals. Use what you learn to solve the crossword puzzle. There are also some clues below to help you.

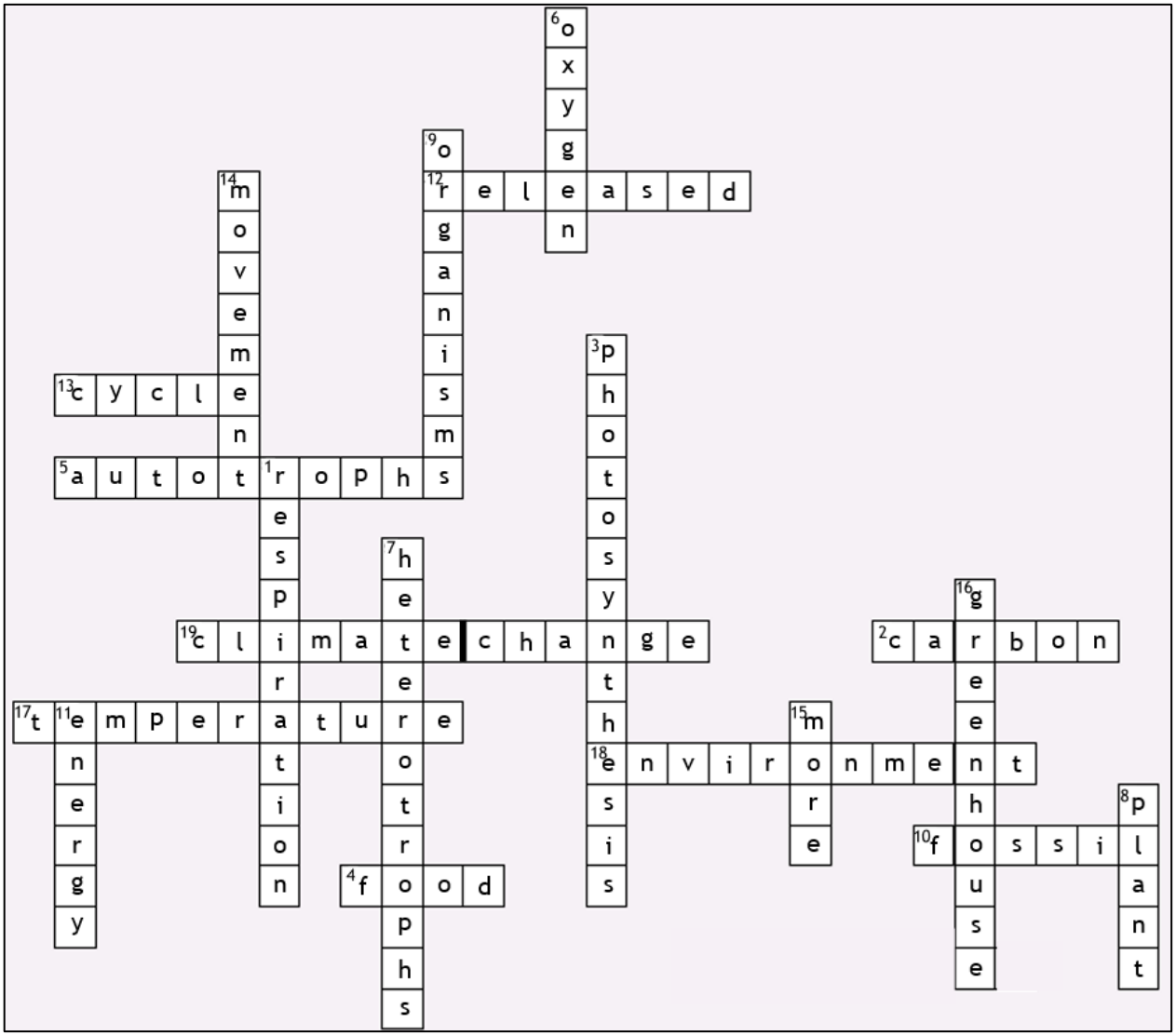
The goal of solving the puzzle is to fill in the grid with different words. Each letter of the word fits into a white square on the grid. The list of clues will help you find the right word, and the place in the grid where the answer to each clue should go is shown by a number.



CLUES

1. Breathe! Inhale, now exhale. Please pay attention. This process is called _____.
2. When we breathe, our body takes the oxygen from the air, and when we exhale, we release _____dioxide (CO_2).
3. CO_2 in the air is captured by plants together with water and energy from the sun in a chemical reaction called _____.
4. This process allows plants to produce their own _____ which they can use as energy to grow.
5. That is why plants are called _____ which means “self-feeding” in Greek.
6. As a result of this chemical reaction, _____ is produced and released into the air. *Hint: you need this gas to breathe.*
7. Since animals like you and me can’t produce our own food like plants do, we need to eat things to get energy and protein. This means we are called _____.
8. So, if you are having dinner and eat rice, the carbon that is stored as food in this _____ will go into you.
9. Living things like plants or animals are called _____. When they die, the carbon that it has stored as food will start to change.
10. After millions of years being buried under rocks and dirt, the carbon can become _____ fuel.
11. These fuels are burned by humans to release _____which we use for things like heating our homes, making electricity, and cooking our food.
12. When burned, the carbon that is stored in the fuel is _____ into the air again
13. This whole process is what we call the carbon _____.
14. Which is the _____of the carbon between it’s different reservoirs like the air, living organisms, the soil and fuel.
15. We humans have been releasing _____ CO_2 into the air that is captured and stored by natural processes.
16. CO_2 is a _____ gas, which means it makes a layer around earth and traps in the heat.
17. Too much of this gas can lead to a rise of _____
18. Which impacts the _____ by causing changes in the weather.
19. Changes in weather and temperature over a long period of time and everywhere on our planet is called _____.

ANSWERS



1. Breathe! Inhale, now exhale. Please pay attention. This process is called **respiration**.
2. When we breathe, our body takes the oxygen from the air, and when we exhale, we release **carbon** dioxide (CO_2).
3. CO_2 in the air is captured by plants together with water and energy from the sun in a chemical reaction called **photosynthesis**.
4. This process allows plants to produce their own **food** which they can use as energy to grow.
5. That is why plants are called **autotrophs** which means "self-feeding" in Greek.
6. As a result of this chemical reaction, **oxygen** is produced and released into the air. *Hint: you need this gas to breathe*.
7. Since animals like you and me can't produce our own food like plants do, we need to eat things to get energy and protein. This means we are called **heterotrophs.**

8. So, if you are having dinner and eat rice, the carbon that is stored as food in this **plant** will go into you.
9. Living things like plants or animals are called **organisms**. When they die, the carbon that it has stored as food will start to change.
10. After millions of years being buried under rocks and dirt, the carbon can become **fossil** fuel.
11. These fuels are burned by humans to release **energy** which we use for things like heating our homes, making electricity, and cooking our food.
12. When burned, the carbon that is stored in the fuel is **released** into the air again
13. This whole process is what we call the carbon **cycle**.
14. Which is the **movement** of the carbon between it's different reservoirs like the air, living organisms, the soil and fuel.
15. We humans have been releasing **more** CO_2 into the air that is captured and stored by natural processes.
16. CO_2 is a **greenhouse** gas, which means it makes a layer around earth and traps in the heat.
17. Too much of this gas can lead to a rise of **temperature**
18. Which impacts the **environment** by causing changes in the weather.
19. Changes in weather and temperature over a long period of time and everywhere on our planet is called **climate change**