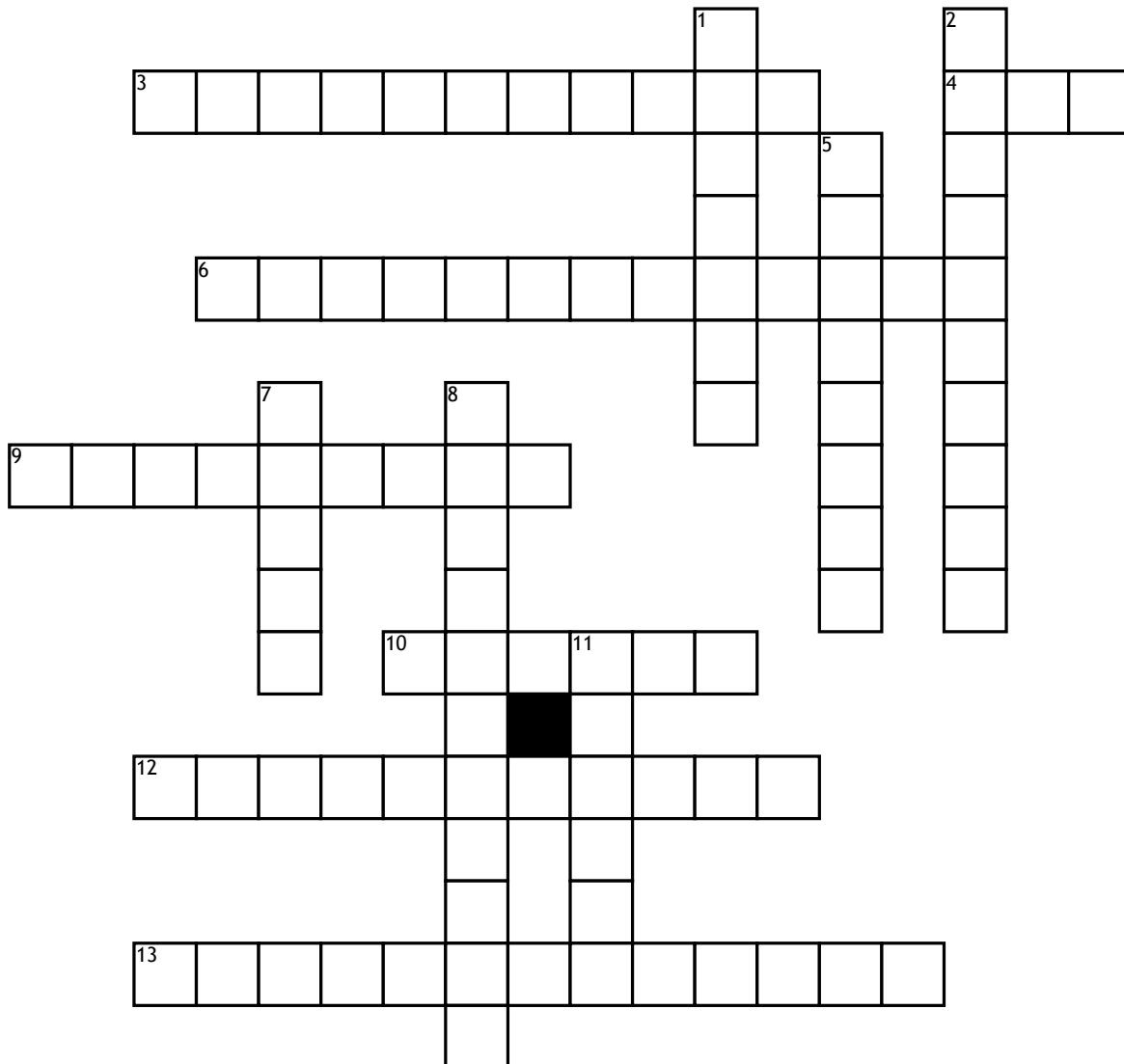


Photosynthesis



Across

3. One of the four reactant of photosynthesis and is a pigment.

4. One of the principal chemical compounds that living things use to store (short term) and release energy. When a phosphate is added to a ADP it stores energy. Breaking the chemical bond between the second and third phosphates, releases energy.

6. One of the four reactant of photosynthesis and chemical formula is CO₂.

9. where light dependent reaction takes place

10. where the calvin cycle takes place

12. The main purpose of this cycle is to produce glucose, reaction of photosynthesis in which energy from ATP and NADPH is used to build high energy compounds such as sugars. After it's done, it gives the NADP⁺ and ADP back to the light reaction since it came from the light dependent cycle.

13. A Dutch scientist who found that light was needed for plants to produce oxygen. He placed a plant under water in a transparent case and saw that there were bubble on the leaves and side of the container, but when the same plants were put into a dark place, the bubbles stopped forming. This lead to his conclusion that light was needed for plants to make oxygen.

Down

1. One of the product of photosynthesis and is also called sugar.

2. A physician that conducted an experiment to find out if plants grew by taking material out of the soil. He watered a seedling in a pot which was measured everyday for five years. It resulted in the tree weigh about 75 kg after the five years but the mass of the soil not changing. He concluded that the seedling gained weight from the water because it was the only thing added.

5. An English minister who found out that oxygen was released by plants.by covering a lit candle with a jar. He saw that the candle slowly died out, and reasoned that something in the air was needed in order for the candle to stay lit. This lead for him to find that if you keep a live spring mint under jar and let it sit for a few days, the candle lights back again. The mint plant had produced oxygen which was a substance required for burning.

7. One of the four reactant of photosynthesis and chemical formula is H₂O.

8. One of the four reactant of photosynthesis and is from the sun.

11. One of the product of photosynthesis, chemical formula O