

Topic: Photosynthesis Worksheet

Summary: Students will answer questions about photosynthesis, the reactants and products of photosynthesis, and the chloroplast structure.

NGSS Standards: *HS-LS1-5:* Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.

Time Length: 10 minutes

Prerequisite Knowledge: Students know the organelle of plant cells, what is a reactant, and a product of a chemical reaction.

Materials:

Class notes or textbook or online textbook:

- <https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/2.17/primary/lesson/autotrophs-and-heterotrophs-bio/>
- <https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/2.21/primary/lesson/light-reactions-of-photosynthesis-bio/>

Procedures:

1. Students work on the handout by themselves.

Accommodations: Students with an IEP can take the handout home if they need extra time, or they can do the diagram model questions.

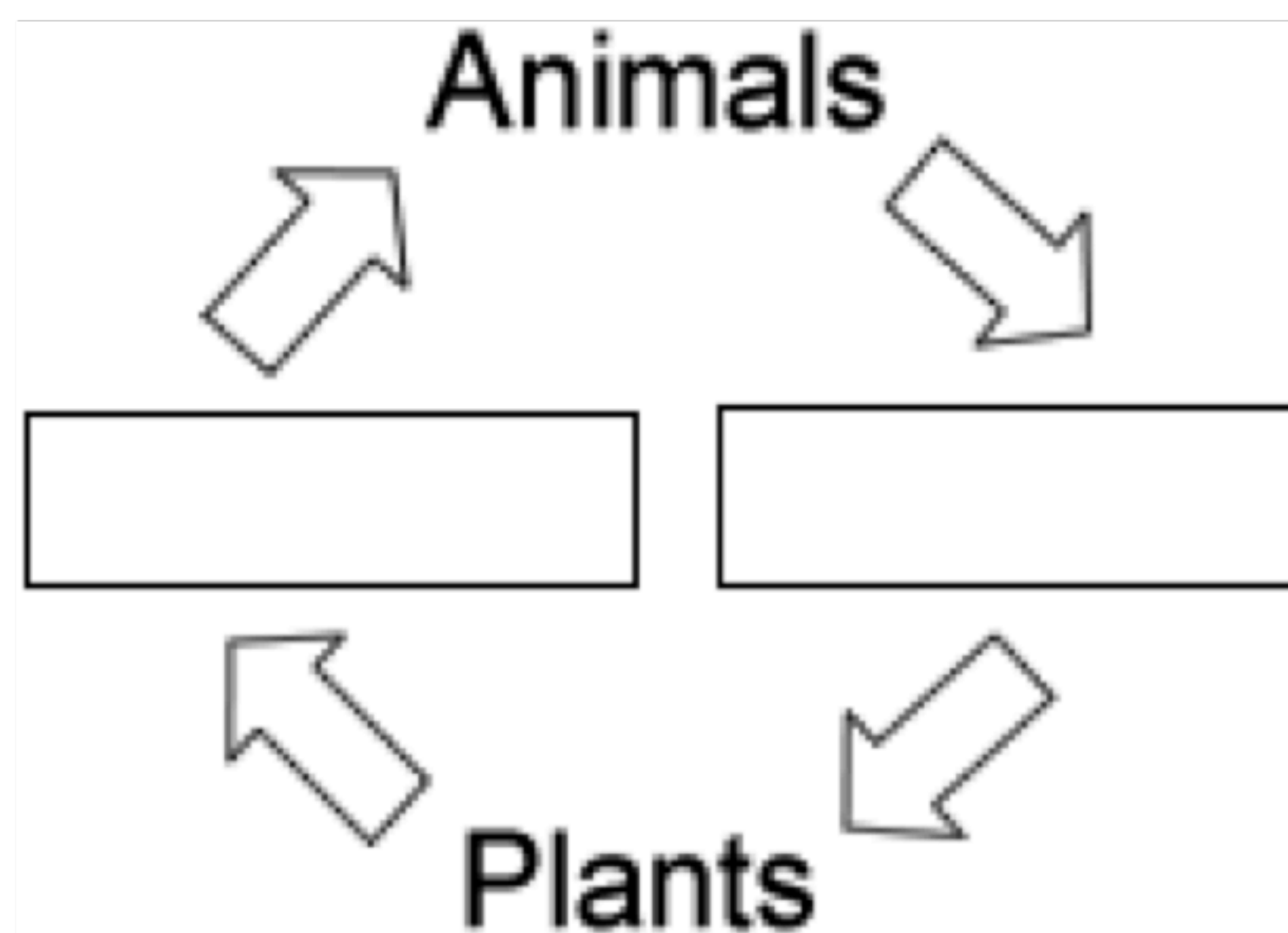
Editable DOCX File and Answer Key:

Available at www.ngsslifescience.com

Photosynthesis Worksheet

(Write definitions or explanations)

1. What organelle in a plant cell performs photosynthesis? _____
2. What pigment makes plants green? _____
3. What part inside the chloroplast actually makes sugar? _____
4. What process converts light energy into chemical energy? _____
5. Photosynthesis Equation: _____ + _____ + Light → _____ + _____
6. In photosynthesis, light energy is converted into chemical energy; what molecule stores this chemical energy? _____
7. What are the reactants of photosynthesis? _____
8. What are the products of photosynthesis? _____
9. Fill in the boxes to complete the cycle below of the reactants and products for photosynthesis.



10. Below is a model of a chloroplast. Draw arrows from the correct label to each structure.

Chloroplast Membrane

Thylakoid

Stroma

