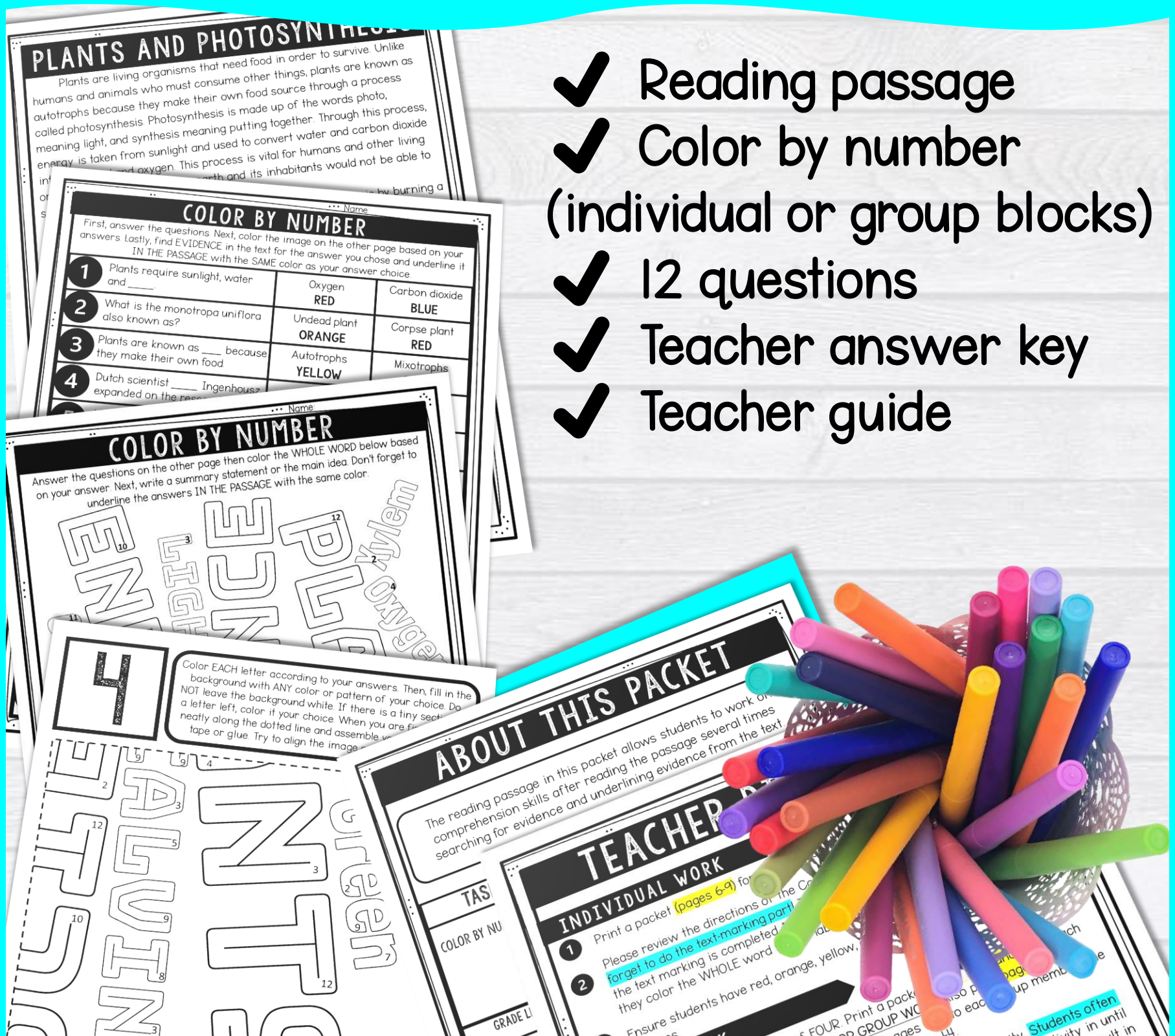


COLOR BY NUMBER

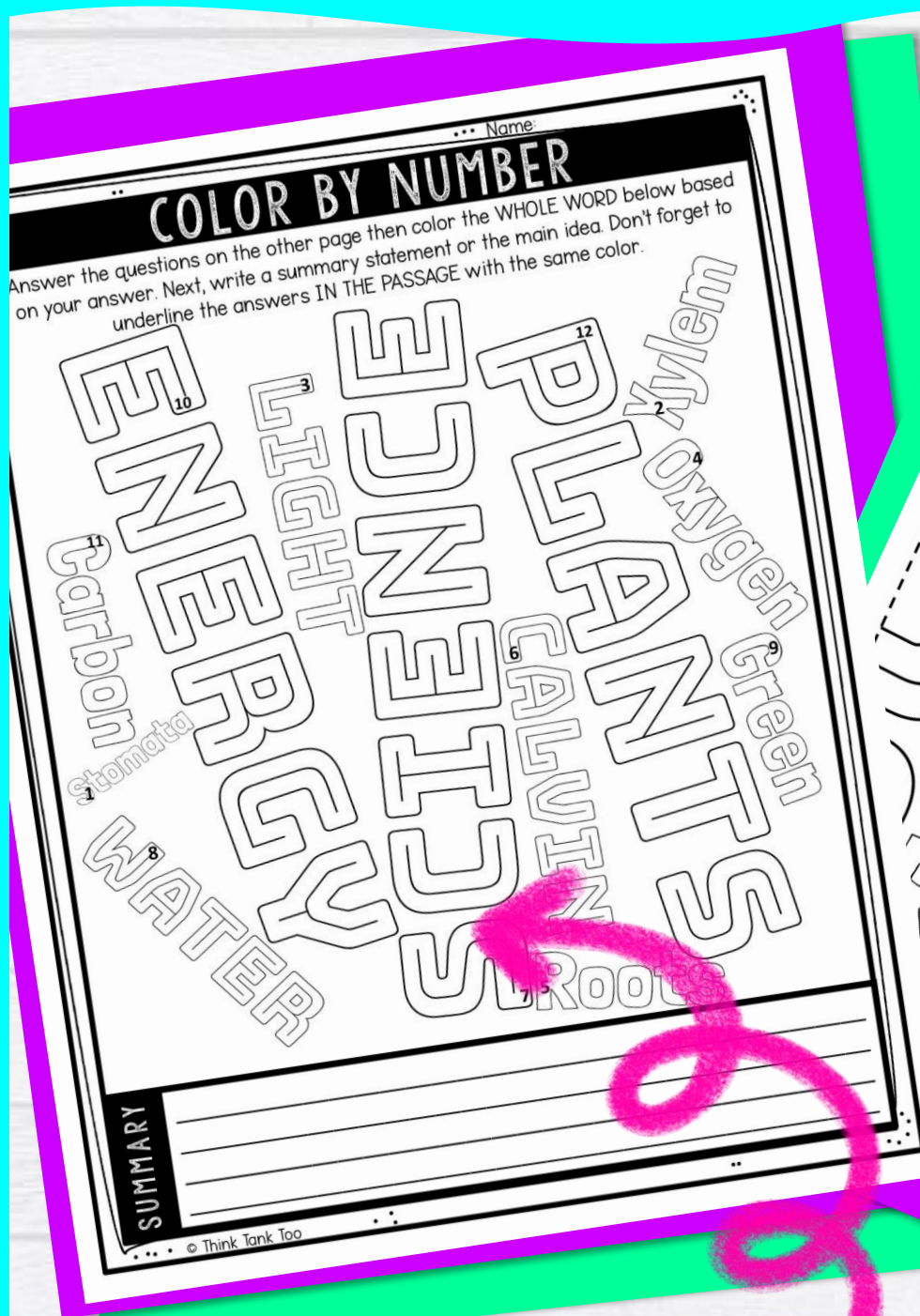


WHAT'S INCLUDED?

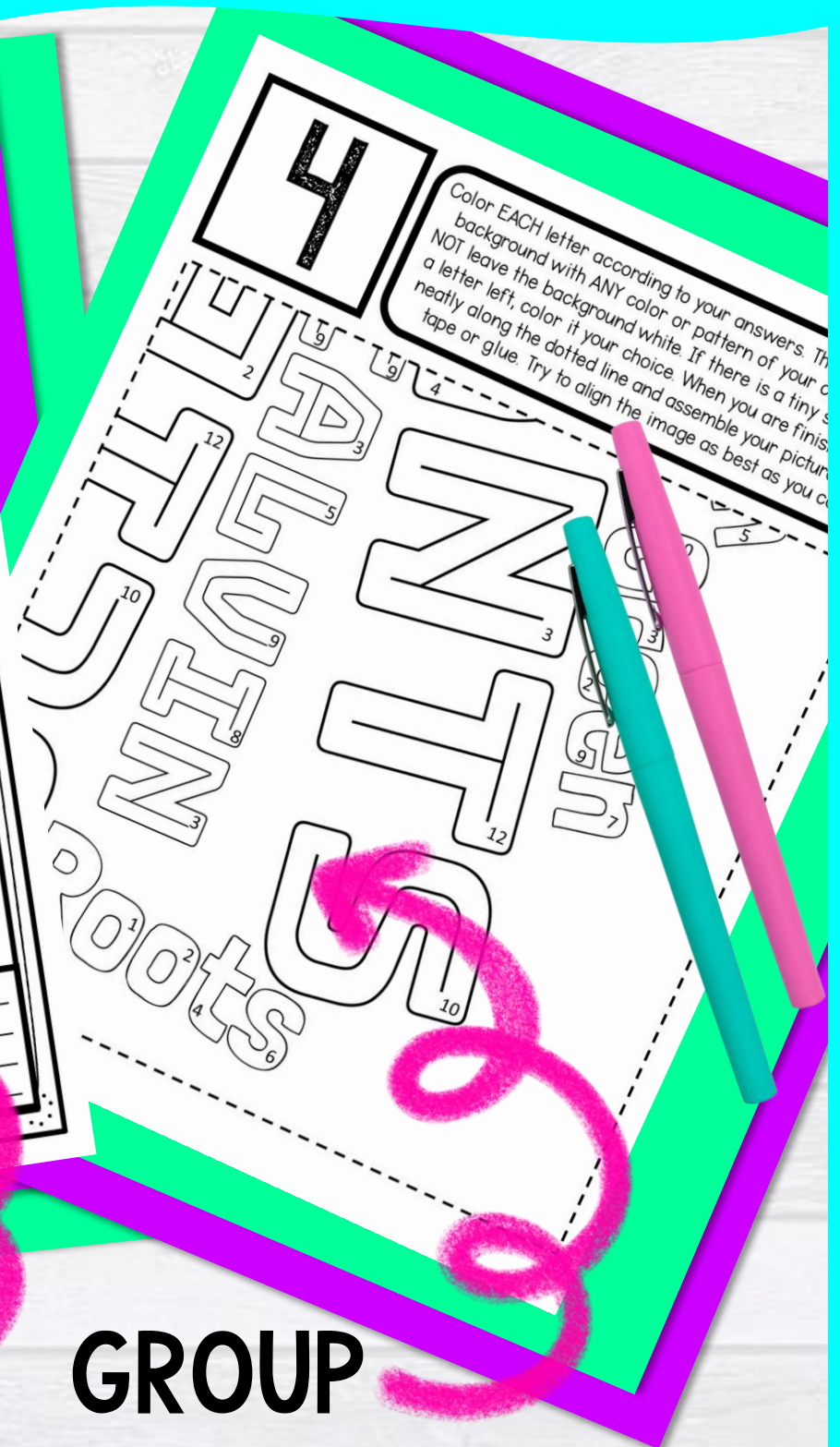
- ✓ Reading passage
- ✓ Color by number (individual or group blocks)
- ✓ 12 questions
- ✓ Teacher answer key
- ✓ Teacher guide



2 OPTIONS



INDIVIDUAL



GROUP

TEXT MARKING

Find evidence
in the text

... Name: _____

COLOR BY NUMBER

For the questions. Next, color the image on the other page based on your answers. Find EVIDENCE in the text for each question and underline it. IN THE PASSAGE with the SAME color as your answer choice.

Question	Answer Choice	Color
Plants require sunlight, water and _____.	Carbon dioxide	BLUE
What is the monstera unicolor also known as?	Oxygen	RED
Plants are known as _____ because they make their own food.	Undead plant	ORANGE
Dutch scientist _____ Ingenhousz expanded on the research of _____.	Autotrophs	YELLOW
	Joseph	GREEN
	Dependent	ORANGE



... Name: _____

PLANTS AND PHOTOSYNTHESIS

Plants are living organisms that need food in order to survive. Humans and animals who must consume other things, plants are known as autotrophs because they make their own food source through a process called photosynthesis. Photosynthesis is made up of the words photo, meaning light, and synthesis meaning putting together. Through this process, energy is taken from sunlight and used to convert water and carbon dioxide into plant food and oxygen. This process is vital for humans and other living organisms and without it, the earth and its inhabitants would not be able to survive.

In 1771, Joseph Priestley began the study of photosynthesis by burning a candle in a closed container. He then placed a mint sprig inside the container and observed that the mint produced a gas, which was later named oxygen. Dutch scientist Jan Ingenhousz expanded on the research of Priestley by exposing plants to light.

Plants and photosynthesis require three things: sunlight, water, and carbon dioxide. Sunlight provides energy and is absorbed through chlorophyll, a green compound or chemical. Chlorophyll is found inside chloroplasts which are small structures located in the cells of leaves and stomata that absorb carbon dioxide from the air. Finally, water is absorbed from the soil through the plant's roots.

Plants possess three pigments that give them color: chlorophyll, carotenoids, and anthocyanins. Chlorophyll traps blue and red light, producing a green color. Carotenoids absorb bluish-green light making them red, orange, or yellow. Anthocyanins absorb red and blue pigments commonly found in red flowers and cyanobacteria.

When chlorophyll absorbs energy from the sun, that energy is used to convert water and carbon dioxide into oxygen.

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