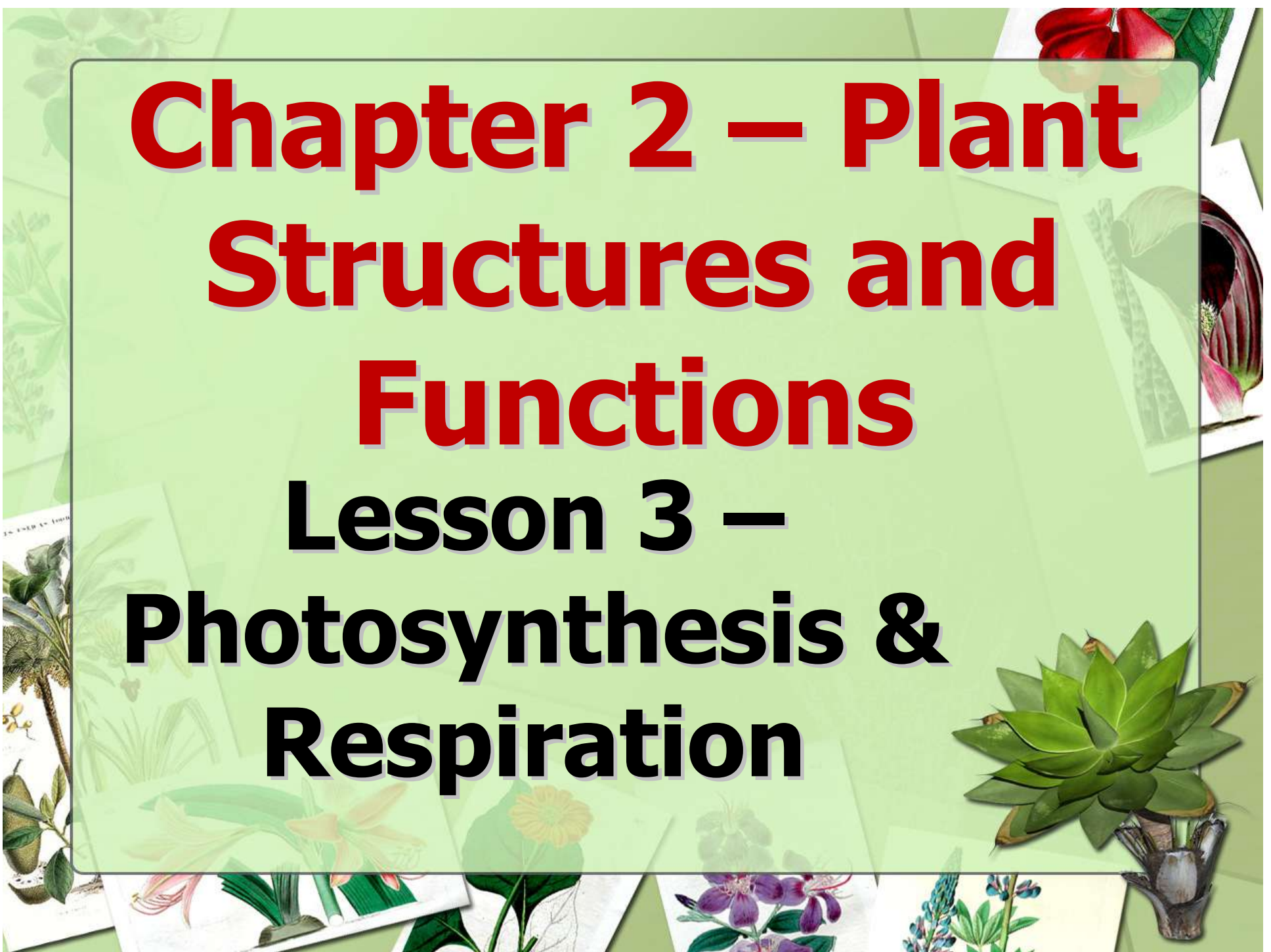


Chapter 2 – Plant Structures and Functions

Lesson 3 – Photosynthesis & Respiration



What do leaves do?

- A leaf makes food (sugar) for the plant.
- To make food, a leaf needs two things:

1. water



2. carbon dioxide



What do leaves do?

- A leaf gets water through **veins** (narrow tubes containing xylem).
- A leaf gets carbon dioxide (CO_2) through **stomata** (tiny holes in the bottom of the leaf).



Food Making

- Plants make food through a process called **photosynthesis**.
- The process takes place in **chloroplasts**, which are just below the **epidermis** (outer layer of the leaf).



Food Making

- **The Photosynthesis Equation:**
 - **Carbon dioxide + water + sunlight = sugar and oxygen**



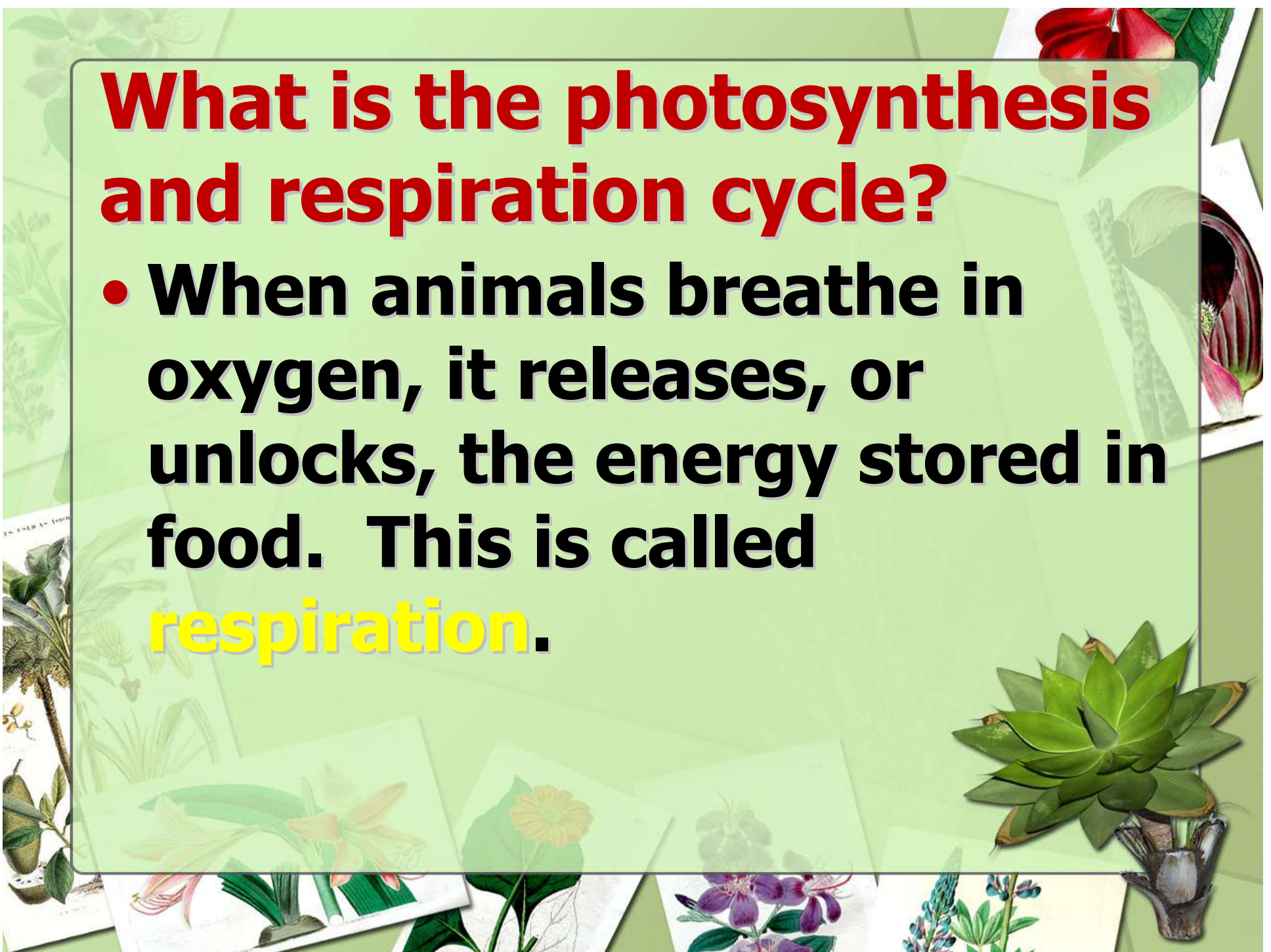
What is the photosynthesis and respiration cycle?

- 1. In photosynthesis, plants release oxygen.**
- 2. Animals take in oxygen and release carbon dioxide.**
- 3. Plants take in the carbon dioxide, and the cycle starts over.**



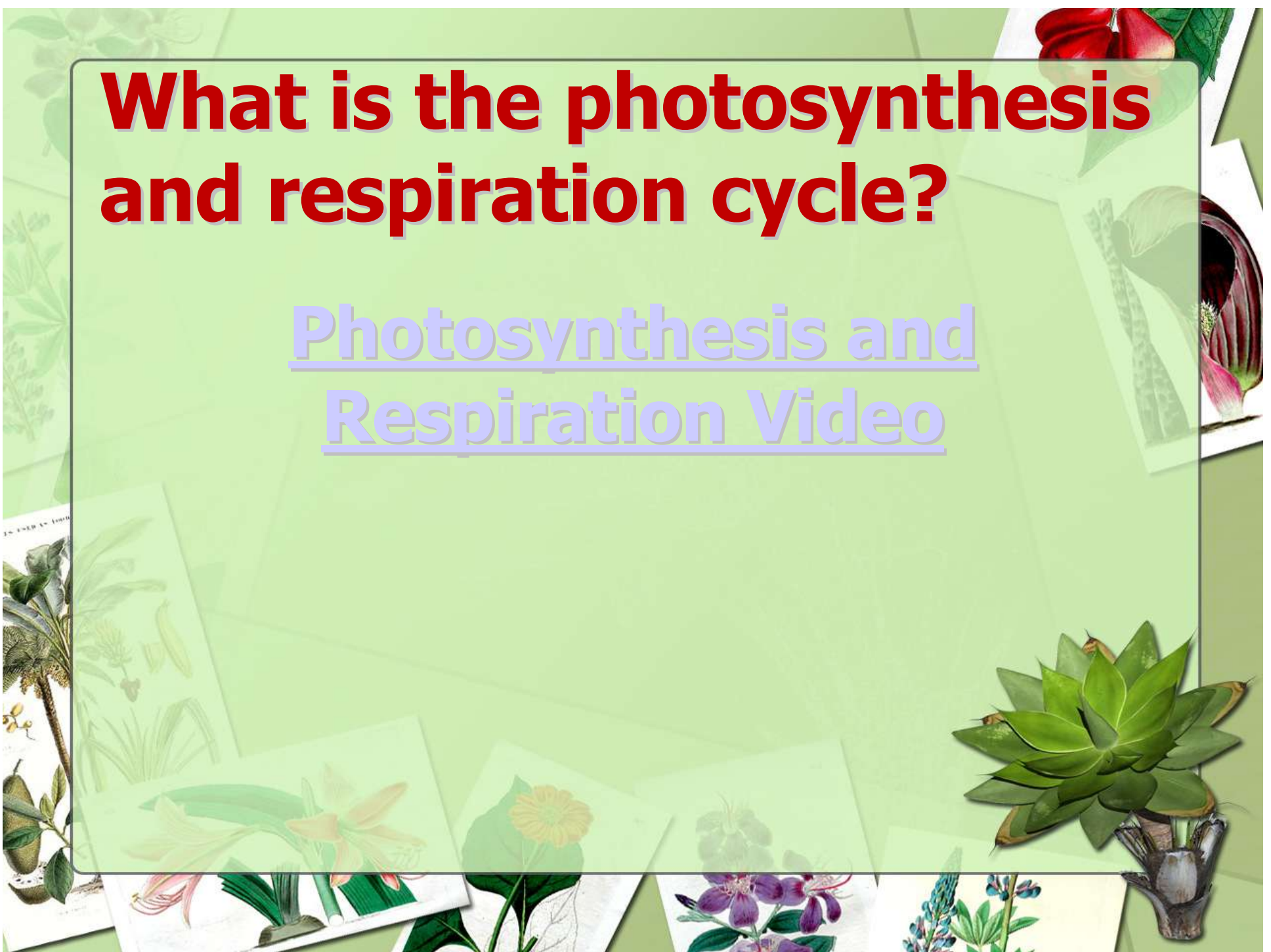
What is the photosynthesis and respiration cycle?

- When animals breathe in oxygen, it releases, or unlocks, the energy stored in food. This is called **respiration**.



What is the photosynthesis and respiration cycle?

Photosynthesis and Respiration Video



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