

WHY DO TREES DIE?

Consider a reverse chronological sequence.

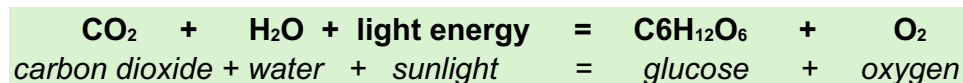
Trees die because:

- **Respiration terminates ...**
 - Respiration terminates because ...
- **Carbohydrate creation ceases + stored carbs are depleted ...**
 - Carbohydrate production ceases because ...
- **Photosynthesis discontinues ...**
 - Photosynthesis discontinues because ...
 - **Inputs to photosynthesis are interrupted/obstructed ...**
 - Inputs: sunlight/water/nutrients/temperature/CO₂/O₂.
 - **Inputs for photosynthesis are interrupted ...**
 - Environmental changes or human activities.

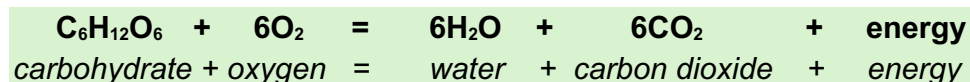
Remember:

- **Photosynthesis creates energy ... respiration utilises energy**
 - Photosynthesis and respiration are mutually opposite processes:

PHOTOSYNTHESIS



RESPIRATION



- **Photosynthesis requires CO₂ ... if absent, it cannot proceed**
 - ∴ no energy creation = no energy utilisation.
 - ∴ sooner or later, death.

Note: subscripts show how many atoms of each element are present in one molecule of a compound.