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| Subject | Science |
| Unit/Topic | Year 10 Bioenergetics |

| Key Vocabulary | Definition |
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| Transpiration | The flow of water through a plant from root to the stomata and out of the stomata by evaporation. |
| Translocation | The movement of dissolved sugar through a plant either from leaves to roots OR from roots to leaves. |
| Xylem | The tube-like cells through which water moves in a plant. They are often strengthened with a woody substance. |
| Phloem | The tube-like cells through which sugars are moved in a plant. They have companion cells with lots of mitochondria for active transport. |
| Potometer | A device for measuring the RATE of transpiration in a plant. |
| Stomata | Holes in the underside of a leaf through which water can evaporate and CO ₂ from the atmosphere can enter. |
| Guard Cells | Cells surrounding the stomata. They can open or close the stomata. |
| Photosynthesis | The process by which plants make glucose using carbon dioxide, water and sunlight. |
| Respiration | The process by which ENERGY is RELEASED from glucose. |
| Limiting factor | Factor that is slowing down the rate of photosynthesis when it is not present. |
| Aerobic respiration | Respiration where oxygen is used to release lots of energy. |
| Anaerobic respiration | Respiration where oxygen is NOT used and releases only small amount of energy. |
| Fermentation | Anaerobic respiration in yeast. |
| Oxygen debt | The amount of extra oxygen the body needs after exercise to react with the built up lactic acid and remove it from the cells. |

Metabolism

All of the chemical reactions in a cell or the body.

