

Solutions

Each answer shows the steps, then the **result**.

2.1

- Converts sunlight directly into electricity

2.2

- Building design that captures solar heat without machines

2.3

- It produces no power at night or when cloudy

3.1 B

- electricity

3.2

(a)

- Advantage: renewable, no CO₂, no fuel cost; disadvantage: intermittent or high up-front cost

(b)

- Store energy in batteries (or use a backup/grid) for use when the sun is not shining

3.3

- Active solar uses pumps/fans to move solar-heated water or air; passive solar uses building design (windows, materials) to capture heat with no machines