GRID & SILICON

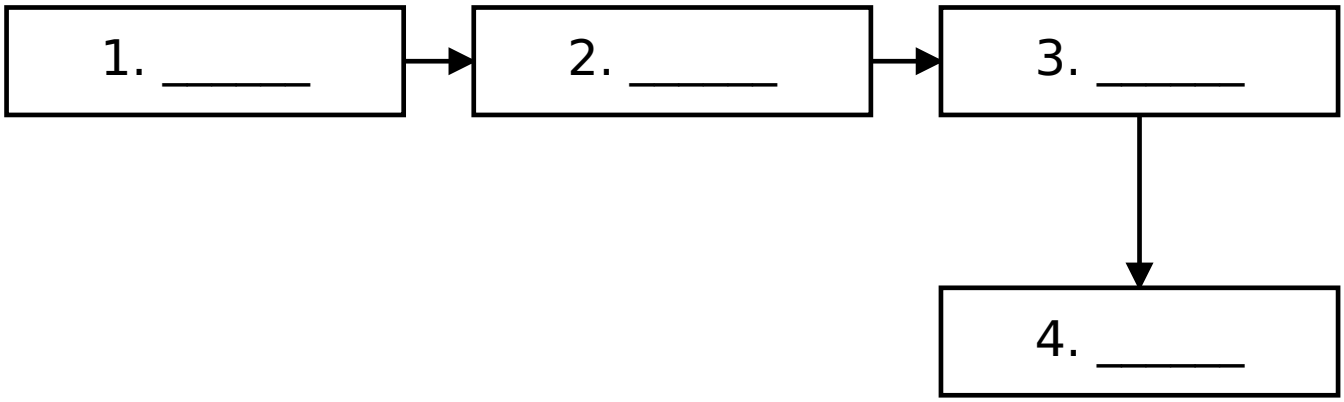
Student sheet

Battery Storage: Power Now, Energy for Later

Name _____ Date _____

Keep the explainer beside you. You may look back for every answer.

Look closer



Word bank: Charge in · Battery cells · Discharge out · Computers

1. Which arrow shows energy entering during charging?

2. Which arrow supplies electricity to the computers?

1. Circle the best answer.

1. A large battery is built from many small working units. What are those units?

A. Generators B. Transformers C. Cells

2. A diagram marks two surfaces where battery reactions occur. What are they?

A. Electrodes B. Cooling plates C. Wire connectors

3. A wire connection is broken. What must be restored for current to flow?

A. More room around the battery | B. A higher power rating alone | C. A complete circuit

4. A phone is plugged in and its stored charge rises. Which stage is occurring?

A. Discharging | B. Charging | C. Power generation from fuel

5. A charged battery runs a lamp after its charger is removed. Which stage is occurring?

A. Fuel delivery | B. Discharging | C. Charging

6. Computers need power during a brief supply gap. What can a charged battery provide?

A. Stored energy for a limited time

B. New energy without recharging

C. A permanent replacement for every supply

7. Which rating tells how much energy a battery stores?

A. MW | B. MWh | C. Hours alone

8. A fully charged ideal battery holds 4 MWh and supplies 2 MW. Ignoring losses, how long can it run?

A. 8 hours | B. Half an hour | C. 2 hours

9. The same 4 MWh battery supplies 1 MW instead of 2 MW. Ignoring losses, what happens?

A. It lasts twice as long | B. Its stored energy doubles | C. It lasts half as long

2. Fill in the blank.

Use each word once.

Word bank: cell · MWh · Charging

1. A _____ is a battery's basic working unit.

2. MW measures power, while _____ measures an energy amount.

3. _____ stores energy supplied by electricity.

3. Label the diagram.

Complete the numbered blanks on page 1 using its word bank.

4. Think about it

1. Your phone battery falls faster while you play a game. Explain using energy and power.

2. You need a lamp during a power cut. What two battery ratings would help you plan?