

Batteries

Activity Sheet

Charged up!

Learn about battery storage as you match the sentences in column A to the missing battery-related words in column B.



A	B
Solar PV systems turn the sun's energy into electricity, through _____ to power equipment and appliances. With a battery, excess energy can be stored.	DAILY SUPPLY CHARGE
Even if you have a battery installed as part of your solar PV system at home, you still need to draw electricity from _____ sometimes, for example, on cloudy or rainy days.	LARGE SCALE LITHIUM-ION BATTERIES
Having a battery to store excess energy generated by a solar PV system may help your household to save on its electricity costs, but you will still need to pay for the electricity you use from the grid and the _____.	ELECTRONS
The most common type of battery storage options for households use the element _____.	THE GRID
_____ are not used widely across WA yet but the technology is being explored, such as through Synergy's Alkimos Beach Energy Trial.	CYCLE LIFE
When describing the features of a battery, _____ is a term used to describe how many times a battery can be fully charged and discharged before it reaches the end of its life.	KILOWATT HOURS (kWh)
A battery stores energy as chemical energy. Chemical reactions inside the battery, when being used, release _____, transforming the chemical energy stored by the battery into electrical energy.	LITHIUM-ION
The more energy a battery can store, the more hours its charge will last and is measured in _____.	AN INVERTER

Batteries at home

Do you have solar lights in your garden? These usually have one mini solar panel, depending on the manufacturer. This solar panel typically stores sunlight via an internal battery throughout the day, and then the fairy lights or lanterns draw on this energy supply to light up when the sun goes down, or when you have set the lights to turn on.

If you can position the charging panel in a sunny spot inside your home, you could use the solar battery technology to add a solar-powered glow inside your home when the sun goes down, or when you have set the lights to turn on.



Charged up!

Answers

A	B
Solar PV systems turn the sun's energy into electricity, through _____ to power equipment and appliances. With a battery, excess energy can be stored.	DAILY SUPPLY CHARGE
Even if you have a battery installed as part of your solar PV system at home, you still need to draw electricity from _____ sometimes, for example, on cloudy or rainy days.	LARGE SCALE LITHIUM-ION BATTERIES
Having a battery to store excess energy generated by a solar PV system may help your household to save on its electricity costs, but you will still need to pay for the electricity you use from the grid and the _____.	ELECTRONS
The most common type of battery storage options for households use the element _____.	THE GRID
_____ are not used widely across WA yet but the technology is being explored, such as through Synergy's Alkimos Beach Energy Trial.	CYCLE LIFE
When describing the features of a battery, _____ is a term used to describe how many times a battery can be fully charged and discharged before it reaches the end of its life.	KILOWATT HOURS (kWh)
A battery stores energy as chemical energy. Chemical reactions inside the battery, when being used, release _____, transforming the chemical energy stored by the battery into electrical energy.	LITHIUM-ION
The more energy a battery can store, the more hours its charge will last and is measured in _____.	AN INVERTER