



# PHYSICS

## BOOKS - SURA PHYSICS (TAMIL ENGLISH)

### ELECTRICITY

#### Example

1. The device which converts chemical energy into electrical energy is

A. fan

B. solar cell

C. cell

D. television

**Answer:**



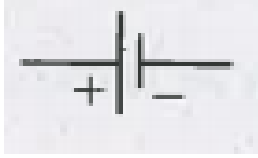
**Watch Video Solution**

2. Choose the symbol for battery.

A.



B.



C.



D.



**Answer:**



**Watch Video Solution**

**3.** In which among the following circuits does the bulb glow?

A.



B.



C.



D.



**Answer:**



**Watch Video Solution**

4. \_\_\_ is a good conductor

A. silver

B. wood

C. rubber

D. plastic

**Answer:**



**Watch Video Solution**

5. Fill in the blanks. \_\_\_ are the materials which allow electric current to pass through them.



**Watch Video Solution**

6. Fill in the blanks. Flow of electricity through a closed circuit is \_\_\_



**Watch Video Solution**

7. Fill in the blanks. \_\_\_ is the device used to close or open an electric circuit.



**Watch Video Solution**

8. Fill in the blanks. The long perpendicular line in the electrical symbol represents its \_\_\_ terminal.



**Watch Video Solution**

9. Fill in the blanks. The combination of two or more cell is called a \_\_\_.



[Watch Video Solution](#)

10. True or false . If false, give the correct statement. In a parallel circuit, the electricity has more the one path.



[Watch Video Solution](#)



**11.** True or false . If false, give the correct statement. To make a battery of two cells , the negative terminal of one cell is connected to the negative terminal of the other cell.



**Watch Video Solution**

**12.** True or false . If false, give the correct statement. The switch is used to close or open an electric circuit.



**Watch Video Solution**

**13.** True or false . If false, give the correct statement. Pure water is a good conductor of electricity.





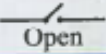

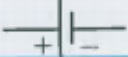
**Watch Video Solution**

**14.** True or false . If false, give the correct statement. Secondary cell can be used only once.



**Watch Video Solution**

15. Match the following.

S. No.	Symbol	Description
1.		open key
2.		cell
3.		bulb glows
4.		battery
5.		bulb does not glow



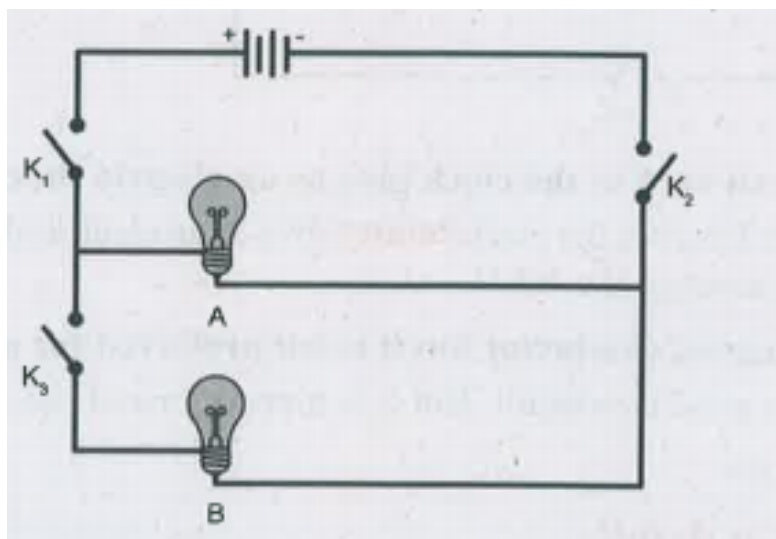
Watch Video Solution

16. Arrange in sequence. A CELL/ A DEVICE/  
ELECTRICAL ENERGY/ IS CALLED/ IN  
TO/CHEMICAL ENERGY/ THAT CONVERTS



Watch Video Solution

17. In the given circuit diagram, which of the given switch (s) should be closed, So that only the bulb A glows.



Watch Video Solution

**18.** Assertion(A):It is very easy for our body to receive electric shock.Reason(R): Human body is a good conductor of electricity.

A. Both A and R are correct and R is the correct explanation for A.

B. A is correct, but R is not the correct explanation for A.

C. A is wrong but R is correct.

D. Both A and R are correct and R is not the correct explanation for A

**Answer:**



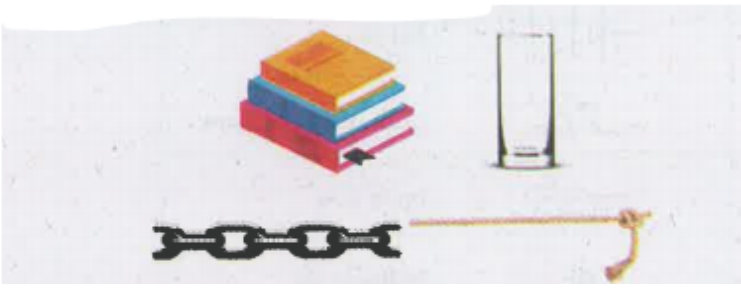
**Watch Video Solution**

**19.** Can you produce electricity from lemon?



**Watch Video Solution**

**20.** Identify the conductor from the following figures.



**Watch Video Solution**

**21. What type of circuit is there in a torch light ?**



**Watch Video Solution**

**22.** Circle the odd one out .Give reaso for your choice. (Switch, Bulb, Battery, Generator)



**Watch Video Solution**

**23.** Draw the circuit diagram for series connection



**Watch Video Solution**



**24.** Can the cell used in the clock give us an electric shock ? Justify your answer.



**Watch Video Solution**

**25.** Silver is a good conductor but it is not preferred for making electric wires. Why?



**Watch Video Solution**

**26.** What is the source of electricity? Explain the various power stations in India.



**Watch Video Solution**

**27.** Tabulate the different components of an electric circuit and their respective symbols.



**Watch Video Solution**

**28.** Write short notes on conductors and insulators.



**Watch Video Solution**

**29.** Rahul wants to make an electric circuit. He has a bulb, two wires, a safety pin and a piece of copper. He does not have any electric cell or battery. Suddenly he gets some idea. He uses a lemon instead of a battery and makes a circuit. Will the bulb glow?





Watch Video Solution

30. Search ten words in the given word grid and classify them as conductors and insulators.

A	G	H	R	N	A	E	I	U	R
R	H	A	E	A	R	T	H	M	A
E	R	S	S	A	L	G	U	M	Q
T	P	L	A	S	T	I	C	N	T
A	T	I	R	O	N	A	A	O	N
W	J	A	E	I	W	O	O	D	T
A	B	D	M	C	O	P	P	E	R
E	R	U	B	B	E	R	M	P	T
S	L	R	H	E	S	S	A	I	I
A	T	N	A	S	B	H	N	L	R



Watch Video Solution

**31.** Which one is the atomic power station located in the following places?

A. Mettur

B. Papanasam

C. Neyveli

D. Kalpakkam

**Answer:**



**Watch Video Solution**

32. In atomic power station \_\_\_ is used to rotate the turbine.

A. Water

B. steam

C. Air

D. diesel

**Answer:**



**Watch Video Solution**

33. Secondary cells are used in \_\_\_\_

A. Mobile phone

B. wall clocks

C. watches

D. toys

**Answer:**



**Watch Video Solution**

34. If two or more \_\_\_ are connected in a circuit, then it is called series circuit.

A. keys

B. cells

C. connecting wires

D. bulbs

**Answer:**



**Watch Video Solution**



35. \_\_\_\_\_ is an instrument used in circuits to find the quantity of current flowing through the circuit.

A. Volt meter

B. Ammeter

C. Cell

D. Key

**Answer:**



**Watch Video Solution**

**36.** Thomas Alva Edison invented more than \_\_\_ useful inventions which are used in homes.

A. 100

B. 10

C. 500

D. 1000

**Answer:**



**Watch Video Solution**

37. Hydel electricity is produced in \_\_\_ in Tirunelveli district.



[Watch Video Solution](#)

38. In thermal power station \_\_\_ is used as fuel.



[Watch Video Solution](#)

39. \_\_\_\_\_ Cell used in automobiles like cars and buses large and very heavy.



[Watch Video Solution](#)

40. The rate of flow of electric charges in a circuit is called \_\_\_\_.



[Watch Video Solution](#)

41. \_\_\_\_ is a kind of fish which is able to produce electric current.



[Watch Video Solution](#)

42. \_\_\_\_\_ are used to connect devices.



**Watch Video Solution**

43. \_\_\_\_\_ was an American inventor, who invented electric bulb.



**Watch Video Solution**

44. Find whether the following sentences are true or false. Wing mills are located ar Neyveli

in Kanyakumari district.



**Watch Video Solution**

**45.** Find whether the following sentences are true or false. In atomic power station nuclear energy is converted into electrical energy.



**Watch Video Solution**

**46.** Find whether the following sentences are true or false. Primary cells are usually

produced in large sizes.



**Watch Video Solution**

**47.** Find whether the following sentences are true or false. Primary cells are used in mobile phones.



**Watch Video Solution**

**48.** Find whether the following sentences are true or false. In a circuit if the key is in open

(off)condition, then electricity will not flow.



[Watch Video Solution](#)

**49.** Find whether the following sentences are true or false. Ebonite do not allow electric charges to pass through them.



[Watch Video Solution](#)

**50.** Analogy. Thermal power station:Neyveli.

Hydel powered station:\_\_\_\_\_





[Watch Video Solution](#)

51. Analogy. Kayatharu in Tirunelveli district:  
Wind mills. Koodankulam in Tirunelveli  
district:\_\_\_\_\_



[Watch Video Solution](#)

52. Primary cells :Toys Secondary cells:\_\_\_\_\_



[Watch Video Solution](#)

53. Bulbs are connected in series :Series circuit. Bulbs are connected in parallel: \_\_\_



[Watch Video Solution](#)

54. Match the following.

1. Thermal power stations	a)	Kinetic energy converted into electrical energy
2. Hydel power stations	b)	Nuclear energy is converted into mechanical energy and then electrical energy
3. Atomic power stations	c)	Wind energy is used to produce electricity.
4. Wind mills	d)	Heat energy is converted into electrical energy.



[Watch Video Solution](#)

55. Match the following.

i. Source of electricity	a)	Conductors
ii. To connect devices	b)	Bulb
iii. Consumes electricity	c)	Insulators
iv. Allow electric charges	d)	Connecting wires
v. Do not allow electric charges	e)	Cell



[Watch Video Solution](#)

56. What are the places in which atomic power stations located in Tamil Nadu?



[Watch Video Solution](#)

**57.** Where are the Hydel power stations located in Tamil Nadu?



**Watch Video Solution**

**58.** Where are Wind mills located in Tamil Nadu?



**Watch Video Solution**

**59.** How electric current is produced in Thermal power stations?



**Watch Video Solution**

**60.** What are the types of cells ? Give examples.



**Watch Video Solution**

**61.** What is meant by a battery or collection of cells.



[Watch Video Solution](#)

**62.** Differentiate Primary and Secondary cells.



[Watch Video Solution](#)

**63.** Define simple circuit.



[Watch Video Solution](#)

**64.** What is electric circuit?



**Watch Video Solution**

**65.** Give the types of circuits.



**Watch Video Solution**

**66.** Why parallel circuits are used in homes?



**Watch Video Solution**

**67.** Identify the conductors and insulators among the following? Copper, plastic, glass, iron, wood, Aluminum, China clay, impure water, Earth, ebonite



**Watch Video Solution**

**68.** Describe series circuit and parallel circuit with diagram.



**Watch Video Solution**



**69.** Describe open circuit and closed circuits with diagram.



**Watch Video Solution**

**70.** Describe series circuit and parallel circuit with diagram.



**Watch Video Solution**

71. Answer any one in brief. What are the safety measures to safeguard a person from electric shock?



Watch Video Solution

## Exercise

1. The device which converts chemical energy into electrical energy is \_\_\_\_.

A. fan

B. solar cell

C. cell

D. television

**Answer:**

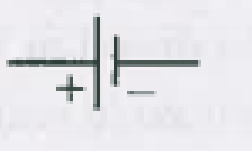


**Watch Video Solution**

2. Choose the symbol for battery.



B.



C.



D.



**Answer:**



[Watch Video Solution](#)

3. Which one is the atomic power station located in the following places?

A. Mettur

B. Papanasam

C. Neyveli

D. Kalpakkam

**Answer:**



**Watch Video Solution**

4. In thermal power station \_\_\_ is used as fuel.



**Watch Video Solution**

5. \_\_\_\_ was an American inventor, who invented electric bulb.



[Watch Video Solution](#)

6. \_\_\_\_ is the device used to close or open an electric circuit.



[Watch Video Solution](#)

7. Find whether the following sentence are true or false. If false correct the statement.

Pure water is a good conductor of electricity.



[Watch Video Solution](#)

8. Find whether the following sentence are true or false. If false correct the statement.

Secondary cell can be used only once.



[Watch Video Solution](#)

**9.** Find whether the following sentence are true or false.If false correct the statement.

Primary cells are used in mobile phones.



**Watch Video Solution**

**10.** Draw the circuit diagram for series connection



**Watch Video Solution**



**11.** Circle the odd one out .Give reaso for your choice. (Switch, Bulb, Battery, Generator)





**Watch Video Solution**

**12.** Can you produce electricity from lemon?



**Watch Video Solution**

### 13. Matching.

i.		a)	cell
ii.	 Open	b)	insulators
iii.	Source of electricity	c)	open key
iv.	Do not allow electric charges	d)	bulb (does not glow)



[Watch Video Solution](#)

14. Analogy. Primary cells: \_\_\_\_\_ Secondary

cells: \_\_\_\_\_



[Watch Video Solution](#)

**15.** Analogy. Thermal power station: Nayveli

Hydel power station: \_\_\_\_\_



**Watch Video Solution**

**16.** What is the source of electricity? Explain the various power stations in India.



**Watch Video Solution**

**17.** Why parallel circuits are used in homes?



[Watch Video Solution](#)

**18.** Answer any one in brief. What are the safety measures to safeguard a person from electric shock?



[Watch Video Solution](#)

**19.** Write short notes on conductors and insulators.



[Watch Video Solution](#)

