

Name:
Grade: 7
Physics worksheet

Electrical appliance



Exercise 1: Answer by true or false. Correct the false ones.

- 1) The Voltage across an open switch is zero.
- 2) There is only one type of connection which is parallel connection.
- 3) If two lamps are connected in series, then they have same voltage.
- 4) Law of uniqueness of voltage is applied in series connection.
- 5) The voltage across a connection wire is equal to the voltage of the generator.

Exercise 2: A circuit is composed of a battery, a closed switch, two lamps and a connection wire. these two lamps are connected in series. the voltage across lamp (1) is $U_1 = 7V$ and the voltage across lamp (2) is $U_2 = 2V$.

- 1) Draw the circuit.
- 2) Is this circuit a closed circuit or an opened circuit? Justify
- 3) The voltage across the switch is 0V. Justify
- 4) Calculate the voltage across the battery. (Don't forget to name the law)

Exercise 3: A circuit is composed of a battery, two lamps and a connection wire. These two lamps are connected in series. The voltage across lamp (2) is $U_2 = 9V$.

- 1) Draw the circuit.
- 2) Calculate the voltage U_G across the battery and U_1 across lamp (1)