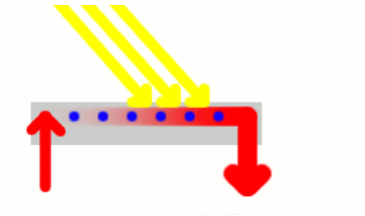
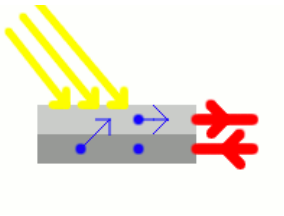
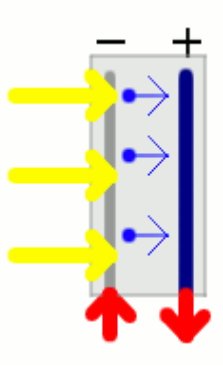
Worksheet number 4

TASK 1: match the picture with the right effect / photovoltaic, photoconductive, photoemissive /and explain why.

Picture 1. Picture 2. Picture 3.







TASK 2: Explain what is thermoelectric effect and correct the senteces if there are any mistakes.

a/The **thermoelectric effect** is the direct conversion of temperature differences to electric voltage and vice versa.

b/A **thermoelectric device** creates voltage when there is a different temperature on each side.

c/ When a voltage is applied to **thermoelectric material**, it creates a temperature difference.

d/ At the atomic scale, an applied **temperature gradient** causes charge carriers in the material to diffuse from the hot side to the cold side.

TASK 3: Put the missing word from the text into the right place.

This thermoelectric effect can be used to generate…… measure temperature or change…… of the objects. Because the direction of heating and cooling is determined by the…….. of the applied voltage, thermoelectric devices can be used as temperature …… .

controllers **electricity** **temperature** **polarity**