

# THERMISTORS

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



World Association of Technology Teachers

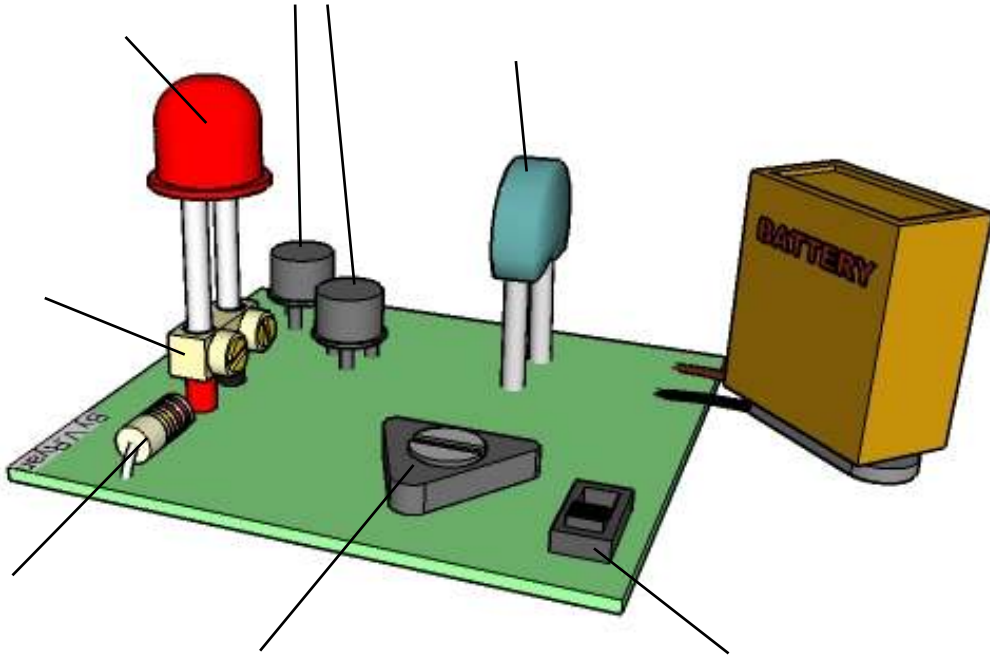
This exercise can be printed and used by teachers and students. It is recommended that you view the website ([www.technologystudent.com](http://www.technologystudent.com)) before attempting the design sheet .

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# SENSORS AND DARLINGTON PAIRS

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The circuit shown below is a temperature sensor. Add labels to all the components



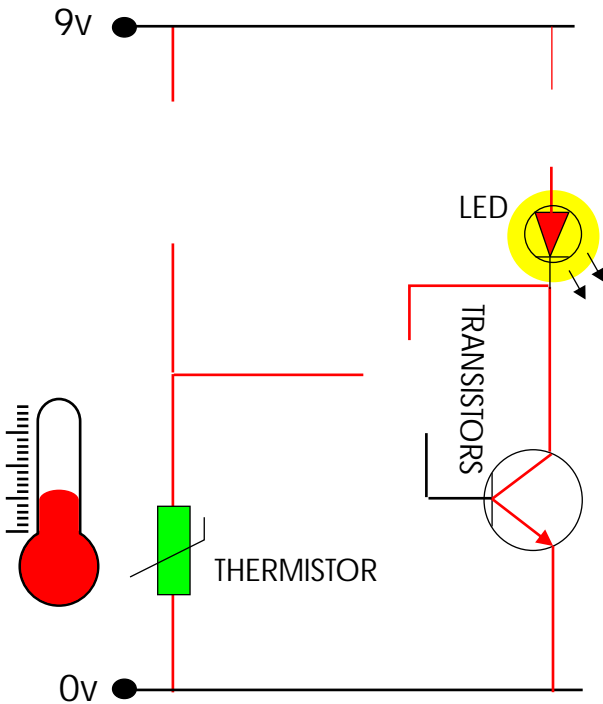
The circuit has two transistors. Why is this necessary?

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The circuit diagram shown below is basically the same as the 3D drawing of the sensor circuit at the top of the page. Add the missing components and explain how the circuit works.




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How would the function of this temperature sensor change if the thermistor and preset resistor were to change position?

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Draw another circuit diagram that includes a thermistor and explain its function and how it works.