

Hands-on experiments for primary schools using temperature sensors and data-logging

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ABSTRACT

Experiment 1 - In this experiment two jars are used with the same volume water. In one of the jars the temperature of the water is below environment temperature and in the other the water's temperature is higher. Using temperature sensors the establishment of thermal equilibrium is studied (Figure 1).

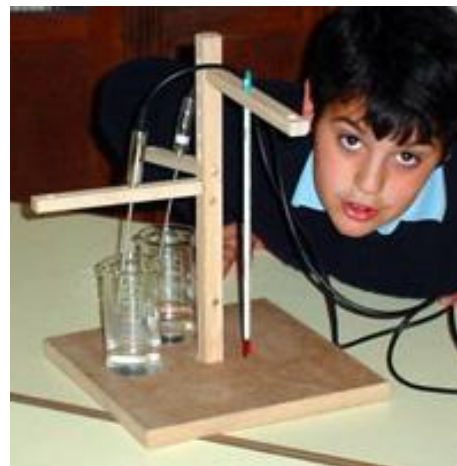
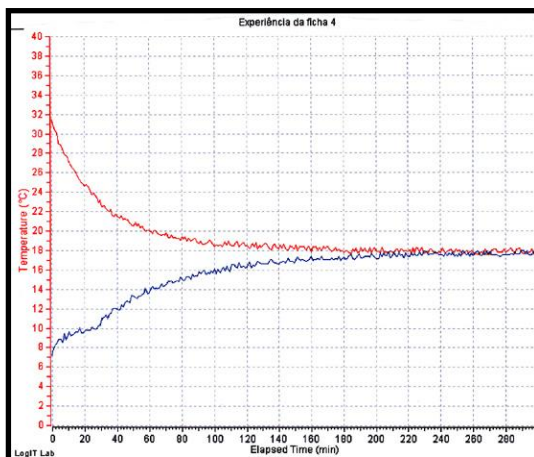


Figure 1. Experiment 1

Experiment 2 – In this experiment three flasks are used with the same volume of cold water. Two of them are covered with different materials that are used as thermal insulators. Thermal equilibrium is studied using temperature sensors (Figure 2).

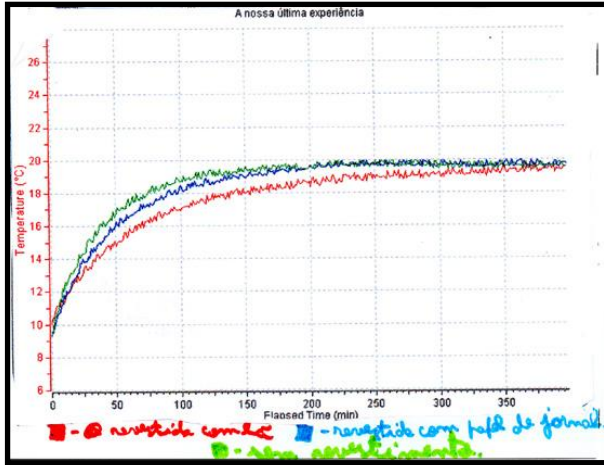


Figure 2 – Experiment 2

