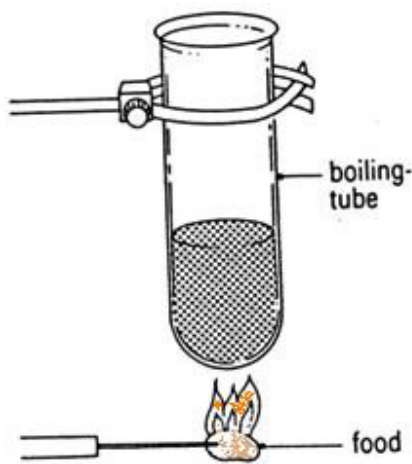


# Energy in food - inquiry activity

**Hypothesis:** The chemical energy from food can be transferred to other types of energy for use.



| Equipment List                                                                                                                                                                                                                    | Method                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Test tube</li> <li>• Retort stand and clamp</li> <li>• Dissecting pin</li> <li>• Variety of different dry foods (crisps, bread etc)</li> <li>• Matches</li> <li>• Thermometer</li> </ul> | <ol style="list-style-type: none"> <li><b>1.</b> Set up the equipment as shown in the diagram.</li> <li><b>2.</b> Ignite your food source and allow it to burn out.</li> <li><b>3.</b> Take the temperature of the water immediately after the food has burned out</li> </ol> |

## Analysis

- ① Design a table to show the results from the above experiment.
- ② Which type of food had the most energy? Why do you think it had the most energy?
- ③ Explain how the experiment was used to measure energy in food.
- ④ Some foods can be difficult to ignite and therefore only produce a small flame. What affect will this have on your results?
- ⑤ Was this investigation a fair test if the food samples used were of different sizes? What can you do to correct this?