water

burning

food sample

thermometer-

boiling tube -

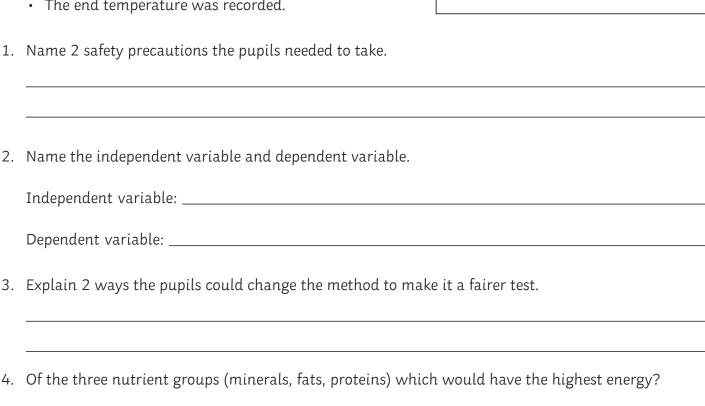
mounted needle

## Exam-Style Questions 2

Pupils were investigating the energy content of different foods.

They used the following method and equipment:

- 10cm³ of cold tap water was poured into a boiling tube and the temperature recorded.
- · A small piece of food was placed onto a mounted needle and set alight using a Bunsen burner.
- The burning food was placed under the boiling tube until it stopped burning.
- The end temperature was recorded.







## Exam-Style Questions 2 Answers

1. Name 2 safety precautions the pupils needed to take.

Wear goggles

Ensure burning food is over a safety mat

(Other answers may be accepted at the teacher's discretion)

2. Name the independent variable and dependent variable.

Independent variable: Type of food

Dependent variable: Change in temperature

3. Explain 2 ways the pupils could change the method to make it a fairer test.

Use the same amount of food

Change the water every time

4. Of the three nutrient groups, minerals, fats, proteins, which would have the highest energy?

**Fats** 



