

Energy, Fuels and Costs (KS3)

Section A – Recall (1–2 marks each)

Q1 (1 mark)

What unit is energy measured in?

Q2 (1 mark)

What unit is power measured in?

Q3 (1 mark)

What does kW stand for?

Q4 (1 mark)

What is a fuel?

Q5 (2 marks)

State TWO examples of energy resources.

Q6 (2 marks)

State TWO units used to measure energy.

Section B – Understanding (2–3 marks each)

Q7 (3 marks)

Explain the difference between energy and power.

Q8 (2 marks)

Explain why different foods have different energy values.

Q9 (2 marks)

Explain what a fuel bill shows.

Section C – Application (3-4 marks each)

Q10 (4 marks)

A student at *Learntit* compares two appliances: a 1000 W kettle and a 2000 W microwave. Explain which uses more power and what this means.

Q11 (3 marks)

Explain how energy use in homes affects fuel costs.

Q12 (4 marks)

A heater has a power rating of 2 kW and is used for 5 hours. Calculate the amount of energy transferred per hour. Include the formula and correct units.

Q13 (4 marks)

Electricity costs 30 pence per kWh. A washing machine uses 4 kWh of energy. Calculate the total cost of using the washing machine. Include the formula and give your answer in pounds.

Q14 (3 marks)

A food label shows:

- Chocolate bar = 950000 kJ
- Banana = 420 kJ

Calculate how much more energy the chocolate bar contains than the banana. Give your answer in joules.

Section D – Extended Response (6 marks each)

Q15 (6 marks)

Explain different energy resources and how they are used in homes.

Total: ____ / 39
Percentage: ____%