

Physics - Key Stage 3 - Energy

Lesson 12: Energy in food

Mrs Evans



Independent practice: answer the questions

1. Which energy store is found in food?
2. What units of energy are used for food (2 answers)
3. What is 2500 kilocalories in calories?
4. Which label do you need to look at to compare energy values of different foods?



Independent practice: complete the method

1. Clamp...
2. Measure...
3. Pour...
4. Record...
5. Measure...
6. Secure...
7. Spike...
8. Set...
9. Watch...
10. Record...
11. Repeat...



Independent practice: identify the different variables

Investigation: which food contains the most energy?

Independent variable - the one you change

Dependent variable - the one you observe

Control variable - the one you keep the same



Analysing our results: calculating a mean

Food type	Temperature of water (°C)		
	Start	Final	Change
shortbread	20	90	
gnocchi	20	50	
brown bread	20	60	

To find the change in temperature: final - start



Independent practice: write a conclusion

The food that transferred the most energy is...

I know this because...



Support

- use this scaffold to help structure your conclusion

The food that transferred the most energy is _____?_____.

I know this because the water had the _____?_____ temperature rise after the food had fully burnt, which means the food transferred the _____?_____ energy to the water.

This food had temperature rise of ____?____, whereas the _____?_____ had a temperature rise of ____?____ and the _____?_____ had a temperature rise of ____?_____.

