Homework/Extension
Step 4: Imperial Units

Teaching Note:

The conversions used in this resource are:

- **1 inch = 2.54cm**
- **1 pint = 568ml**
- **1kg = 2.2lbs**

National Curriculum Objectives:

Mathematics Year 5: (5M6) Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Match three pairs of conversions from metric to imperial and vice versa using multiplying and dividing by 10. Conversion rates given.
Expected Match three pairs of conversions from metric to imperial and vice versa using multiplying and dividing by 2, 4 or 5. Conversion rates given.
Greater Depth Match three pairs of conversions from metric to imperial and vice versa using multiplying or dividing by any number up to 12. No conversion rates given.

Questions 2, 5 and 8 (Varied Fluency)
Developing Compare metric and imperial amounts using multiplying and dividing by 10. Conversion rates given.
Expected Compare metric and imperial amounts using multiplying and dividing by 2, 4 or 5. Conversion rates given.
Greater Depth Compare metric and imperial amounts using multiplying or dividing by any number up to 12. No conversion rates given.

Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Prove whether or not a statement is correct using knowledge of multiplying by 10. Conversion rates given.
Expected Prove whether or not a statement is correct using knowledge of odd and even numbers. Conversion rates given.
Greater Depth Prove whether or not a statement is correct using contextual knowledge of rounding conversion rates. No conversion rates given.

More Year 5 Converting Units resources.

Did you like this resource? Don't forget to review it on our website.

Imperial Units

1. Match the conversions using the following information:

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

10kg	5,680ml	10 inches
10 pints	25.4cm	22lbs

D

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2. Compare the amounts below using <, > or =. Use the conversion rates to help you.

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

10 pints	☐	1,000 ml	10kg	☐	22lbs
20lbs	☐	10kg	10 inches	☐	254cm
25cm	☐	10 inches	5,860ml	☐	10 pints

D

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3. Prove whether or not this statement is correct. Give one example to support your answer.

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

If 1 pint equals 568 millilitres, 5,680 millilitres equals 100 pints.

D

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Imperial Units

4. Match the conversions using the following information:

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

5 inches	4.4lbs	4 pints
2,272ml	12.7cm	2kg

E

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5. Compare the amounts below using <, > or =. Use the conversion rates to help you.

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

15 pints	☐	1,500 ml	4 inches	☐	10cm
25lbs	☐	20kg	1,136ml	☐	4 pints
30cm	☐	8 inches	6kg	☐	13.2lbs

E

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6. Prove whether or not this statement is correct. Give more than one example to support your answer.

1 inch = 2.54cm 1 pint = 568ml 1kg = 2.2lbs

Because 1 kilogram equals 2.2 pounds, any number of kilograms will never convert to an odd whole number of pounds.

E

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Imperial Units

7. Match the conversions using the following information:

22.86cm	11 pints	7kg
6,248ml	15.4kg	9 inches

GD

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8. Compare the amounts below using <, > or =. Use the conversion rates to help you.

60cm	☐	6 inches	3 pints	☐	1,900ml
3,976ml	☐	7 pints	8kg	☐	17.2lbs
27.4lbs	☐	12kg	5 inches	☐	12.7cm

GD

VF
HW/Ext

9. Prove whether or not this statement is correct. Give more than one real-life example to support your answer.

When converting from metric to imperial measures, you should always round the decimal in the conversion to the nearest whole number before you convert (for example, 1 inch equals 3cm).

GD

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Homework/Extension
Imperial Units

Developing

1. 10kg = 22lbs; 5,680ml = 10 pints; 10 inches = 25.4cm
2. 10 pints > 1,000ml; 20lbs < 10kg; 25cm < 10 inches; 10kg = 22lbs; 10 inches < 254cm; 5,860ml > 10 pints
3. The statement is incorrect because 10 multiplied by 568ml is 5,860ml, so it is 10 pints. 568ml multiplied by 100 is 58,600ml.

Expected

4. 5 inches = 12.7cm; 4.4lbs = 2kg; 4 pints = 2,272 cm
5. 15 pints > 1,500ml; 25lbs < 20kg; 30cm > 8 inches; 4 inches > 10cm; 1,136ml < 4 pints; 6kg = 13.2lbs
6. The statement is incorrect because multiples of 5kg ending in a 5 will always give odd whole numbers when converted to pounds.

Greater Depth

7. 22.86cm = 9 inches; 11 pints = 6,248ml; 7kg = 15.4kg
8. 60cm > 6 inches; 3,976ml = 7 pints; 27.4lbs > 12kg; 3 pints < 1,900ml; 8kg > 17.6lbs; 5 inches = 12.7cm
9. The statement is incorrect because different real-life examples will require rounding in different directions, for example: the width of a fridge needing to fit into a space would need rounding down to ensure it fits in the space, but providing juice for a party might require rounding up to ensure everyone has enough to drink.