

Year Group: KS4 (Year A)

Term: Summer 2

Maths: Metric, Imperial, and Measure

Key Concepts	SMSC & British Values	Lesson Objectives	Key Vocabulary
<p>Understanding and using standard units of measure (metric and imperial) Converting between metric units (length, mass, capacity, temperature) Understanding and using approximate equivalences between metric and imperial units Using and interpreting scales Applying compound measures Solving real-life and practical problems Using decimal notation and appropriate scaling</p> <p>Prior Knowledge Recognising and naming common metric and imperial units (cm, m, g, kg, l, ml, inches, feet, pounds, pints) Counting, reading, and writing numbers up to 1000 Understanding of basic arithmetic operations (addition, subtraction, multiplication, division) Awareness of place value and decimal notation Experience with simple measures in everyday contexts</p> <p>Cross-Curricular Links Science: Measuring length, mass, temperature, and volume in experiments; interpreting data from graphs Geography: Reading maps, using scale, interpreting distances PE: Measuring distances, times, and speeds in athletics PSHE: Understanding rates of pay, budgeting, and unit pricing in real-life contexts</p>	<p>Promoting accuracy, honesty, and responsibility in measurement and calculation Appreciating the historical context of imperial and metric systems in the UK Encouraging respect for different systems and international standards Supporting collaborative problem-solving and discussion Developing resilience and perseverance in tackling multi-step problems</p> <p>Assessment Ongoing formative assessment through questioning End-of-topic quiz assessing conversion, application of compound measures, and problem-solving Functional Skills-style questions embedded throughout lessons Practical tasks requiring measurement and calculation Teacher observation and feedback during independent and group work</p> <p>Adaptations Use of concrete resources (measuring tapes, scales, jugs, thermometers) for hands-on learners Visual supports (conversion charts, dual-scale rulers, pictorial representations) Extension tasks (e.g. multi-step compound measure problems) Additional practice and repetition Use of real-life contexts relevant to students' interests</p>	<ol style="list-style-type: none"> 1. Recognise and name standard metric units for length, mass, and capacity 2. Use decimal notation and appropriate scaling with metric units 3. Read and interpret scales on measuring equipment 4. Recognise and use metric units in practical contexts 5. Convert between metric units of length 6. Convert between metric units of mass and capacity 7. Solve problems involving metric units and scaling 8. Recognise common imperial units for length, mass, and capacity 9. Understand and use approximate equivalences between metric and imperial units 10. Convert between metric and imperial units in simple contexts 11. Understand and use the concept of speed as a compound measure 12. Calculate speed in metric and imperial units 13. Apply speed calculations to real-life contexts 14. Apply compound measures to multi-step problems 15. Review and consolidate metric and imperial conversions 16. Apply knowledge to solve functional and real-life problems 17. Complete assessment on metric, imperial, and compound measures 18. Reflect on progress and set targets for future learning <p>Links to Future Learning Perimeter, area, and volume calculations using mixed units Advanced conversions involving compound measures (density, pressure) Application of measures in GCSE and Functional Skills Level 2 contexts Interpreting and constructing graphs involving units and rates</p>	<p>Metric Imperial Unit Measure Length Mass Weight Capacity Volume Temperature Scale Conversion Equivalence Centimetre (cm) Metre (m) Kilometre (km) Gram (g) Kilogram (kg) Litre (l) Millilitre (ml) Inches (in) Feet (ft) Pound (lb) Ounce (oz)</p>

Possible Enrichment:

Cooking or baking sessions requiring conversion of recipes between metric and imperial units; Sports day measuring distances, times, and calculating speeds.