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| **Title of unit:** | Measures |
| **Overview of unit:** | Reading ScalesCompound measuresSpeed, distance and timeReal life graphsSimilarity |
| **Cross-curricular/ extra-curricular links:** | Art/Design – use standard measures to find length; perspective and scale; converting between unitsGeography – use standard measures to find length, mass, time, force, temperature area or capacity, especially distance and area PE – time, height, distance, reading from scales, timekeeping; calculation of speed, acceleration, deceleration and graphing of these over time during an action/eventScience – use standard measures to find length, mass, time, force, temperature, area or capacity |
| **Literacy/ numeracy links:** | Worded problems/exam questions Keywords displayed on all PPts - metric, imperial, length, mass, volume, area, capacity, speed, distance, time, mass, density, similarWritten plenaries |

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| **Grade:** | **Learning objective:** | **Resources:** |
| **1** | Read scalesInterpret real-life tables | [Reading and interpreting scales](https://www.piximaths.co.uk/reading-and-interpreting-scales)[Reading/interpreting tables](https://www.piximaths.co.uk/time-calculations) |
| **2** | Convert one metric unit to another | [Metric units conversions](https://www.piximaths.co.uk/metric-unit-conversions) |
| **3** | Solve simple speed problems | [Speed, distance and time](https://www.piximaths.co.uk/compound-measures) |
| **4** | [Understand and use compound measures such as speed and density.](file:///O%3A/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape%2C%20space%20and%20measure/Measures/Compound%20measures)[Draw and interpret distance-time graphs.](file:///O%3A/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape%2C%20space%20and%20measure/Measures/Real%20life%20graphs) | [Speed, distance and time; Mass, density and volume](https://www.piximaths.co.uk/compound-measures)[Real life graphs](https://www.piximaths.co.uk/real-life-graphs) |
| **5** | [Use ratio and scale factors to calculate missing lengths in similar shapes.](file:///O%3A/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape%2C%20space%20and%20measure/Measures/Similar%20shapes)[Calculate complex average speeds from distance-time graphs.](file:///O%3A/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape%2C%20space%20and%20measure/Measures/Real%20life%20graphs) | [Similar shapes inc. area and volume](https://www.piximaths.co.uk/similar-shapes)[Speed, distance and time; Mass, density and volume](https://www.piximaths.co.uk/compound-measures) |
| **6** | Find the area of a 2D shape given the area of a similar shape and a ratio.Find the volume of a 3D solid given the volume of a similar solid and a ratio. | [Similar shapes inc. area and volume](https://www.piximaths.co.uk/similar-shapes) |
| **7** | Interpret velocity-time graphs.Discuss and interpret graphs modelling real situations. | [Area under graphs and gradient, velocity-time graphs and acceleration/deceleration](https://www.piximaths.co.uk/area-under-graphs) |
| **8** | Calculate distance travelled by calculating the area under a velocity-time graph. | [Area under graphs and gradient, velocity-time graphs and acceleration/deceleration](https://www.piximaths.co.uk/area-under-graphs) |
| **9** |  |  |