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| **Title of unit:** | Measures |
| **Overview of unit:** | Reading Scales  Compound measures  Speed, distance and time  Real life graphs  Similarity |
| **Cross-curricular/ extra-curricular links:** | Art/Design – use standard measures to find length; perspective and scale; converting between units  Geography – 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/event  Science – 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, similar  Written plenaries |

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| **Grade:** | **Learning objective:** | **Resources:** |
| **1** | Read scales  Interpret 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:/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape,%20space%20and%20measure/Measures/Compound%20measures)  [Draw and interpret distance-time graphs.](file:///O:/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape,%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:/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape,%20space%20and%20measure/Measures/Similar%20shapes)  [Calculate complex average speeds from distance-time graphs.](file:///O:/_2015-2016/SUBJECTS/MATHS/Pixi%20MATHS/Shape,%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.](O:\\_2015-2016\\SUBJECTS\\MATHS\\Pixi MATHS\\Shape, space and measure\\Measures\\Similar shapes)  [Find the volume of a 3D solid given the volume of a similar solid and a ratio.](O:\\_2015-2016\\SUBJECTS\\MATHS\\Pixi MATHS\\Shape, space and measure\\Measures\\Similar shapes) | [Similar shapes inc. area and volume](https://www.piximaths.co.uk/similar-shapes) |
| **7** | [Interpret velocity-time graphs.](O:\\_2015-2016\\SUBJECTS\\MATHS\\Pixi MATHS\\Shape, space and measure\\Measures\\Real life graphs)  [Discuss and interpret graphs modelling real situations.](O:\\_2015-2016\\SUBJECTS\\MATHS\\Pixi MATHS\\Shape, space and measure\\Measures\\Real life graphs) | [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** |  |  |