

## Rounding Power Point Presentation

(These notes accompany a PowerPoint presentation available on the site).

### Core Curriculum References

N1/E2.6 Approximate by rounding to the nearest 10

N1/E3.7 Approximate by rounding numbers less than 10000 to the nearest 10 or 20

N1/L1.8 Approximate by rounding

N2/L1.7 Approximate decimals by rounding to a whole number or two decimal places

N2/L2.5 Order, approximate and compare decimals (up to 3 d.p.) when solving practical problems

This presentation is designed to be used as a group or class activity with the tutor controlling progress through the presentation in steps with appropriate questioning preceding each step.

Initial discussion could take the form of establishing why and when we need to round numbers, what determines the levels of accuracy. Drawing comparisons between attendance at a pop concert and the width of a turned metal component is one example. It is useful to make the connection at this stage between rounding and working out an estimated answer to a calculation.

Learners should be asked to identify the limits for each number depending on the approximation required; giving the lower limit first. Encouraging them to think about the position of the number on a scale is a helpful visualisation activity. You could even ask them to hold up their right hand if the number is nearer the upper limit, left hand for the lower limit - for the kinaesthetic learners!

Targeted questioning can be used for differentiation. It would be easy to give some learners consolidating activities on the whole number section before moving onto the decimal places with others. The last three slides introduce the usefulness of significant figures with the last one demonstrating the relationship between sig figs and degree of rounding.

Additional slides can be added to the presentation very easily merely by inserting 'Duplicate Slide' and then altering the numbers and the position of the arrow on the scale.