

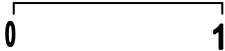
Adult Numeracy Core Curriculum Ideas and suggestions

Estimating and approximating in numeracy

Often in mathematics and numeracy, a lot of emphasis is placed on giving exact answers and carrying out precise calculations. However there is much value to be gained from encouraging learners to estimate or approximate answers to questions. This approach can provide a wealth of diagnostic information regarding learner understanding, and can be used as a starting point for further discussion and learning.

When it comes to estimating, answers are not so much 'right' or 'wrong' as near enough for the purposes of the estimation. Estimation skills can be improved through practice, although the skills of rounding and multiplying numbers ending in zero are also useful (e.g. approximating 43×19 by working out 40×20).

Some examples are:

- *Where, approximately, would $\frac{5}{8}$ go on this number line?* 
- Learner: *What's 7×8 ?*
Teacher: *Roughly how big do you expect it to be?*
- *If I buy all this shopping, will there be change from £10?*
- *Looking at this data, whereabouts do you think the mean lies?*
- *Show me $\frac{2}{3}$ of this...* (use a lump of modelling clay, a cake, a strip of paper or length of material, or anything else that is to hand or relevant to the learner).
- *We need to make a drink that is 20% concentrated fruit juice and 80% water. Can you fill this jug so that it is roughly 20% full of juice?*
- *If we divide £3498 by 14, will the answer be in thousands, hundreds or tens of pounds?*

Useful links:

['Bestimation: Using basic calculators in the numeracy classroom](#)

This is an NRDC report that includes activities to develop estimation skills.