Teaching notes and background



I have found that many numeracy students get scared when you mention terms like percentages or fractions. I therefore developed this introductory activity for my new level 1 numeracy students. They are mostly young parents who were disengaged at school and have no mathematics qualifications.

They are usually nervous when they attend the first session so I try to boost their confidence and reassure them that the course will not be like school.

The words in bold lettering are written on flash cards (provided on pages 5-12). I show each one to the group and they tell me whether they find it daunting or not. As they do this I sort the flashcards into two piles: "scary" or "not scary now" (see page 14).

Note: there is no need to go through them in alphabetical order. Arrange them to suit or shuffle and use randomly.

Some of the "demystifiers" that I use are listed on pages 2-4. I use these to unravel the meaning of each word and reassure students that we will be covering the topic in the course (or that they can already do it in their everyday lives). You will probably find other definitions that are suitable for different groups of learners. Various flashcards can be omitted (or added) as needed to suit the level of your group.

I then go on to do initial assessment with the learners: it is surprising how much better they then perform. It's all down to confidence.

I hope other tutors will find this useful.

Linda Hoole



addition	Can you check your shopping bill?
area	Think about carpeting or tiling a floor.
average	Statistics. How the government can give a false representation by using different types of average. I usually use the example of average wage.
centimetre	Cent = 100 (see percentage). 100 in a metre. Children's clothes often come in centimetre heights.
circle	No explanation usually needed.
cube	Think of an Oxo cube (the old ones).
cuboid	A brick.
cylinder	Tins of baked beans or cans of beer.
decimal	Just think money!
digit	A figure that is part of a number
estimation	You have 10 items in your shopping trolley. Some cost around £1, some 50p. Do you work it out roughly to make sure that you have enough money to pay?
factor	I write a simple multiplication sum on the board and explain the term.
fraction	Would you prefer to have half of a chocolate cake or a quarter?



gram	1 gram. Very small weight (think bags of crisps). A pound coin weighs about 10g.
graph	Think about a record of growth for a child or a temperature chart.
imperial	Our ridiculous mixed systems today. I buy my milk in pints from my milkman but in litres in a shop. I buy my petrol in litres but I boast that my car does 40 miles to the gallon. Builders still ask for 2x4 wood then buy it in metre lengths
kilogram	Big thousand
kilometre	Big one. Kilogram/ milligram comparison.
litre	Think about buying milk or 2 litre bottles of pop.
metre	A bit more than a yard. A door is about 2 metres.
metric	So easy to calculate. It is all about tens.
milligram	Small thousand (see millimetre).
millilitre	Do you think this is a big thousand or a little one? More or less than a litre?
millimetre	milli means 1000, but it is a little measurement. Think of a millipede, a small insect.
multiple	I write a simple multiplication sum on the board and explain the term.
multiplication	Did you learn your times tables at school? I then demonstrate the 'fingers' method. (See www.skillsworkshop.org for links).



negative numbers	Think about the weather or a bank balance.
percentage	'Per', means for each. 'Cent', think of century – 100 years. So percentage means 'out of every 100
perimeter	Think about the perimeter fence in a prison. "The prisoners escaped by climbing over the perimeter fence."
pie chart	Local government statistics. How much of the pie is spent on education, for example.
place value	Each digit has its own value. Would you like £550 or £505, or £055?
probability	Tossing a coin, rolling a dice.
proportion	Do you change recipes for more or less people that the recipe will feed?
pyramid	Egypt
ratio	Have you ever made up a baby's bottle or antifreeze to put in your car?
rectangle	Also known as an oblong. *There are technical differences.
rounding	Did you really want to know that 20451 went to the football game last Saturday? How about roughly 20,000?
scale	Think about a map or a kitchen design.
square	No explanation usually needed.



subtraction	Think about your bank balance or your weekly budget.
triangle	'Tri' indicates 3 in lots of other words.
unit	A bit of something. Centimetre, inch, pint, kilogram
volume	"A voluminous dress" is a dress that takes up lots of space!
whole number	A number that doesn't have any extra bits.
zero	keeps all the digits in order so that they know their place
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addition

area

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cube



Flashcards

cuboid

cylinder

decimal

digit

estimation

factor



fraction

gram

graph

imperial

kilogram

kilometre



litre

metre

metric

milligram

millilitre

millimetre



multiple

multiplication

negative numbers

percentage

perimeter

pie chart



place value

probability

proportion

pyramid

ratio

rectangle



Flashcards

rounding

scale

square

subtraction

triangle

unit





volume

whole number

zero





Scary

Not so SCary