



Year 4 measurement

Prior Knowledge

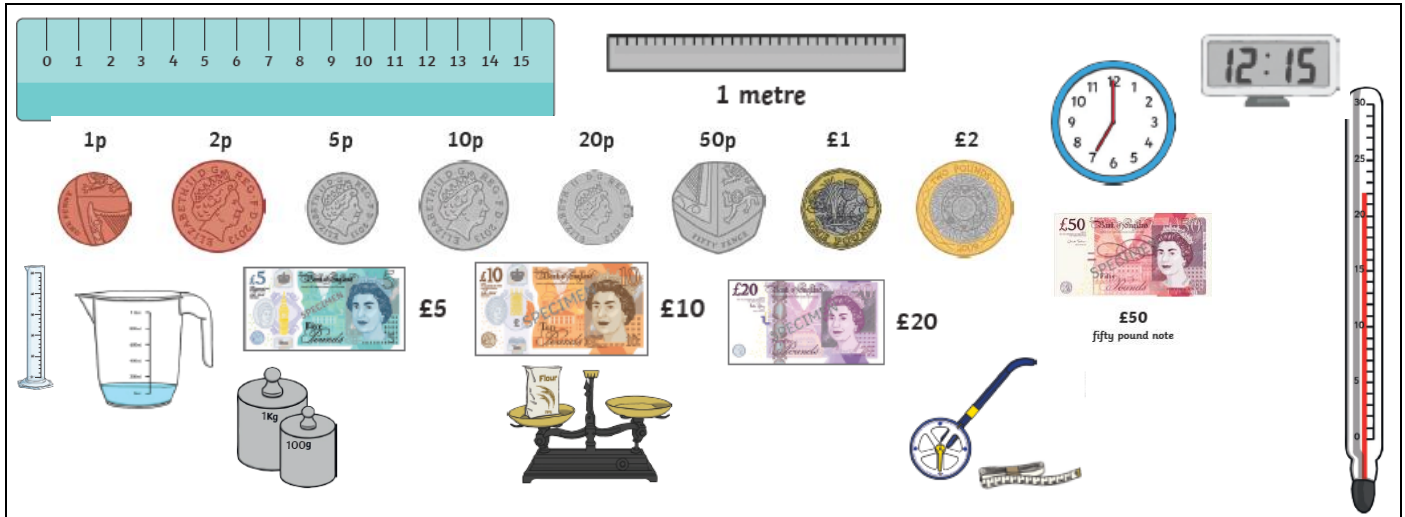
- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (Y3)
- Compare and order lengths, mass, volume/capacity and record the results using >, < and = (Y2)
- Measure the perimeter of simple 2-D shapes (Y3)
- Add and subtract amounts of money to give change, using both £ and p in practical contexts (Y2/3)
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks (Y2/3)
- Know the number of minutes in an hour and the number of hours in a day (Y2)
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight (Y3)
- Know the number of seconds in a minute and the number of days in each month, year and leap year (Y3)

measurement		Working Towards	Within	Expected	Above
	Convert between different units of measure				
	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres				
	Find the area of rectilinear shapes by counting squares				
	Estimate, compare and calculate different measures, including money in pounds and pence				
	Read, write and convert time between analogue and digital 12 and 24-hour clocks				
	Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days				
Highlights: _____					



Glossary

vocabulary	word class	definition
length	noun	the measurement or extent of something from end to end; the greater of two or the greatest of three dimensions of an object
height	noun	the measurement of someone or something from head to foot or from base to top
mass	noun	(in general use) weight
weight	noun	a body's relative mass or the quantity of matter contained by it; the heaviness of a person or thing
capacity	noun	the maximum amount that something can contain
volume	noun	the amount of space that a substance or object occupies, or that is enclosed within a container
time	noun	a point of time as measured in hours and minutes past midnight or noon
day	noun	each of the twenty-four-hour periods, reckoned from one midnight to the next, into which a week, month, or year is divided, and corresponding to a rotation of the earth on its axis
week	noun	a period of seven days
month	noun	each of the twelve named periods into which a year is divided
year	noun	the period of 365 days starting from the first of January
clock	noun	a mechanical or electrical device for measuring time
temperature	noun	the degree or intensity of heat present in a substance or object, especially as expressed according to a comparative scale and shown by a thermometer or perceived by touch
pound	noun	a unit of weight equal to 16 oz. / the basic monetary unit of the UK, equal to 100 pence
pence	noun	plural form of penny.
perimeter	noun	the continuous line forming the boundary of a closed geometrical figure
analogue	adjective	showing the time by means of hands or a pointer rather than displayed digits
o'clock	adverb	used to specify the hour when telling the time (abbreviation of 'of the clock')
noon	noun	twelve o'clock in the day; midday
midnight	noun	twelve o'clock at night
leap year	noun	a year, occurring once every four years, which has 366 days including 29 February as an intercalary day
rectilinear	adjective	contained by, consisting of, or moving in a straight line or lines
digital	adjective	showing the time by means of displayed digits rather than hands or a pointer
month	noun	a period of 28 days or four weeks



Capacity

1 litre = 1000 millilitres
1 centilitre = 10 millilitres


l
cl
ml



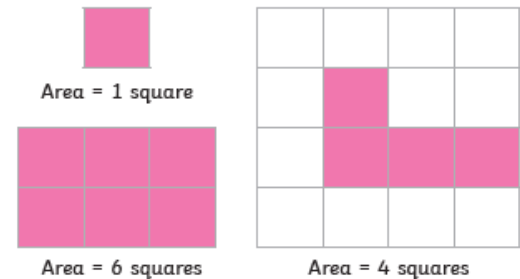
Length

1 kilometre = 1000 metres
1 metre = 100 centimetres
1 centimetre = 10 millimetres

km
m
cm
mm



We can count **squares** to find the **area** of a **rectilinear** shape.



Currency

1 pound = 100 pence

£
p















Time

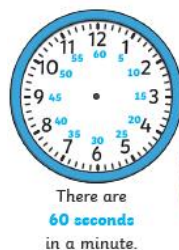
1 day = 24 hours
1 hour = 60 minutes
1 minute = 60 seconds

h
min
s



UK Coins							
							
£0.01	£0.02	£0.05	£0.10	£0.20	£0.50	£1.00	£2.00
one penny coin	two pence coin	five pence coin	ten pence coin	twenty pence coin	fifty pence coin	one pound coin	two pound coin

UK Notes			
			
£5	£10	£20	£50
five pound note	ten pound note	twenty pound note	fifty pound note





Future Learning

Year 5

- Convert between different units of metric measure
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of rectangles (including squares) including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes
- Estimate volume and capacity
- Solve problems involving converting between units of time
- Use all four operations to solve problems involving measure using decimal notation including scaling.

Year 6

- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 2 decimal places where appropriate
- Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places
- Convert between miles and kilometres
- Recognise that shapes with the same areas can have different perimeters and vice versa
- Recognise when it is possible to use formulae for area and volume of shapes
- Calculate the area of parallelograms and triangles
- Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units