Ysgol Eirias



Numeracy Booklet LLyfryn Rhifedd

Contents

Calculating methods Dulliau Cyfrifo	
Subtraction Tynnu	4
Division Rhannu	
Simple Multiplication Lluosi Syml	5
Harder Multiplication Lluosi Hir	
Numbers	
Even numbers Eilrifau	
Odd numbers Odrif	6
Square numbers Rhifau Sgwâr	6
Factors Ffactorau	6
Multiples Lluosrifau	6
Prime numbers Rhifau Cysefin	6
Place value Gwerth Lle	
Input	8
Fractions Ffracsiynau Equivalent fractions Ffracsiynau Hafal	
Decimals Degolion	9 9
Useful fractions, decimals and percentages	10
Ratio CymharebFinding equivalent ratios	
Directed numbers Rhifau Cyfeiriol	
To add and subtract negative numbers:	12
Multiplying and dividing directed numbers	13
Coordinates Cyfesurynnau	
Inequalities Amhafaleddau	15
The circle Y cylch	
Circumference of a circle Cylchedd cylch	16

Perimeter Perimedr	16
Area of 2D Shapes Arwynebedd siapiau 2D	17
Areas of irregular shapes Arwynebedd siapiau afreolaidd	
Area formulae Fformiwla Arwynebedd	
Volume Cyfaint	
Cuboid Ciwboid	19
Prism Prism	19
Metric units of length Unedau metrig hyd	20
Metric units of mass Unedau metri más	20
Metric units of volume Unedau metrig cyfaint	
Time Amser	
The Yearly Cycle Cylch Blwyddyn	
The 24 hour and 12 hour clock - Y cloc 24 awr a 12 awr	
Time vocabulary Geiriau Amser	
Data Data	
Discrete data	
Continuous data	
Discrete data Data arwahanol	24
Collecting and recording Casglu a chofnodi	24
Displaying Arddangos	25
Pictogram Pictogram	25
Bar chart (or Frequency Diagram) Siart bar (neu Diagram Amlder)	26
Vertical line graph Graff llinell fertigol	26
Pie chart Siart Cylch	27
Continuous data Data di-dor	28
Displaying Arddangos	
Line graph Graff llinell	28
Conversion graph Graff trawsnewid	28
Scatter diagram Diagram gwasgariad	29
Important things to remember when drawing graphs	30
Averages Cyfartaledd	30
Vocabulary Geirfa	31

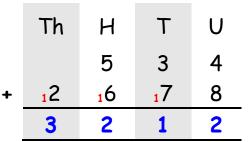
Calculating methods Dulliau Cyfrifo

Addition Adio

Example 534 + 2678

Place the digits in the correct "place value" columns with the numbers under each other. Begin adding in the units column.

Show any carrying in the next column.



Subtraction Tynnu

Example: 7689 - 749

Place the digits in the correct "place value" columns with the numbers under each other.

Begin subtracting in the units column.

You can't subtract 9 from 6 so move 1 ten from the 8 tens to the 6 units to make 16 units.

Th	Н	Т	U
67	¹ 6	78	1 6
-	7	4	9
6	9	3	7

Note that the same has happened with the hundreds.

Division Rhannu

Example: 432 ÷ 15

Concise method

4 is not divisible by 15, so you divide 43 by 15.

 $3 \times 15 = 45$ which is more than 43 so choose

 $2 \times 15 = 30$.

Subtract 30 from 43 to give a remainder of 13.

Write 13 in front of the 2 to give 132.

 $8 \times 15 = 120$.

Subtract 120 from 132 to give a remainder of 12.

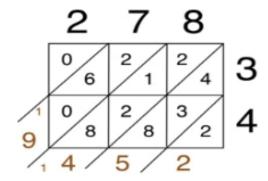
Therefore, the answer is: 28 r 12

Simple Multiplication Lluosi Syml

	12 X 12 Multiplication Table												
×	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Harder Multiplication Lluosi Hir

Example 278 \times 34



$$278 \times 34 = 9,452$$

- Step 1: On a multiplication problem like 278 times 34 make a three by two grid.
- Step 2: Draw a line in every box from the top right to the bottom left corner.
- Step 3: On the top and side write down the multiplication problem.
- Step 4: In each box, multiply the number that is above it and to the side of it.
- Step 5: Now you will need to draw lines diagonally from the grid.
- Step 6: Add up the line that is diagonally, and then you will get the answer.

Numbers

Even numbers Eilrifau

2, 4, 6, 8, 10, 12,

2 divides exactly into every even number.

Odd numbers Odrif

1, 3, 5, 7, 11,

2 doesn't divide exactly into odd numbers.

Square numbers Rhifau Sgwar

The first 7 square numbers are: 1, 4, 9, 16, 25, 36, 49

 $1^2 = 1 \times 1 = 1$

 $2^2 = 2 \times 2 = 4$

 $3^2 = 3 \times 3 = 9$

 $4^2 = 4 \times 4 = 16$

 $5^2 = 5 \times 5 = 25$

 $6^2 = 6 \times 6 = 36$

 $7^2 = 7 \times 7 = 49$

Factors Ffactorau

A factor is a number that divides exactly into another number.

The factors of 12 are: 1, 2, 3, 4, 6, 12

The factors of 13 are: 1 and 13

Multiples Lluosrifau

A multiple is a number that divides exactly into another number. The multiples of 6 are: 16, 12, 18, 24, 30 etc.

Prime numbers Rhifau Cysefin

A prime number has exactly two factors, namely 1 and itself.



The factors of 17 are 1 and 17, therefore 17 is a prime number.

The prime numbers between 1 and 100 are:

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

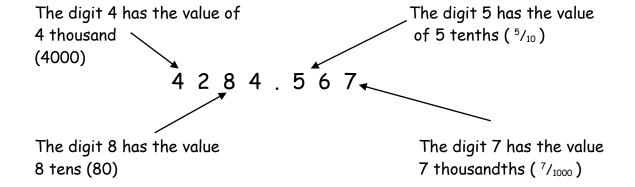
Note: 1 is not a prime number!

Place value Gwerth Lle

Thousands	Hundreds	Tens	Units		Tenths	Hundredths	Thousandths
(1000)	(100)	(10)	(1)	•	<u>1</u>	<u>1</u>	<u>1</u>
					10	100	1000

10 units=1 ten10 thousandths=1 hundredth10 tens=1 hundred10 hundredths=1 tenth10 hundreds=1 thousand10 tenths=1 unit

The placement of the digits within the number gives us the value of that digit.



Inverses Gweithdrefn gyferbyn

Inverses allow you to undo a sum.

Sign	Inverse
+	-
-	+
÷	×
×	÷

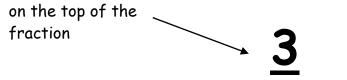
We use inverses when we work with function machines.

Input

If the output is 3, the input? must be 30.

Fractions Ffracsiynau

The **numerator** is the number



The **denominator** is the number on the bottom

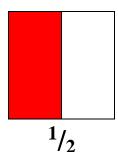
If we have a number and a fraction mixed we call it a mixed fraction.

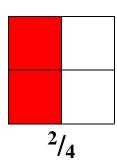
$$3\frac{7}{8}$$

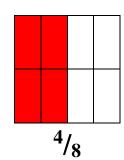
When the numerator is larger than the denominator we call this an **improper** fraction.

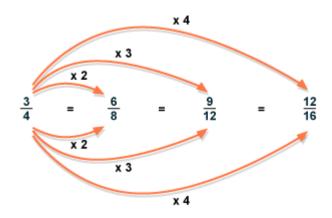
Equivalent fractions Ffracsiynau Hafal

All the fractions below represent the same proportion. Therefore they are called equivalent fractions.









If we multiply or divide the top and bottom numbers in a fraction by the same value, we will get an equivalent fraction.

Decimals Degolion

A decimal is any number that contains a decimal point. The following are examples of decimals.

0.549

1.25

256.4

3.406

<u>Percentages</u> <u>Canrannau</u>



The symbol % means out of 100

7% means 7 out of 100

63% means 63 out of 100

120% means 120 out of 100

Changing decimals and fractions into percentages

Newid degolion a fracsiynau i ganrannau

To change a decimal or fraction to a percentage you have to multiply by 100%.

 $0.75 \times 100\% = 75\%$

$$\frac{13}{120} \times 5100\% = 65\%$$

To change a fraction into a decimal you have to divide the numerator by the denominator.

$$\frac{3}{8} = 3 \div 8 = 0.375$$

It is also possible to change a fraction into a percentage like this:

$$\frac{4}{5} = 4 \div 5 = 0.8$$

then $0.8 \times 100\% = 80\%$

Useful fractions, decimals and percentages

Ffracsiynau. Degolion a chanrannau defnyddiol

Fraction	Decimal	Percentage
1	1.0	100%
1/2	0.5	50%
¹ / ₃	0.33	33.3r%
1/4	0.25	25%
3/4	0.75	75%
¹ / ₁₀	0.1	10%
$^{2}/_{10}$ (= $^{1}/_{5}$)	0.2	20%
³ / ₁₀	0.3	30%

Ratio Cymhareb

A ratio is used to describe how two quantities are related.

For example, we might say that orange squash is to be mixed with water in a ratio of 1:6. This means that for every 1 part squash, there will need to be 6 parts of water. If there was 100ml of squash, there would be 600ml of water.

Another common example of a ratio is a map scale. A particular map scale might be 1:50,000. In this case it means that 1cm on the map represents 50,000cm in "real-life". 50,000cm = 500m = 0.5km, so 1cm on the map represents half a kilometre. 2cm would therefore represent 1km.

OS MAP OF COLWYN BAY AT 1:50 000



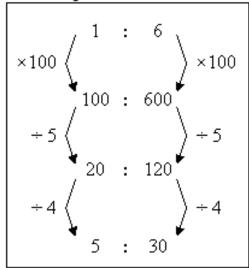
Finding equivalent ratios

The ratio of squash to water in the example above was 1:6, but this could be written as 100:600, or 20:120, or 5:30.

These ratios are equivalent because they have the same meaning - the amount of water is six times the amount of squash.

You can find equivalent ratios by multiplying or dividing both sides by the same number. This is similar to finding equivalent fractions. Some examples of finding equivalent ratios are shown below. All the ratios in the diagram are equivalent.

Equivalent Ratios



Directed numbers Rhifau Cyfeiriol

The negative sign (-) tells us the number is below zero e.g. -4. The number line is useful when working with negative numbers. Below is a part of the number line.

Negative direction
$$\leftarrow$$
 \rightarrow Positive direction
-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

The numbers on the right are greater than the numbers on the left e.g. 5 is greater than 2 and 2 is greater than -3. **Note** that -3 is greater than -8.

Adding and subtracting directed numbers

Adio a thynnu rhifau cyfeiriol

To add and subtract negative numbers:

When adding and subtracting directed numbers there are a couple of rules you can use to help you work out the answer:

• Two 'pluses' make a plus - so if two '+' signs are written next to each other you can replace them with a single '+' sign.

Thus
$$-3 + (+2) = -3 + 2 = -1$$

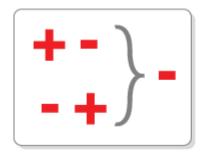
• Two 'minuses' make a plus - so if two '-' signs are written next to each other, you can replace them with a single '+' sign.

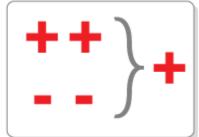
Thus
$$6 - (-2) = 6 + 2 = 8$$

• A plus and a minus make a minus - so if one of each sign sit next to each other, then you can replace them with just a '-' sign.

Thus
$$-4 - (+3) = -4 - 3 = -7$$
 and $3 + (-7) = 3 - 7 = -4$

Basically when adding and subtracting directed numbers different signs next to each other mean subtract, the same signs next to each other means add.





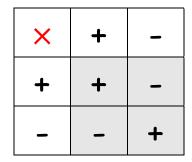
Multiplying and dividing directed numbers

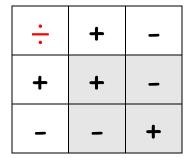
Lluosi a rhannu rhifau cyfeiriol

We multiply and divide directed numbers in the usual way whilst remembering these very important rules:

Two signs the same, a positive answer.

Two different signs, a negative answer.





Remember, if there is no sign before the number, it is positive.

Examples:

$$5 \times -7 = -35$$
 (different signs give a negative answer)

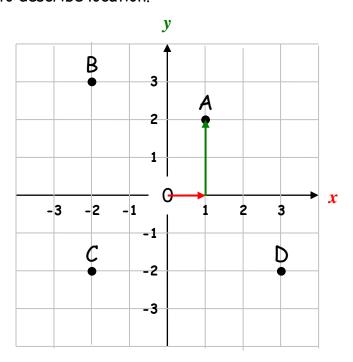
$$-4 \times -8 = 32$$
 (two signs the same give a positive answer)

$$48 \div -6 = -8$$
 (different signs give a negative answer)

$$-120 \div -10 = 12$$
 (two signs the same give a positive answer)

Coordinates Cyfesurynnau

We use coordinates to describe location.



The coordinates of the points are:

$$A(1,2)$$
 $B(-2,3)$ $C(-2,-2)$

$$C(-2,-2)$$

There is a special name for the point (0,0) which is the origin.

The first number (x-coordinate) represents the distance across from the origin. The second number (y-coordinate) represents the distance going up or down.

Example: The point (1,2) is one across and two up from the origin.

Inequalities Amhafaleddau

We us the = sign to show that two sums are **equal**. If one sum is greater than or less than the other we use inequalities:

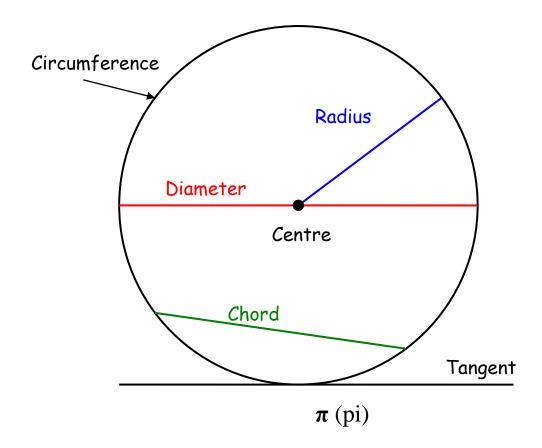
< less than > more than

 \leq less than or equal to \geq more than or equal to

Examples:

5 < 8 43 > 6 $x \leq 8$ $y \geq 17$

The circle Y cylch



 π is a Greek letter which represents 3.1415926535897932384 (a decimal that carries on for ever without repetition).

We round π to 3.14 in order to make calculations or we use the π button on the calculator

Circumference of a circle Cylchedd cylch

The circumference of a circle is the distance around the circle.

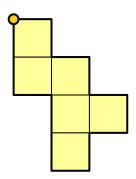
Circumference = π x diameter Circumference = π d

Since the diameter is twice the length of the radius, we can also write

Circumference = $\pi \times 2 \times \text{radius}$ Circumference = $2 \pi \text{ r}$

Perimeter Perimedr

Perimeter is the distance around the outside of a shape. We measure the perimeter in millimetres (mm), centimetres (cm), metres (m), etc.



This shape has been drawn on a 1cm grid. Starting on the orange circle and moving in a clockwise direction, the distance travelled is . . .

$$1+1+1+1+1+1+1+1+1+2+1+2=14$$
cm

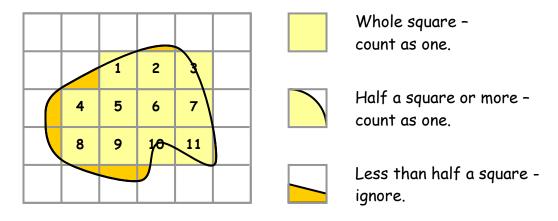
Perimeter = 14cm

Area of 2D Shapes Arwynebedd siapiau 2D

The area of a shape is how much surface it covers. We measure area in square units e.g. centimetres squared (cm^2) or metres squared (m^2) .

Areas of irregular shapes Arwynebedd siapiau afreolaidd

Given an irregular shape, we estimate its area through drawing a grid and counting the squares that cover the shape.

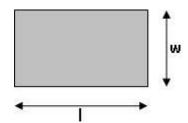


Area = 11cm^2 .

Remember that this is an estimate and not the exact area.

Area formulae Fformiwla Arwynebedd

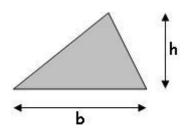
Rectangle Petryal



Multiply the length with the width.

Area =
$$1 \times w$$

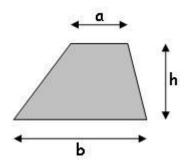
Triangle Triongl



Multiply the base with the height and divide by two.

Area =
$$\frac{b \times h}{2}$$

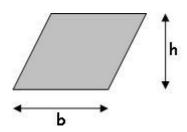
Trapezium Trapesiwm



Add the parallel sides, multiply with the height and divide by two.

Area =
$$\frac{(a+b)h}{2}$$

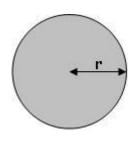
Parallelogram Paralelogram



Multiply the base with the height.

$$Area = b \times h$$

Circle Cylch



Multiply π by the radius then the radius again..

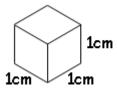
Area =
$$\pi \times \text{radius} \times \text{radius}$$

= $\pi \times \text{r} \times \text{r}$
= πr^2

Volume Cyfaint

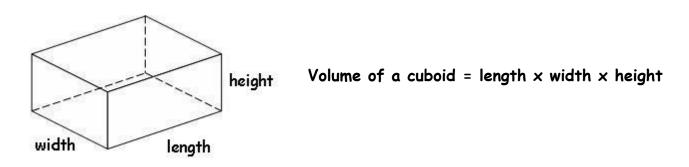
Volume is the amount of space that an object contains or takes up. The object can be a solid, liquid or gas.

Volume is measured in cubic units e.g. cubic centimetres (cm^3) and cubic metres (m^3) .



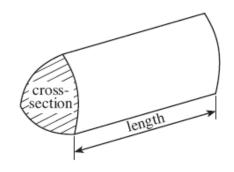
Cuboid Ciwboid

Note that a cuboid has six rectangular faces.



Prism Prism

A prism is a 3-dimensional object that has the same shape throughout its length i.e. it has a uniform cross-section.



Volume of a prism = area of cross-section x length

Metric units of length Unedau metrig hyd

Millimetre mm $10 \text{ mm} = 1 \text{ cm} \quad 1000 \text{ mm} = 1 \text{ m}$ Centimetre cm $100 \text{ cm} = 1 \text{ m} \quad 100 000 \text{ cm} = 1 \text{ km}$

Metre m = 1000 m = 1 km

Kilometre km

Metric units of mass Unedau metri más

Milligram mg = 1 g = 1 000 000 mg = 1 kg

 Gram
 g
 1 000 g = 1 kg

 Kilogram
 kg
 1 000 kg = 1 t

Metric tonne t

Metric units of volume Unedau metriq

cyfaint

Millilitre MI 1000 ml = 1 l

Litre

Time Amser

1000 Years o flynyddoedd = 1 millennium Mileniwm

100 Years o flynyddoedd = 1 century Canrif 10 Years o flynyddoed = 1 decade Degawd

60 Seconds Eiliad = 1 minute Munud

60 Minutes Munud = 1 hour Awr

24 Hours Awr = 1 day Diwrnod

7 Days Diwrnod = 1 week Wythnos

12 Months Mis = 1 year Blwyddyn

52 Weeks Wythnos ≈ 1 year Blwyddyn

365 Days Diwrnod ≈ 1 year Blwyddyn

366 Days Diwrnod ≈ 1 leap year Blwyddyn Naid

The Yearly Cycle Cylch Blwyddyn

Season	Month	Days	
Tymor	Mis	Diwrnod	Spring
	January Ionawr	31	
	February Chwefror	28	Summer Summer
	March Mawrth	31	Autumn
	April Ebrill	30	
	May Mai	31	Winter
	June Mehefin	30	,
	July Gorffenaf	31	Y Gwanwyn
	August Awst	31	i i
	September Medi	30	Yr Haf
	October Hydref	31	Vn Hydnef
	November Tachwedd	30	Yr Hydref
	December Rhagfyr	31	Y Gaeaf

The 24 hour and 12 hour clock - Y cloc 24

awr a 12 awr

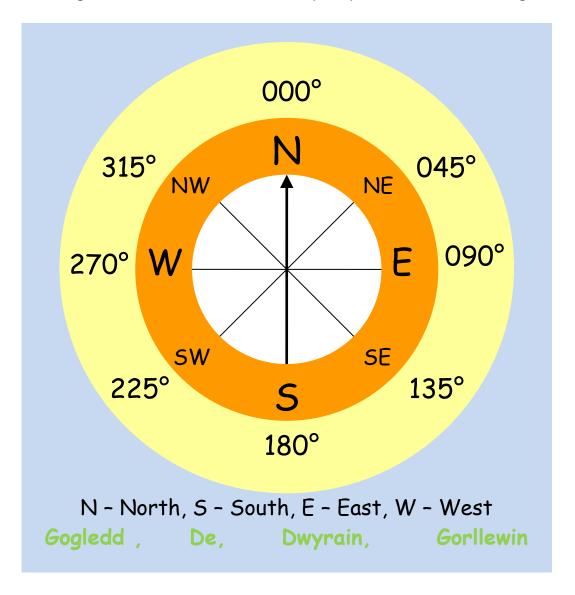
	24 hour	12 hour	
	24 awr	12 awr	
Midnight Hanner Nos	00:00	12.00 a.m.	Midnight Hanner Nos
	01:00	1:00 a.m.	
	02:00	2:00 a.m.	
	03:00	3:00 a.m.	
The 24 hour clock always	04:00	4.00 a.m.	
uses 4 digits to show the	05:00	5:00 a.m.	The 12 hour clock shows the
time.	06:00	6:00 a.m.	time with a.m. before mid-
The 24 hour system does	07:00	7:00 a.m.	day and p.m. after mid-day.
not use a.m. nor p.m.	08:00	8:00 a.m.	
·	09:00	9:00 a.m.	
	10:00	10:00 a.m.	
	11:00	11:00 a.m.	
Mid-day Hanner Dydd	12:00	12:00 p.m.	Mid-day Hanner Dydd
	13:00	1:00 p.m.	
	14:00	2:00 p.m.	
70 10	15:00	3:00 p.m.	
17.53	16:00	4:00 p.m.	12 10
13.36	17:00	5:00 p.m.	IC LOWINTCH MA
MONTH DATE TOUR 22.1	18:00	6:00 p.m.	9 3
	19:00	7:00 p.m.	8 WATER RESISTANT SOM=185R.
	20:00	8:00 p.m.	.7.6.5.
	21:00	9.00 p.m.	
	22:00	10.00 p.m.	
	23:00	11:00 p.m.	

Time vocabulary Geiriau Amser

02:10	Ten past two in the morning – Deg munud wedi dau yn y bore	2:10 a.m.
07:15	Quarter past seven in the morning - Chwarter wedi saith yn y bore	7:15 a.m.
15:20	Twenty past three in the afternoon - Ugain munud wedi tri yn y pnawn	3:20 p.m.
21:30	Half past nine in the evening - Hanner awr wedi naw yn y nos	9:30 p.m.
14:40	Twenty to three in the afternoon - Ugain munud i dri yn y pnawn	2:40 p.m.
21:45	Quarter to ten at night - Chwarter i ddeg yn y nos	9:45 p.m.

Bearings Cyfeiriant

A bearing describes direction. A compass is used to find and follow a bearing. The diagram below shows the main compass points and their bearings.



The bearing is an angle measured clockwise from North.

Bearings are always written using three figures e.g. if the angle from the North is 5° , we write 005° .

Data Data

We collect data in order to highlight information to be interpreted. There are two types of data:

Discrete data	Continuous data		
Data Arwahanol	Data Di-dor		
Things that are not measured:	Things that are measured:		
 Colours Days of the week Favourite drink Number of boys in a family 	 Pupil height Volume of a bottle Mass of a chocolate bar Time to complete a test 		
Number of boys in a familyShoe size	Time to complete a testArea of a television scree		

Discrete data Data arwahanol

Collecting and recording Casglu a chofnodi

We can record data in a list

e.g. here are the numbers of pets owned by pupils in form 9C:

A frequency table is more structured and helps with processing the information.

Number of pets	Tally	Frequency
1	W W	10
2	JH III	8
3	III	3
4	II	2
5		2
6		0
7		0
8		0
9		0
10	1	1

Displaying Arddangos

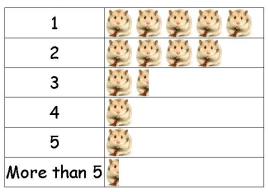
In order to communicate information, we use statistical diagrams. Here are some examples:

Pictogram Pictogram

A pictogram uses symbols to represent frequency. We include a key to show the value of each symbol.

The diagram below shows the number of pets owned by pupils in 9C.

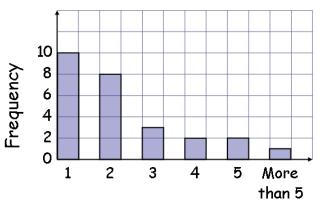




Bar chart (or Frequency Diagram) Siart bar (neu Diagram Amlder)

The height of each bar represents the frequency. All bars must be the same width and have a constant space between them. Notice that the scale of the frequency is constant and starts from 0 every time. Remember to label the axes and give the chart a sensible title.

Pets owned by pupils of 9C

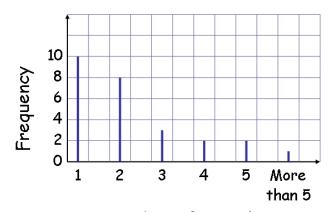


Number of animals

Vertical line graph Graff llinell fertigol

A vertical line graph is very similar to a bar chart except that each category has a line instead of a bar. Notice that the category labels are directly below each line.

Pets owned by pupils of 9C



Number of animals

Pie chart Siart Cylch

The complete circle represents the total frequency. The angles for each sector are calculated as follows:

Here is the data for the types of pets owned by 9C

Type of pet	Frequency	Ar	gle	of th	e s	ector
Cats	13	13	X	10°	=	130°
Dogs	11	11	X	10°	=	110°
Birds	5	5	X	10°	=	50°
Fish	7	7	X	10°	=	70°
Total	36					360°

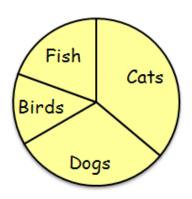
Divide 360° by the total of the frequency:

$$360^{\circ} \div 36 = 10^{\circ}$$

Therefore 10° represents one animal

Remember to check that the angles of the sectors add up to 360° .

Types of pet owned by 9C



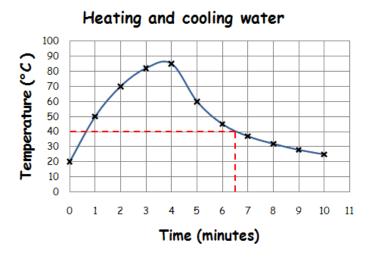
Continuous data Data di-dor

Displaying Arddangos

With graphs representing continuous data, we can draw lines to show the relationship between two variables. Here are some examples:

Line graph Graff llinell

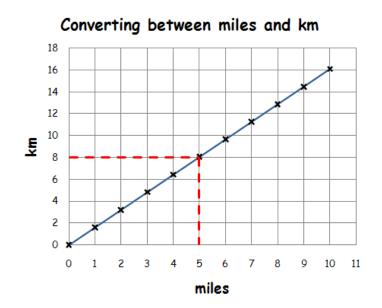
The temperature of water was measured every minute as it was heated and left to cool. A cross shows the temperature of the water at a specific time. Through connecting the crosses with a curve we see the relationship between temperature and time.



The line enables us to estimate the temperature of the water at times other than those plotted e.g. at $6\frac{1}{2}$ minutes the temperature was approximately 40 °C.

Conversion graph Graff trawsnewid

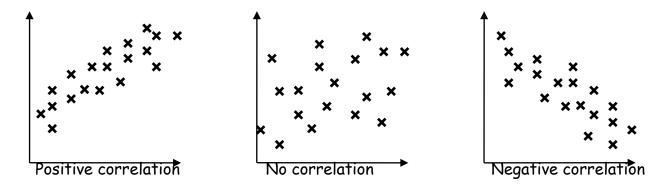
We use a conversion graph for two variables which have a linear relationship. We draw it in the same way as the above graph but the points are connected with a straight line.



From the graph, we see that 8 km is approximately 5 miles.

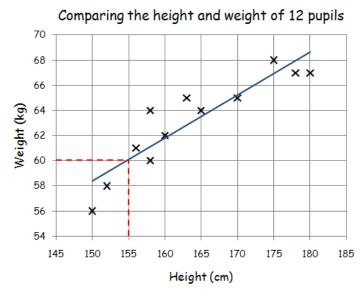
Scatter diagram Diagram gwasgariad

We plot points on the scatter diagram in the same way as for the line graph. We do not join the points but look for a correlation between the two sets of data.



If there is a correlation, we can draw a line of best fit on the diagram and use it to estimate the value of one variable given the other.

The following scatter graph shows a positive correlation between the weights and heights of 12 pupils.



The line of best fit estimates the relationship between the two variables. Notice that the line follows the trend of the points. In this case, drawing the line of best fit by eye, there are approximately the same number of points above and below the line.

We estimate that a pupil 155 cm tall has a weight of 60 kg.

Important things to remember when drawing graphs

- Title and label axes
- Sensible scales
- Careful and neat drawing with a pencil

Averages Cyfartaledd

The average is a measure of the middle of a set of data. We use the following types of average:

Mean

- We add all the numbers, and then divide by how many numbers you have.

Median

 Place the numbers in order starting with the smallest then find the number in the middle. This is the median.
 If you have two middle numbers then find the number that's halfway between the two.

Mode

- This is the value that appears most often.

Spread

The spread is a measure of how close together are the items of data. We use the following to measure spread:

Range

The range of a set of data is the difference between the highest and the lowest value.

Examples

Find the mean, median, mode, and range of the following numbers:

4,3,2,0,1,3,1,1,4,5

Mean

$$\frac{4+3+2+0+1+3+1+1+4+5}{10} = 2.4$$

Median

$$0,1,1,1,2,3,3,4,4,5$$
 $\frac{2+3}{2}$ = 2.5

Mode

Range

$$0,1,1,1,2,3,3,4,4,5$$
 $5-0 = 5$

Vocabulary Geirfa

Acceleration	Cyflymiad
Acute angle	Ongl lem
Add	Adio
Angle	Ongl
Anti-clockwise	Gwrthglogwedd
Approximation	Brasamcan
Area	Arwynebedd
Average	Cyfartaledd
Axis	Echelin
Balance	Cydbwysedd
Bearing	Cyfeiriant
Bills	Biliau
Bisect/Halve	Haneru
Boundary	Ffin
Calculator	Cyfrifiannell
Capacity	Cynhwysedd
Cash	Arian Parod
Circle	Cylch
Circumference	Cylchyn
Clockwise	Clocwedd
Column	Colofn
Compass (drawing circles)	Cwmpas (Ilunio cylchoedd)
Compass (points North)	Cwmpawd (pwyntio i'r Gogledd)
Cone	Côn
Co-ordinates	Cyfesurynnau
Corresponding	Cyfatebol
Cross-section	Trawstoriad
Cube	Ciwb
Curve	Cromlin
Cylinder	Silindr
Cheapest	Rhataf
Decimal	Degolyn
Density	Dwysedd
Deposit	Blaendal

Depth	Dyfnder	
Diagonal	Croeslin	
Diameter	Diamedr	
Dice	Dis	
Digit	Digid	
Dimension	Dimensiwn	
Discount	Disgownt	
Drawn to scale	Lluniadu wrth raddfa	
East	Dwyrain	
Edge	Ymyl	
Enlarge	Helaethu	
Equal/Unequal	Hafal/Anhafal	
Equivalent	Cywerth	
Estimate	Amcangyfrif	
Even number	Eilrif	
Extend	Ymestyn	
Factor	Ffactor	
Fraction	Ffracsiwn	
Frequency	Amlder	
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Height	Uchder	
Horizontal	Llorweddol	
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Intersection	Croestoriad	
Interval	Cyfwng	
Invest	Buddsoddi	
Irregular	Afreolaidd	
Layer/Tier	Haen	
Length	Hyd	
Loan	Benthyciad	
Loss	Colled	
Lower/Reduce	Gostwng	
Mass	Màs	
Maximum	Uchafswm	
Mean	Cymedr	

Measure	Mesur	
Median	Canolrif	
Minimum	Lleiafswm	
Mode	Modd	
Multiple	Lluosrif	
Net	Rhwyd	
North	Gogledd	
Obtuse angle	Ongl aflem	
Octagon	Octogon	
Odd number	Odrif	
Parallel	Paralel	
Percent	Canran	
Perimeter	Perimedr	
Perpendicular	Perpendicular	
Power	Pwer	
Pressure	Gwasgedd	
Prime number	Rhif cysefin	
Decelorate than	Talanca da da	
Probability	Tebygolrwydd	
Probability Profit	Elw	
Profit	Elw	
Profit Quadrilateral	Elw Pedrochr	
Profit Quadrilateral Radius	Elw Pedrochr Radiws	
Profit Quadrilateral Radius Range	Pedrochr Radiws Amrediad	
Profit Quadrilateral Radius Range Rate of exchange	Elw Pedrochr Radiws Amrediad Cyfradd cyfnewid	
Profit Quadrilateral Radius Range Rate of exchange Ratio	Elw Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle Remainder	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg Gweddill	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle Remainder Right angle	Elw Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg Gweddill Ongl sgwâr	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle Remainder Right angle Round off	Elw Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg Gweddill Ongl sgwâr Talgrynnu	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle Remainder Right angle Round off Row	Elw Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg Gweddill Ongl sgwâr Talgrynnu Rhes	
Profit Quadrilateral Radius Range Rate of exchange Ratio Rectangle Reduce/Decrease Reflection Reflex angle Remainder Right angle Round off Row Salary (income)	Pedrochr Radiws Amrediad Cyfradd cyfnewid Cymhareb Petryal Lleihau Adlewyrchiad Ongl atblyg Gweddill Ongl sgwâr Talgrynnu Rhes Cyflog(incwm)	

South	De
Space	Gofod
Speed	Buanedd
Sphere	Sffêr
Square	Sgwâr
Square number	Rhif sgwâr
Square Root	Ail Isradd
Substitute	Amnewid
Symmetry	Cymesuredd
Total	Cyfanswm
Triangle	Triongl
Triangular number	Rhif triongl
Unknown	Anhysbysyn
Unlikely	Annhebygol
Value Added Tax (VAT)	Treth ar Werth (TAW)
Velocity	Cyflymder
Vertex	Fertig
Vertical	Fertigol
Malana a	Cyfaint
Volume	Cyfuirii
Weight	Pwysau
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