Straight lines can either cross or be parallel. Where they cross they form an angle. The greek for angle is "agon".

paralle 1

Three lines can be arranged to form a triangle. These can be classified by their sides....


Scalene.
no sides equal
.....or by their angles.....


Obtuse-angled

Isoscelestwo sides equal

acute-angled


Equilateral-
all sides equal

rigft-angled

## QUADRI LATERALS

Shapes with four straight sides are called quadrilaterals.
There are many different types, 6 ut they are $\mathcal{A L L}$ quadrilaterals if they have four sides.


## $\mathcal{S P E C I A L}$ <br> Q UADRI LATERALS

$\mathcal{A}$ quadrilateral with four right-angles is called a rectangle.


A rectangle with four equal sides is called a square.


## $\mathcal{S P E C I A L}$ <br> Q UADRI LATERALS

$\mathcal{A}$ quadrilateral where the opposite sides are parallel is called a parallelogram.


Of course a rectangle and a square are also parallelograms because their opposite sides are parallel.


## $\mathcal{S P E C I A L}$ <br> Q UADRI LATERALS

$A$ paralle logram that fias four equal sides has a special name. It is called a rhombus.

$\mathcal{A}$ square is of course also a rfombus. It is a rfombus with right. angles.


## Q UADRI LATERALS

There are two other special quadrilaterals.
A trapezium, where two of the sides are parallel but not equal. The other two are equal but not parallel. (It looks a bit like a trapeze)


Finally there is a Kite. In a kite each side fas one adjacent side which is equal and one which is not. Better still, it looks like a Kite!


## $O \mathcal{T H E R}$ PO LYGONS

The rest of the polygons get their names from the Greekfor how many angles they have.

$$
\begin{aligned}
\mathcal{P e n t} & =5 \\
\mathcal{H e} \chi & =6 \\
\mathcal{H e} p t & =7 \\
O c t & =8 \\
\mathcal{N} o n & =9 \\
\mathcal{D e c} & =10 \\
\text { Dodeca } & =12 \\
\text { Icosa } & =20
\end{aligned}
$$

So the shapes are called pentagons, fexagons, icosagons, etc.

## REGULAR $\mathcal{A N D}$ IRREGULLARS HAPES

If these shapes have equal angles they are called regular. If not they are called irregular.


