

# Area

LO: To be able to find the area of a triangle.

LO: To be able to find the mode, median and range

1) Zone

2) How to find the mode.

3) How to find the median.

4) How to find the range.

5) Follow up work.

Blue Zone



Going slow

E.g. sad, sick, tired,  
bored

Green Zone



Good to go

E.g. happy, calm,  
focused, ok

Yellow Zone



Caution

Starting to lose control

E.g. worried, excited,  
annoyed

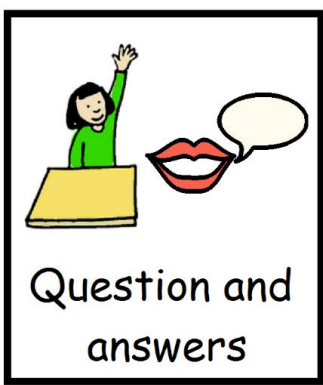
Red Zone



Stop!

Out of control

E.g. angry, terrified,  
elated



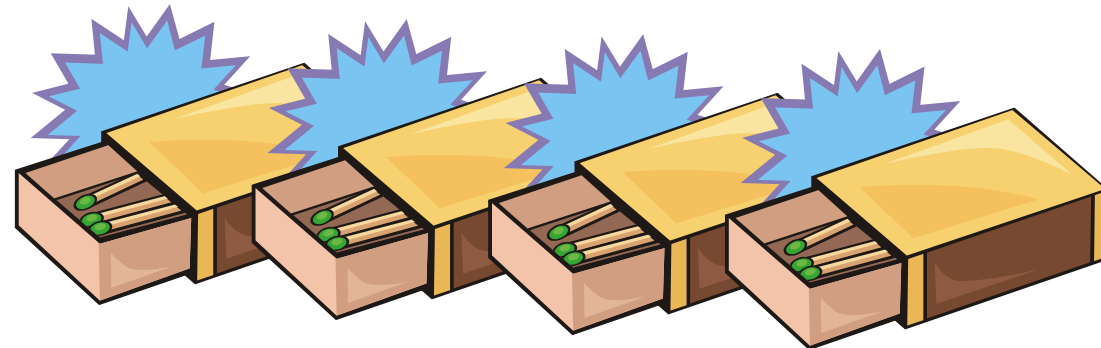
## Averages (The Mode)

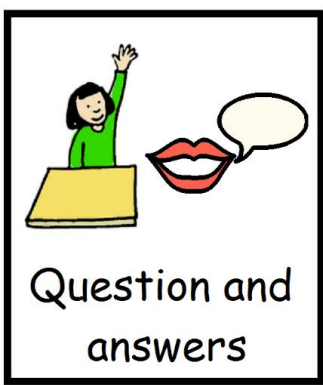
The **mode** is the data value that occurs **most frequently**

**Example 1.** The number of matches in a random sample of 14 boxes were counted and the results are recorded below. Find the **mode** of the data.

48, 49, 52, 50, 51, 49, 49, 55, 47, 48, 50, 51, 50, 50

**Mode** = 50 (as it occurs more often than the other numbers).





## Averages (The Mode)

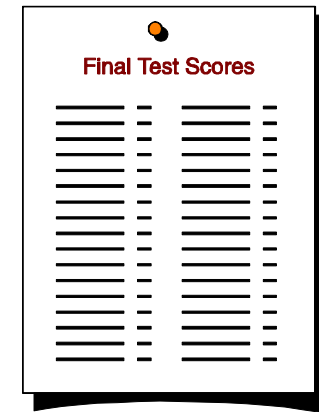
The **mode** is the data value that occurs **most frequently**

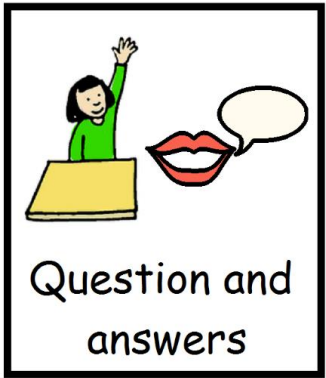
**Example 2.** Twenty people sat a maths test. Their marks out of 10 are recorded below. Find the modal mark for the test.



2, 5, 9, 3, 7, 6, 8, 6, 10, 4,  
3, 2, 0, 9, 5, 1, 8, 6, 1, 5

**Mode** = 5 and 6





To find the mode;

- 1) Look at your list of either numerical or non numerical data. The value that comes up the most is your mode.
- 2) If you have two values that come up the same amount of times, they are both the mode.

Find the mode of the following sets of data.

Ewan - 5, 8, 1, 9, 2, 7, 2

2

Emmanuel - 8, 5, 9, 1, 7, 3, 5

5

Nathan - 720, 429, 429, 287, 287, 823, 429

429

Every body - 168, 163, 163, 168, 168, 163, 168

168

Every body - 25, 82, 98, 17, 12, 92, 5, 98, 12

98 & 12

To find the mode;

- 1) Look at your list of either numerical or non numerical data. The value that comes up the most is your mode.
- 2) If you have two values that come up the same amount of times, they are both the mode.



Question and  
answers

## Averages (The Median)

The **median** is the middle value of a set of data once the data has been **ordered**.

**Example 1.** Robert hit 11 balls at Grimsby driving range. The recorded distances of his drives, measured in yards, are given below. Find the median distance for his drives.

85, 125, 130, 65, 100, 70, 75, 50, 140, 95, 70

50, 65, 70, 70, 75, 85, 95, 100, 125, 130, 140



Single middle value

Ordered data

Median drive = 85 yards







Question and  
answers

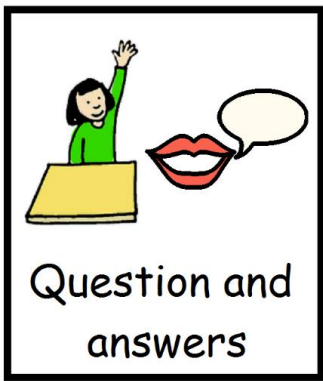
## Example

The scores from a maths test were;  
27, 14, 52, 16, 42

What is the median?

1) ~~14~~, ~~16~~, 27, ~~42~~, ~~52~~

2) What number is exactly in the middle? 27.



To find the median;

- 1) Put all of the numbers in order starting from the smallest.
- 2) Find the middle number.

Find the median of the following sets of data.

Ewan - 5, 8, 1, 9, 2, 7, 2

5

Emmanuel - 25, 82, 69, 17, 34, 92, 5,

34

Nathan - 8, 2, 9, 1, 7, 3, 5

5

Everybody - 720, 632, 730, 287, 964, 823, 429

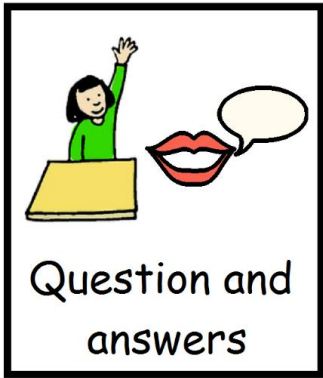
720

Everybody - 3, 5, 1, 7, 4, 9, 2,

4

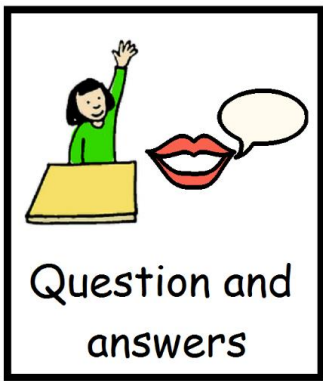
To find the median;

- 1) Put all of the numbers in order starting from the smallest.
- 2) Find the middle number.



To find the range;

- 1) Identify the highest number and lowest number in your list.
- 2) Find the value of the highest number take away the lowest number



## Example

The scores from a maths test were;  
27, 14, 58, 16, 42

What is the range?

1) What are the highest and lowest numbers?

58 and 14

2) What is the highest number, takeaway the smallest number?

$$58 - 14 = 44$$

The range is 44.

To find the range;

- 1) Identify the highest number and lowest number in your list.
- 2) Find the value of the highest number take away the lowest number

Find the range of the following sets of data.

Ewan - 81, 1, 29, 2, 73

80

Emmanuel - 85, 17, 34, 92, 5,

80

Nathan - 28, 72, 90, 10, 72

80

Everybody - 720, 632, 730, 287, 964, 823, 429

720

Everybody - 3, 5, 1, 7, 4, 9, 2,

4

To find the range;

1) Identify the highest number and lowest number in your list.

2) Find the value of the highest number take away the lowest number

Find the mode, median and range of the following data examples;

1) 2, 6, 3, 6, 5, 9, 3, 6, 4

2) 11, 63, 24, 33, 63, 21, 19, 56

3) 143, 265, 34, 76, 865, 444, 143, 222, 76, 456, 999

To find the mode;

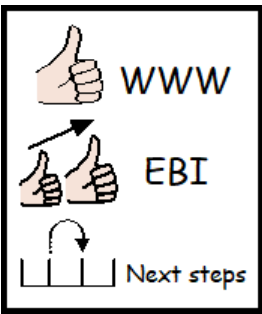
- 1) Look at your list of either numerical or non numerical data. The value that comes up the most is your mode.
- 2) If you have two values that come up the same amount of times, they are both the mode.

To find the median;

- 1) Put all of the numbers in order starting from the smallest.
- 2) Find the middle number.

To find the range;

- 1) Identify the highest number and lowest number in your list.
- 2) Find the value of the highest number take away the lowest number



LO: To be able to find the area of rectangles.

WWW

EBI



Blue Zone



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E.g. sad, sick, tired,  
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Good to go

E.g. happy, calm,  
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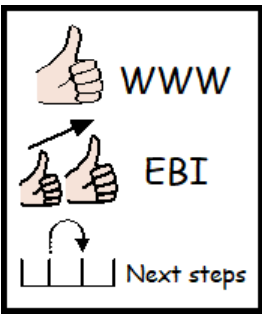
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LO: To be able to find the mode, median and range.

Follow up work

- 1) Mode Worksheet
- 2) Median worksheet
- 3) Range Worksheet

For ALL worksheets you can either print out and write your answers on, or write your answers on paper.

Please take pictures of your work and email to [jo.gould@grangepark.kent.sch.uk](mailto:jo.gould@grangepark.kent.sch.uk)