Playing together, Learning together

Year 7

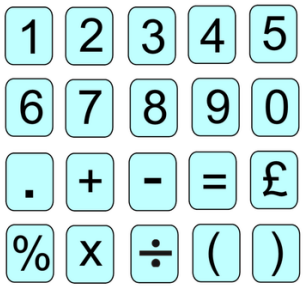
School Improvement Liverpool
Secondary Learning Team

Maths at home for Parents and Carers

This short leaflet covers the Core Concepts and ideas that your child will need to know this year. You will find suggestions for games to play, activities to do and websites to access to support you, as you support your child.

Equipment

Many of the activities included in this helpful leaflet will not require any special equipment. If you have access to online resources this will be useful but not essential when supporting your child.



Digit and maths operation cards

Mini whiteboard and pen

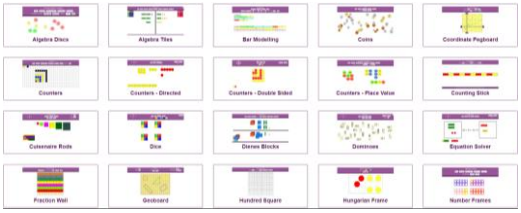
Playing cards

Dice

Websites

White Rose Maths

https://whiterosemaths.com/parent-workbooks/#year6



Online Manipulatives and Tools

https://mathsbot.com

OAK NATIONAL ACADEMY

https://classroom.thenationalacademy/subjects-by-key-stage/key-stage-3/subjects/maths

Maths words and phrases

A digit - 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are the ten digits we use in everyday numerals.

Example: The numeral 153 is made up of 3 digits ("1", "5" and "3").

The position (place) of a digit in a number determines its value. Hence the term place value.

Compose a number means put together the parts to make the whole number, so 5 thousands, 4 tens and 3 tenths is 5,040.3

Decompose a number means splitting a number up into its place value parts, so 402.103 is 4 hundreds, 2 ones, 1 tenth and 3 thousandths

Partition a number means splitting it up into its place value parts, or into other parts, so 4321 can be written as 43 hundreds and 21 ones, as well as 4 thousands,3 hundreds etc.

The main place value column headings are:

Millions	Hundred thousands	Ten thousands	thousands	Hundreds	Tens	Ones	Tenth	Hundredths	Thousandths
1,000,000	100,000	10,000	1,000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

Key Learning

Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning.

- Make a number with digit cards with and without the decimal point. What digit is in the tens column? 10 thousands column? Hundredths column?
- Pick a card from each column and answer: Make a number

10 ×	larger than	402
100 ×	smaller than	340
1,000 ×		30,487
10,000 ×		384.869
100,000 ×		23.04

- Read the following and write using figures:
  - four hundred
  - seven tenths
  - eight hundredths
  - forty five point zero one
  - nine and two hundredths
  - three thousand and six
  - two hundred and seven and nine hundredths
- Write the following numbers as words:
  - 3000
  - 50
  - 0.08
  - 0.5
  - 6.2
  - 809
  - 9032
- Add each red ringed number in turn to 4,513

0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1000	2000	3000	4000	5000	6000	7000	8000	9000

- Subtract each blue ringed number in turn from 8,965
- Write PV calculations to change all the digits in these numbers into 9s.
  6,246 3,225 2,703 5,039 4,146
- Write PV calculations to change all the digits in these numbers into 2s.
  8,793 6,846 5,839 4,850 3,675

Key Learning

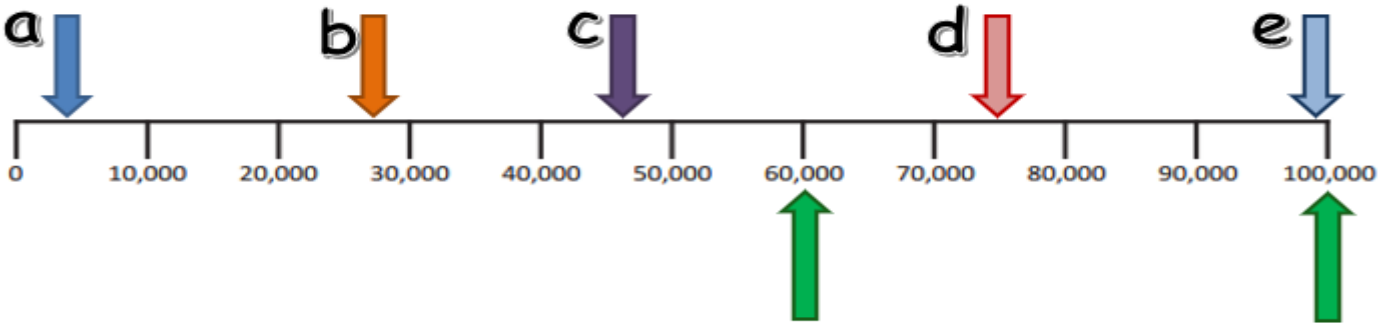
Read scales/number lines with labelled intervals divided into 2, 4, 5 & 10 equal parts.

- Use some paper or a white board. Draw a line on it. Mark a start point and an end point.

If the beginning with 10 and the end is 20, where would 15 go? Where would 18 go? How do you know? Where are other values on this line?

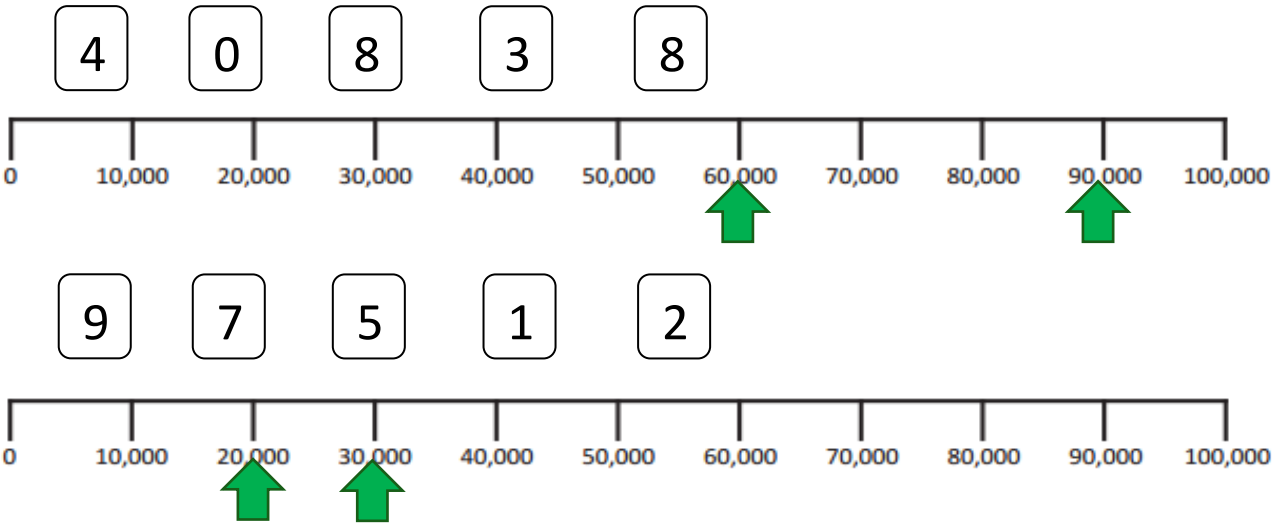
Repeat with different beginning and ending points such as 200 and 300, 0.6 and 0.7 etc.?

- Look at the scale below. What numbers are the green arrows pointing to?



Estimate values for the other arrows. Can you tell me why you came up with that estimate? Why couldn't it be ___ (eg. Orange arrow 23,867)

- Use these 5 digit cards to make a number that will go between the green arrows.



- What scales can you find in the house? Try reading from them