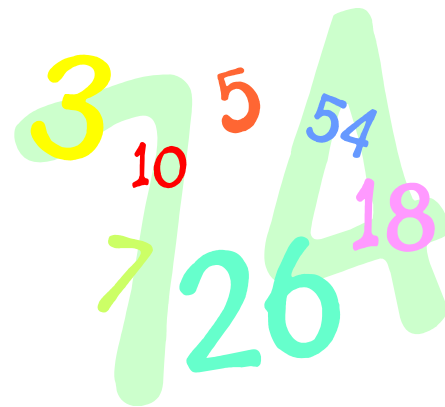
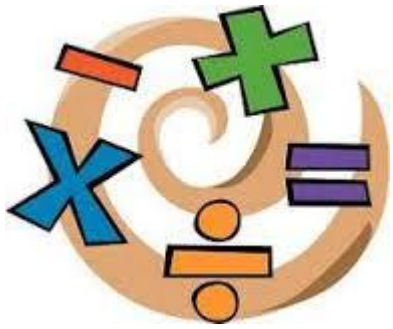




Maths Workshop

13th October 2016





Thinking is at the heart of Mathematics and therefore should be at the heart of mathematical teaching and learning.



Workshop Aims

- To gain an insight into how Maths is taught.
- To learn ways to support your children at home.
- Have opportunities to work with members of staff on a variety of maths activities.



The Maths Curriculum

Children should:

- Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **Reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.
- **Solve problems** by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Maths through the week

- At least one hour of Maths a day
- Learning times tables using tablets and Kurios
- Maths Weekly-skills
- Gap filling lesson
- Problem solving
- New learning



Number Sense

Children need to understand our number system, starting with counting numbers, building an understanding of how our numbers work and fit together. This includes exploring place value and comparing and ordering numbers then applying this understanding in different contexts.



Recalling facts

- It is important that children recognise number bonds, different pairs of numbers with the same total.

10

$7 + 3$



8

$6 + 2$

$5 + 3$



6

$3 + 3$

$5 + 4$

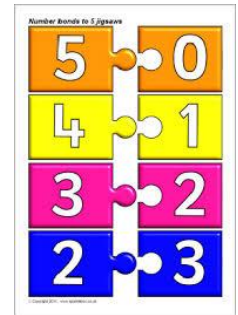
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$6 + 3$

$3 + 2$

5

$1 + 4$



$6 + 1$

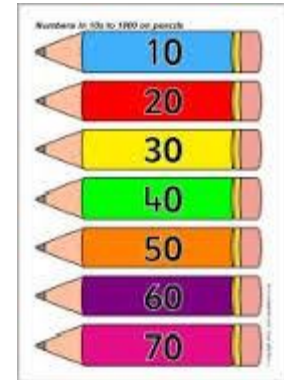
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$3 + 4$

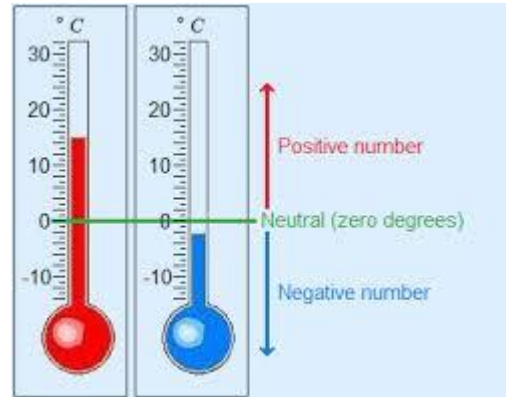


Keep Counting

- Backwards and forwards in 10s, 100s, 1000s
- Counting in decimals
- Counting in fractions
- Counting into negatives



$$\frac{1}{4} = \frac{2}{8} = \frac{4}{16}$$



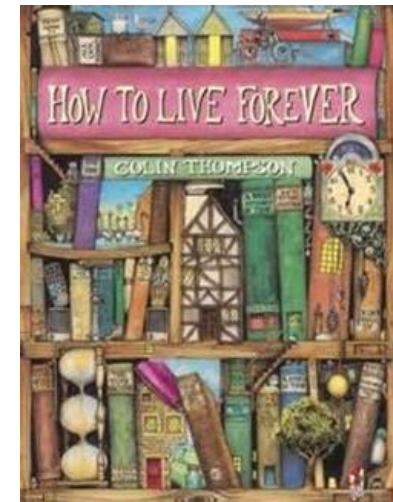
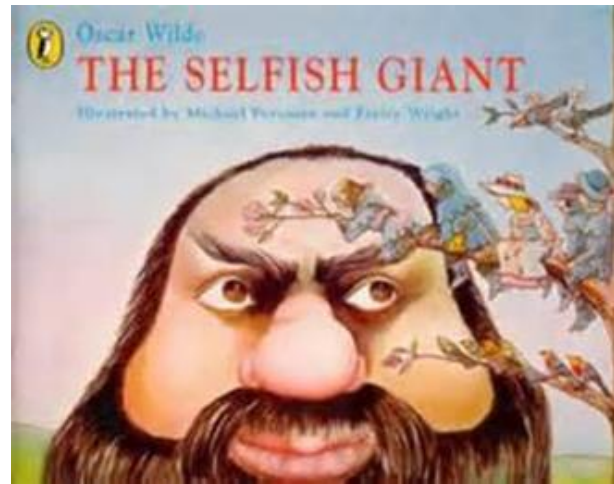
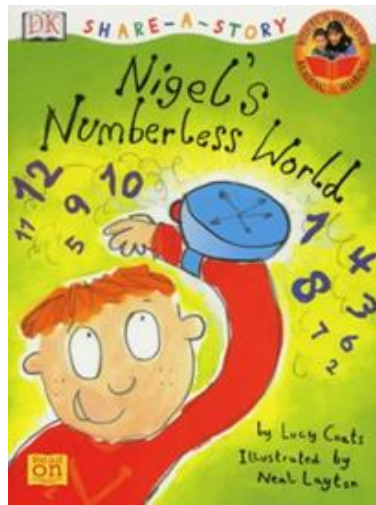
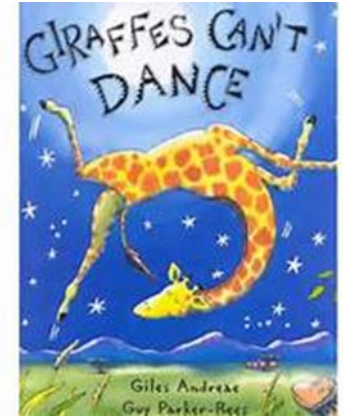
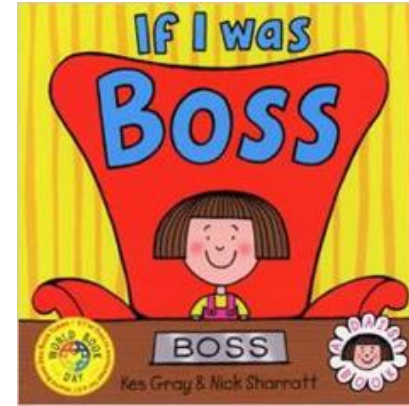
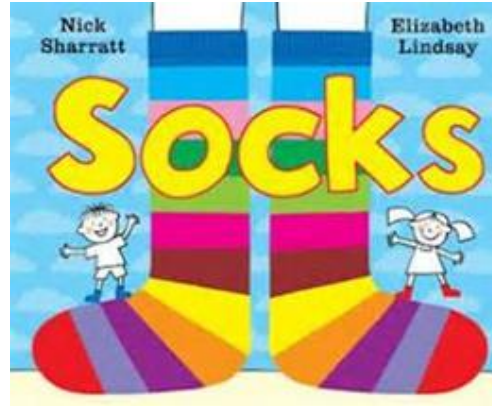
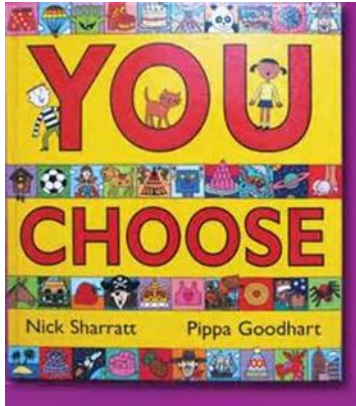
<i>Decimal</i>	<i>Words</i>	<i>Fraction</i>
0.1	1 tenth	$\frac{1}{10}$
0.01	1 hundredth	$\frac{1}{100}$
0.001	1 thousandth	$\frac{1}{1000}$

To Whom It May Concern:

Decimals matter!



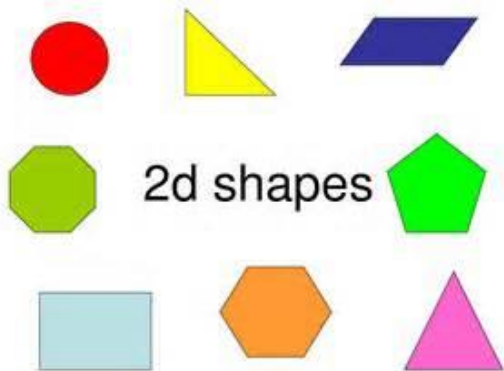
Reasoning in stories



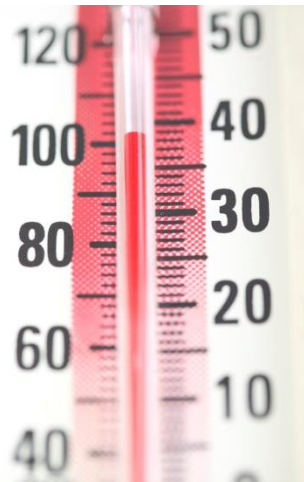
What do we have in common?



- Sort into groups – no more than two to start with
- Explain why the objects have been sorted in that way (Identify characteristics of each set)



What is the same? What is different?



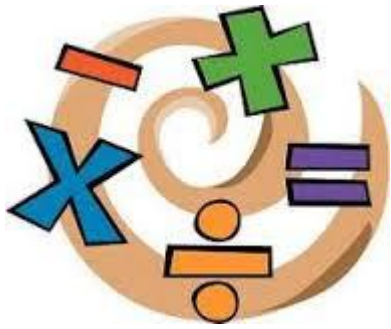
What is the same and what is different about a:

- Number line and a clock
- Number line and a thermometer

Sometimes, always or never

- When you multiply a number by ten you add a zero?





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