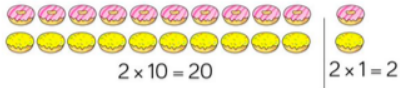


Multiplication

By the end of year 4 children are expected to be able to rapidly recall all of their tables and the inverses up to and including 12×12 .

Building on their knowledge of the 1, 10 and 2 times tables, children will explore the 11 and 12 times tables through partitioning. Encourage children to notice patterns within and between the 11 and 12 times tables.

Fill in the blanks:

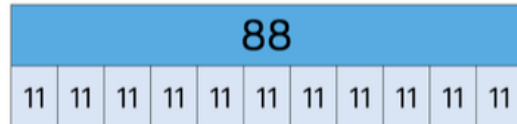


2 lots of 10 add 2 lots 1 is the same as 2 lots of _____



3 lots of 10 add 3 lots of 1 = _____ $\times 11$

Sarah used a bar model to show $88 \div 11$. Explain Sarah's mistake.

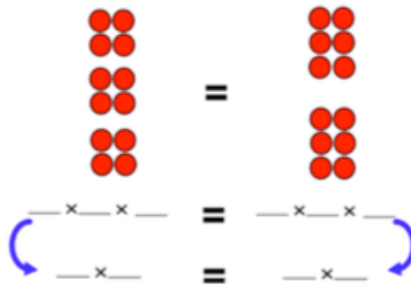


Can you represent $88 \div 11$ using a bar model correctly?

Children should know multiplication is commutative (it can be done in any order) to find the most efficient order in which to multiply three single digit numbers. For example, $2 \times 7 \times 5 = 2 \times 5 \times 7$

Complete the calculations.

Using counters, create your own examples and record the calculations.



Choose 3 single digit cards. Arrange them to create a multiplication calculation and work out the answer.

$$\square \times \square \times \square =$$

Rearrange the cards to create 2 different calculations. What do you notice about the three answers?

Decimals

- Children will be able to compare numbers with the same number of decimal places up to two decimal places. Eg. Which is larger 3.45 or 3.04? Why?
- Children will be able to round decimals with one decimal place to the nearest whole number. (if the decimal number is 5 or above the whole number goes up, if the decimal is 4 or lower the whole number stays the same) Eg. 4.5 rounds to 5, 4.4 rounds to 4
- Children will be able to recognize and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$
Eg. $\frac{1}{4} = 0.25$ $\frac{1}{2} = 0.5$ $\frac{3}{4} = 0.75$
- Children will be able to divide by 10 and 100, they should be able to identify the value of the digits. They should be able to place the number on the grid below and describe the movement of the digits when divided by 10 and 100.

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred thousandths
				.					

How many tenths make one whole? How many hundredths make one whole?

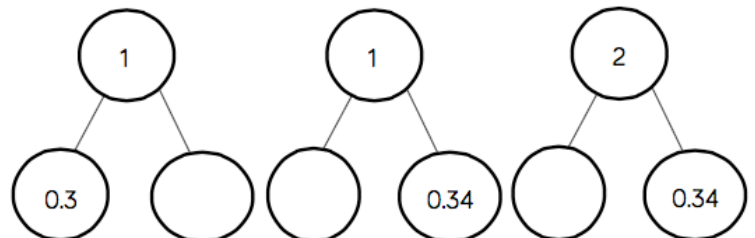
If I have ___ hundredths, how many more do I need to make one whole?

Complete the part whole models.

Here is a hundred square. How many hundredths are shaded in? How many more hundredths do you need to shade so the whole hundred square is shaded?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

hundredths + hundredths = 1 whole



Three bead strings are 0.84 m long altogether.

Would four bead strings be longer or shorter than a metre?

Explain how you know.

Make the numbers on a place value chart and write down the value of the underlined digit.

What number is represented on the place value chart?

Ones	Tenths	Hundredths
	●	● ● ●
0	1	3

There are ones, tenths and hundredths.

The number is

3.47

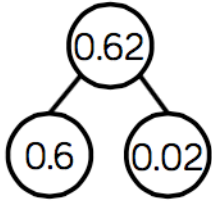
2.15

0.6

25.03

Decimals continued...

Sally says there is only one way to partition 0.62



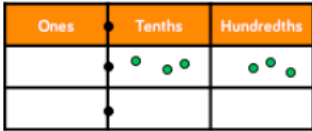
Prove Sally wrong by finding at least 3 different ways to partition 0.62

Fill in the blanks

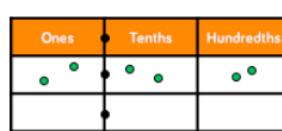
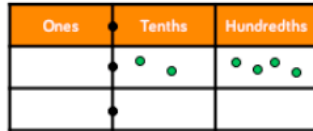
- $3.32 \bigcirc 3.23$
- $0.14 \bigcirc 0.29$
- $1.14 \bigcirc 0.64$
- $5.5 \bigcirc 5.7$
- $0.37 < 0._7$
- $2.22 > 2._2$
- $1._1 > 1._1$
- $9.9_ < 9.9_$

Write the decimals and compare using $<$ or $>$

Complete the place value chart so that the statements are correct.



\bigcirc



$<$

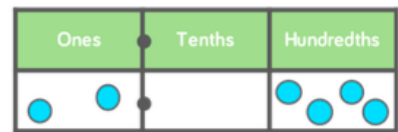
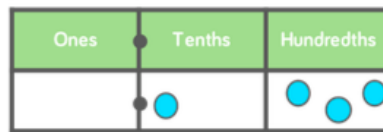
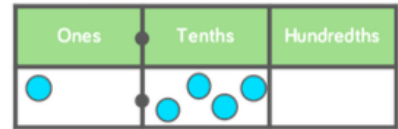
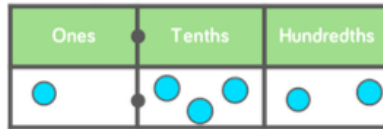


Use each digit card once to complete the statement:



Write the decimals, then place them in ascending order.

$3._ _ > _ _ _$



Can you find eight different possible solutions?

Place the numbers in descending order.

$3.32 \bigcirc 3.23 \bigcirc 2.32$

46.2 2.64 46.02 40.46

$1.11 \bigcirc 1.12 \bigcirc 1.13$

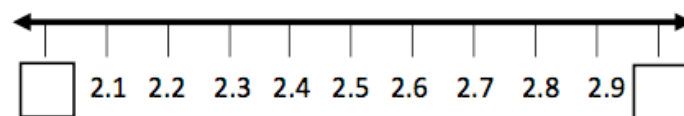
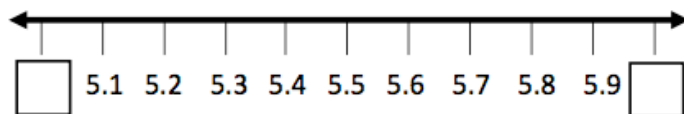
Tallulah is ordering some numbers in ascending order:



$1.2 < 0.21 < 0.32 < 0.69 < 0.84$

Can you explain her mistake?

Which whole numbers do the decimals lie between?



Circle the numbers that round up to the nearest whole number.

4.5 3.7 2.3 4.2 16.8 1.9

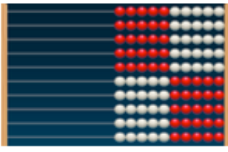
Two numbers with 1 decimal place round to 23 to the nearest whole number.

The numbers add together to make 46.

What could the two numbers be?

Decimals continued 2...

Here is a Rekenrek with 100 beads.



- out of 100 beads are red.
- out of 100 beads are white.
- $\frac{\square}{100}$ are red, and $\frac{\square}{100}$ are white.

Half of the beads are red and half a white.

$$\frac{1}{2} = \frac{50}{100} = \frac{5}{10} = 0.5 \text{ so } \frac{1}{2} \text{ is } \square \text{ as a decimal.}$$

True or False?

$$\frac{1}{2} = 1.2, \frac{1}{4} = 1.4 \text{ and } \frac{3}{4} = 3.4$$

Explain your answer.

Statistics

- Children will be able to interpret discrete and continuous data using graphs, including bar charts and time graphs.
- Children will be able to present discrete and continuous data using graphs, including bar charts and time graphs.
- Children will be able to use bar charts, pictograms, tables and other graphs to solve comparison, sum and difference problems.

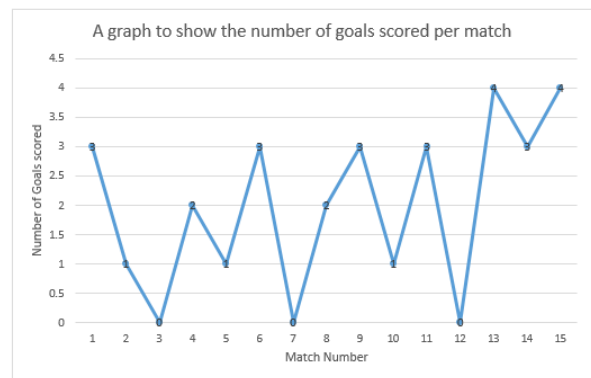
The 3 graphs and tables below show the same type of information, children should be able to compare the results in each and answer questions relating to them.

0 goals	
1 goal	
2 goals	
3 goals	
4 goals	

A pictogram to show the number of goals scored in fifteen football matches

represents 2 matches

Number of goals	Tally
0	
1	
2	
3	
4	



Measure- Time


- Convert between different units of measure [for example, kilometre to metre; hour to minute]
 1000 meters = 1km, 1000 milliliters = 1 litre, 60 seconds = 1 minute, 60 minutes = 1 hour, 24 hours = 1 day, 365 days = 1 year
- Read, write and convert time between analogue and digital 12- and 24-hour clocks.
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Measure- Money


- Children will be able to estimate, compare and calculate different measures, including money in pounds and pence.
- Children will be able to solve measure and money problems involving fractions and decimals to 2 decimal places.

Some children are converting pence in to pounds.

How much money is in each purse?



There is ___ pence
There is ___ pounds
There is £___ and ___ p
There is £___



There is ___ pence
There is ___ pounds
There is £___ and ___ p
There is £___

708p = £7.80
Claudia

£6.50 = 65p
Ruby

1,260p = £1.26
Mason

Can you spot their mistakes?

Identify which amount is the largest in each pair.

3,589p 3,598p

£53.89 £53.98

4,056p 4,506p

£54.04 £54.06

Convert these amounts to pounds and pence:

357p 307p 57p 370p

What's the same? What's different?

Order the amounts in ascending order.

130p £0.32 132p £13.20

Order the amounts in descending order.

257p £2.50 2,057p £25.07

Complete the estimate by rounding each amount and adding the rounded amounts.

Item 1	Item 2	Approximate
 £5.63	 £1.76	
 £3.05	 £11.54	

Jamal has these digits cards.



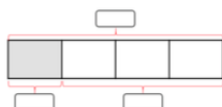
He makes a total that is more than three pounds but less than six pounds.

How many prices can he make?

Can you order your prices in ascending or descending order?

Jenny has £15 to spend at the theme park. She rides on the roller coaster which costs £4.34 She rides on the big wheel which costs £3.85 How much change will she approximately have?

Emma has £48. She spends one quarter of her money. How much does she have left?
Use the bar model to help.

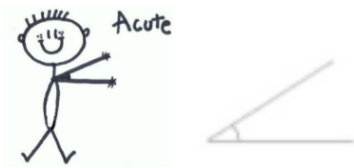


A family is going bowling.
How much does it cost for 1 child and 1 adult at peak time?
How much does it cost for 1 adult, 2 children off peak?

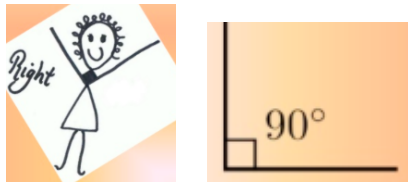
Tickets	Peak	Off Peak
Adult	£8	£6
Child	£4.20	£5.30

Geometry- Properties of shape

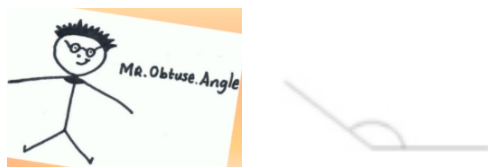
- Identify acute and obtuse angles and compare and order angles up to two right angles by size. The children remember the angles as a family:
An angle less than 90 degrees is called an acute angle, the children remember this: 'the cute small one who always wants a hug.'



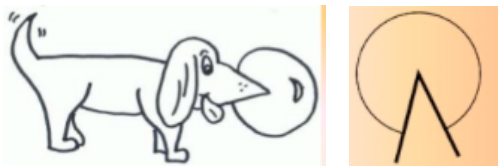
A 90 degree angle is 90 degrees and is called a right angle, the children remember this as the 'mum who is always right.'



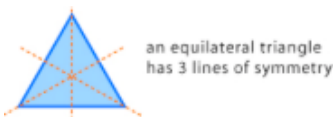
An angle between 90 degrees and 180 degrees is called an obtuse angle, this is remembered as the big Dad.



A reflex angle is larger than 180 degrees, this is remembered by the children as 'the dog Reflex.'



Identify lines of symmetry in 2-D shapes presented in different orientations.



These are some websites that could help your child:

Addition

<https://www.topmarks.co.uk/Flash.aspx?f=bingoaddition>

Subtraction

<https://www.topmarks.co.uk/maths-games/subtraction-grids>

Timetables and number bonds- Hit the Button

<https://www.topmarks.co.uk/maths-games/hit-the-button>

Timetables- Shooting bubbles

http://www.mad4maths.com/4_x_multiplication_table_math_game/

Timetables- Fishy timetables

<http://www.what2learn.com/home/examgames/maths/subtraction/>

Place Value- Place value chart

<https://www.topmarks.co.uk/>

Recognising numbers- Blast off

<https://www.topmarks.co.uk/learning-to-count/blast-off>

TimesTable RockStars

<https://ttrockstars.com>