



Reception – Spring 2

This term your child will be learning about:

Building 9 & 10

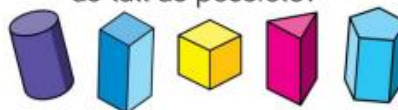
Outdoors



Provide a starting line. Ask the children to take 9 giant steps, 9 tiny steps, 9 jumps, 9 tiptoes etc. How far do they travel each time? Who can travel the furthest in 9 giant steps? Who can travel the shortest distance with 9 tiny steps?

Provide a selection of bricks in different sizes and shapes. Ask the children to make the tallest possible tower using 10 bricks. Which bricks will they choose?

How will they place their bricks to make the tower as tall as possible?

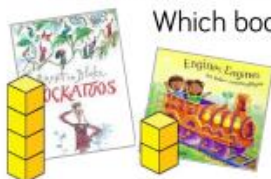


Ask questions to make comparisons for a real purpose.

Are more children having sandwiches or dinners?

Which book shall we read today?

Can you place a cube to vote for your favourite?



Provide a set of dominoes. Can the children sort them into sets of dominoes with 7 spots, more than 7 spots and fewer than 7 spots?

In pairs, play Who Has More

With the dominoes face down, choose one domino each and compare the spots. The player with the most spots can keep the pair.

Use cubes to build towers from 1 to 10.

Can the children order the towers?

What do they notice?

Can they see that each number is one more than the number before?



Other Resources



How do Dinosaurs Count to 10? - Yolen & Teague

One Gorilla - Atsuko Morozumi

Mouse Count - Ellen Stoll Walsh

Nine Naughty Kittens - Linda Jenny

Feast for 10 - Cathryn Falwell

Numberblocks Series 2 - 9 and 10

Vocabulary

- total
- more than
- same as
- what do you notice?
- how many are there?



Year 1 – Spring 2

This term your child will be learning about: **Compare length and height**

Fluency:

Use cubes to measure the length of objects around your classroom. Write a sentence for each object.

The pencil is cubes long.

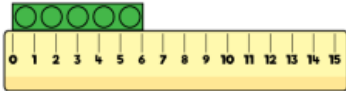
The is cubes long.



Which is longer – your maths book or a lunch box?

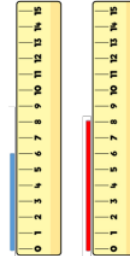
The is longer than the .

How long is the building block?



The building block is cm.

Which straw is the tallest?



The blue straw is cm tall.

The red straw is cm tall.

The straw is the tallest.

The straw is the shortest.

Problem Solving:

Rosie, Alex and Mo are comparing the height of Mrs Rose and Jack.



True or false?

The flower is 8 cubes tall.

False because the cubes should be level with the bottom of the flower. The flower is about 6 cubes tall.

- Mrs Rose is taller than Jack.
- Jack is shorter than Mrs Rose.
- Mrs Rose is taller than Jack.
- Taller is a better word than longer because we are comparing height

Vocabulary

- taller
- shorter
- longer
- measure

Key Skills: Continue to develop fluency of counting in 2's and 10's



Year 2 – Spring 2

This term your child will be learning about:

Measure & Capacity

Fluency:



The _____ is heavier than the _____.
The _____ is lighter than the _____.
The _____ is equal to the _____.

Use scales to record the mass of objects in grams.

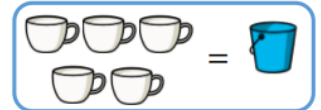


Provide a range of different containers for children to explore practically using water or sand.

Show me full containers.
Show me empty containers.
Show me almost full.
Show me almost empty.



It takes 5 to fill 1 .



How many will it take to fill 2 buckets?

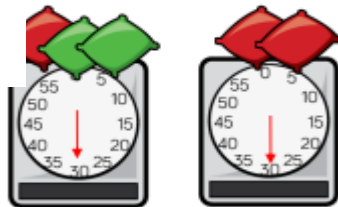
What about three buckets?

Problem Solving:

Choose a selection of different sized containers.
Decide how you will measure how much liquid each container can hold.
Order your containers from smallest to largest.
Compare the containers using <, > or =



How many cubes does the teddy bear weigh?
Explain how you know.



Which is heavier, the red or the green beanbag?

Vocabulary

mass
lighter
heavier
largest
Smallest
grams (g)
Millilitres (ml)

Key Skills: Count in multiples of 3 to 12x3 in order from 0 with growing fluency.



Year 3 – Spring 2

This term your child will be learning about:

Fractions

Fluency:

Look at the representations. Decide which show equal parts and which show unequal parts.



$$\frac{1}{2} \text{ of } 4 = \square \quad \frac{1}{2} \text{ of } 40 = \square$$

$$\frac{1}{2} \text{ of } 6 = \square \quad \frac{1}{2} \text{ of } 60 = \square$$

$$\frac{1}{2} \text{ of } 8 = \square \quad \frac{1}{2} \text{ of } 80 = \square$$

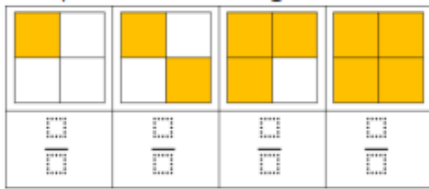
Three friends are sharing a pizza.

The pizza is split into ____ equal parts.



Each part is worth a _____.

This is the same as $\frac{\square}{\square}$



1 whole is the same as $\frac{\square}{\square}$

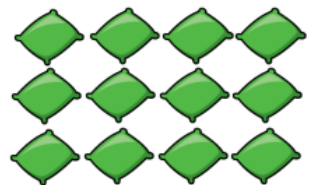
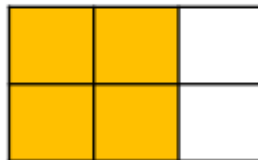
Problem Solving:

$$\frac{1}{3} \text{ of } 60 = \frac{1}{4} \text{ of } \square$$

$$\frac{1}{\square} \text{ of } 50 = \frac{1}{5} \text{ of } 25$$

This is $\frac{3}{4}$ of a set of beanbags.

Explain how the diagram shows both $\frac{2}{3}$ and $\frac{4}{6}$



How many were in the whole set?

Mathematical talk:

When the fraction is equivalent to one, what do you notice about the numerator and denominator?

How many tenths make a whole?

What does equivalent mean?

What does the denominator tell us? What does the numerator tell us?

Key Skills: Recall multiples of 4 up to 12x4 in any order, with growing fluency



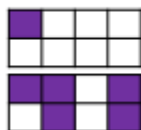
Year 4 – Spring 2

This term your child will be learning about:

Fractions

Fluency:

Complete the sentences to describe the images.



___ out of ___ equal parts are shaded.

of the shape is shaded.

A unit fraction always has a numerator of ____
 A non-unit fraction has a numerator that is ____ than ____
 An example of a unit fraction is ____
 An example of a non-unit fraction is ____

Shade $\frac{1}{5}$ of the circle.



Shade $\frac{3}{5}$ of the circle



Circle $\frac{1}{5}$ of the beanbags.

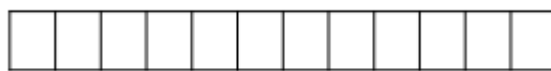


Circle $\frac{3}{5}$ of the beanbags.



What's the same and what's different about $\frac{1}{5}$ and $\frac{3}{5}$?

Using the diagram, complete the equivalent fractions.



$$\frac{1}{4} = \frac{\square}{12}$$

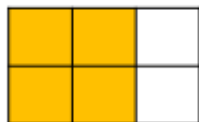
$$\frac{1}{\square} = \frac{6}{12}$$

$$\frac{2}{3} = \frac{\square}{12}$$

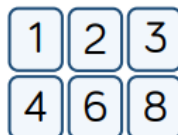
$$\frac{5}{12} = \frac{\square}{24}$$

Problem Solving:

Explain how the diagram shows both $\frac{2}{3}$ and $\frac{4}{6}$

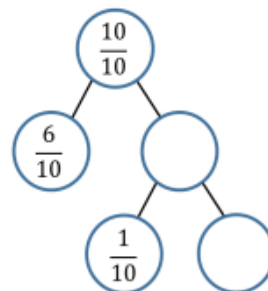


Use the digit cards to complete the equivalent fractions.



$$\frac{\square}{\square} = \frac{\square}{\square}$$

How many different ways can you find?



Mathematical Talk:

What is a unit fraction?

What is a non-unit fraction?

How many tenths make a whole?

When we get $\frac{10}{10}$ what else can we say? What comes next?

Key Skills: Fluently count in 9's in order up to 12x9



Year 5 – Spring 2

This term your child will be learning about:

Decimals & Percentages

Fluency:

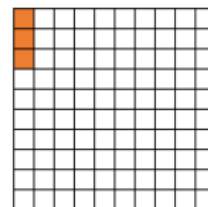
Which number is represented on the place value chart?

Ones	Tenths	Hundredths
	0.1	0.01 0.01
0	1	2

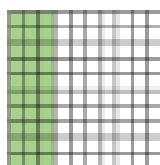
There are ____ ones, ____ tenths and ____ hundredths.

The number is ____

What fraction is shown in both representations?
Can you convert this in to a decimal?



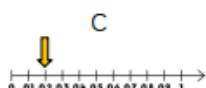
The fraction $\frac{3}{10}$ is the same as the decimal ____



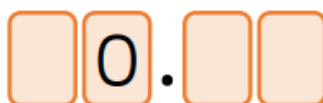
$$0.3 = \frac{3}{10} = \frac{30}{100}$$

Problem Solving:

Which of the images below is the odd one out?



Use the digits 3, 4 and 5 to complete the decimal number.



List all the possible numbers you can make.

0.394

= 3 tenths, 9 hundredths and 4 thousandths

$$= \frac{3}{10} + \frac{9}{100} + \frac{4}{1000}$$

$$= 0.3 + 0.09 + 0.004$$

Mathematical Talk:

When do we need to use zero as a place holder?

How many tenths are in a whole?

How many hundredths are there in 1 tenth?

When rounding to the nearest one decimal place, how many digits will there be after the decimal point?

Key Skills: Multiply and divide numbers mentally drawing upon known facts

If $6 \times 4 = 24$ then $60 \times 40 = 2400$ If $18 \div 3 = 6$ then $180 \div 30 = 6$

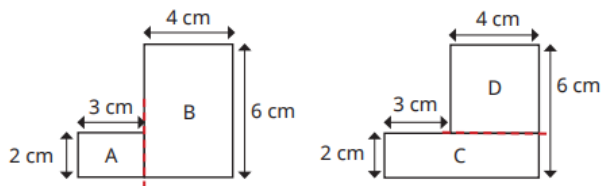


Year 6 – Spring 2

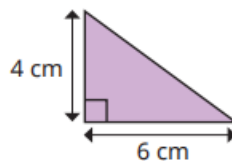
This term your child will be learning about:

Area, Perimeter & Volume

Fluency:

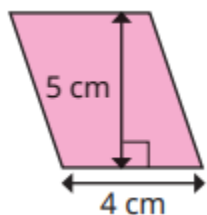


Work out the areas of the rectangles to work out the areas of the rectilinear shapes.



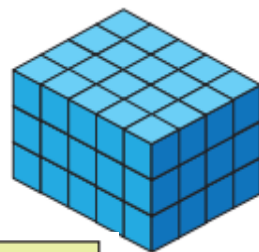
$$\text{area} = \frac{1}{2} \times \text{base} \times \text{perpendicular height}$$

$$\text{area} = \frac{1}{2} \times 6 \times 4 = \frac{1}{2} \times 24 = 12 \text{ cm}^2$$



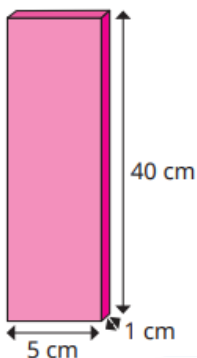
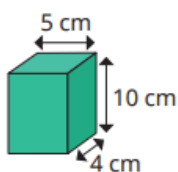
$$\begin{aligned} \text{area} &= \text{base} \times \text{perpendicular height} \\ &= 4 \text{ cm} \times 5 \text{ cm} \\ &= 20 \text{ cm}^2 \end{aligned}$$

$$\text{volume} = \text{length} \times \text{width} \times \text{height}$$



Problem Solving:

Which cuboid has the greater volume?

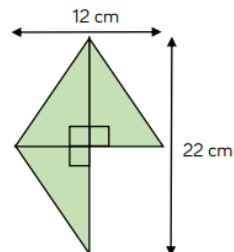


What is the same about these two triangles?

What is different?



The shape is made of three identical triangles.



What is the area of the shape?

Mathematical Talk:

Why is it useful to know your times-tables when calculating area?

How do we work out the area and perimeter of shapes? Can you show this as a formula?

What does estimate mean?

What is the relationship between the area of a rectangle and the area of a right-angled triangle?

Key Skills: Use estimation to check answers to calculations and determine an appropriate degree of accuracy