



Reception – Spring 1

This term your child will be learning about:

Alive In 5

Show the children 3 fingers – ask them how many fingers?

Can they hold up 3?

Can they hold up more than 3 fingers?

Is there more than one way to do this?

Can they hold up fewer than 3 fingers?

How many do they have?



Provide cubes in 2 different colours.

Ask the children to build a tower of 5.

Compare the towers.

What is the same? What is different?

How many different towers can you build?

What if you make towers of 4 cubes?



Play Bunny Ears



Using 2 hands to be the ears, how many ways can you show 4

or 5 fingers? Can you see what number I have made?

Can you make ears the same as mine?

Can you make the same number in a different way?

How many different ways can we find?

Children will continue to develop the understanding that all numbers are made up of smaller numbers.

Allow them to explore and notice the different compositions of 4 and 5. For example 5 can be composed of 1 and 1 and 3 or 2 and 3 or 1 and 4.



Encourage them to subitise (instantly recognise these small quantities without counting).

Encourage them to notice how numbers can be composed of 2 parts or more than 2 parts.



Small World

As the children play, prompt them to notice where they see 0

E.g. Could we park 0 cars in this car park?

If there are 5 horses and 2 fields, how many horses could be in each field?

If all 5 monkeys have fallen off the bed, how many are left on the bed?

Other Resources

A Squash and a Squeeze – Julia Donaldson

Room on the Broom – Julia Donaldson



One Elephant Came Out to Play

5 Little Monkeys Swinging in a Tree

Vocabulary

- zero
- more than
- fewer than
- compare
- what is different?
- what is the same?

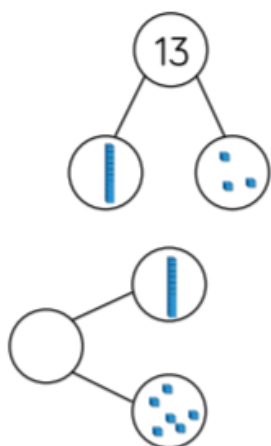


Year 1 – Spring 1

This term your child will be learning about:

Place Value within 20

Fluency – Count, read and write forwards and backwards from any number up to 20



Match the representations to the correct numeral.



12



7



10

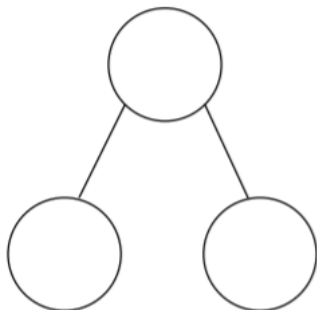
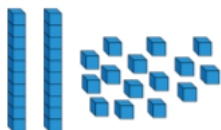
Fill in the missing numbers.

	15		17	
--	----	--	----	--

16					11
----	--	--	--	--	----

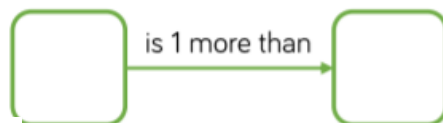
Problem Solving - Compare and order numbers

How many ways can you complete the part-whole model to show numbers up to 20, using the Base 10 equipment – you do not have to use it all.

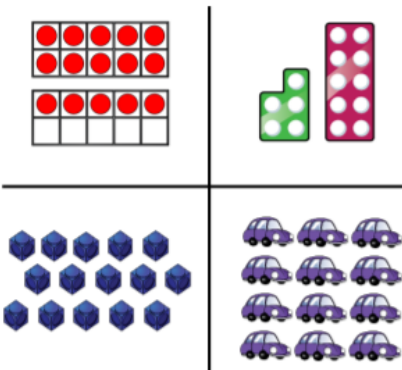


Use number cards 11 – 20

How many different ways can you complete the boxes?



Which image is the odd one out?
Why?



Vocabulary

- same
- different
- greater
- tens
- ones
- digit

Key Skills: Count in multiples of 10 in order up to 120



Year 2 – Spring 1

This term your child will be learning about:

Money

Fluency – Recognise the value of coins and notes

Can you name each coin?



Write down the value of each coin.

What is the value of each note?



Use $<$, $>$ or $=$ to compare the money.



Problem Solving - Find the correct change

I have 20 p.

My change is more than 5 p but less than 10 p.

What could I have bought?



Sweet: 7 p



Apples: 18 p



Chocolate: 12 p



Banana: 4 p

Jack selects four of these coins.



He can use the coins more than once.

What total could he make?

What is the lowest total?

What is the greatest total?

Amir buys bread and eggs.



49 p



30 p

How much does he spend?

Vocabulary

coins
pounds
notes
same
different
total

Key Skills: Recall multiples of 10 up to 12 x 10 in any order



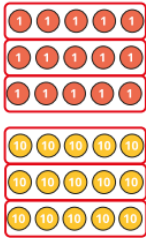
Year 3 – Spring 1

This term your child will be learning about:

Multiplication & Division

Fluency:

Use the place value counters to complete the divisions.



$15 \div 3 = \underline{\quad}$

$15 \text{ tens} \div 3 = \underline{\quad}$

Complete the number sentences and write $<$, $>$ or $=$ to compare the arrays.



$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

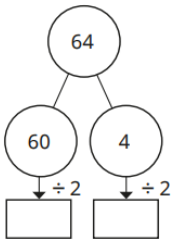
$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

What multiplication and division facts does the array show?

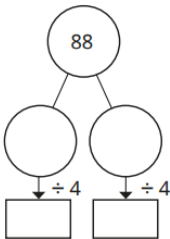


$$\begin{aligned} \underline{\quad} \times \underline{\quad} &= \underline{\quad} \\ \underline{\quad} \times \underline{\quad} &= \underline{\quad} \\ \underline{\quad} \div \underline{\quad} &= \underline{\quad} \\ \underline{\quad} \div \underline{\quad} &= \underline{\quad} \end{aligned}$$

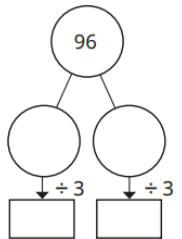
$64 \div 2 = \underline{\quad}$



$88 \div 4 = \underline{\quad}$



$96 \div 3 = \underline{\quad}$



Problem Solving:

Here are some digit cards.



Use each digit card once to create a multiplication.



Which multiplication gives an answer closest to 100?

Write $<$, $>$ or $=$ to compare the statements.

$8 \div 2 \bigcirc 80 \div 2$

$80 \div 2 \bigcirc 80 \div 4$

$60 \times 3 \bigcirc 60 \div 3$

$4 \times 80 \bigcirc 8 \times 40$

Which division is the odd one out?

$64 \div 8$

$77 \div 4$

$49 \div 6$

$65 \div 3$

How do you know?

Mathematical talk:

What is the product of $\underline{\quad}$ and $\underline{\quad}$?

Can you partition this number into tens and ones? $74 = 70 + 4$

What division facts do you know by using the fact $\underline{\quad} \times \underline{\quad} = ?$

How can you use the part-whole model to work out the division?

Key Skills: Count in multiples of 4 to 12x4 in order from 0 fluently



Year 4 – Spring 1

This term your child will be learning about:

Multiplication and Division

Fluency:

Fill in the blanks.



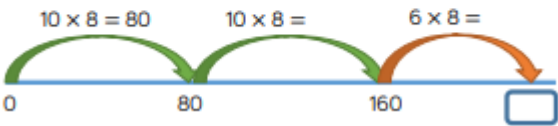
$2 \times 10 = \underline{\quad}$ $2 \times 1 = \underline{\quad}$

2 lots of 10 doughnuts = $\underline{\quad}$ 2 lots of 1 doughnut = $\underline{\quad}$

2 lots of 11 doughnuts = $\underline{\quad}$

$2 \times 10 + 2 \times 1 = 2 \times 11 = \underline{\quad}$

There are 8 classes in a school.
Each class has 26 children.
How many children are there altogether?
Complete the number line to solve the problem.



Complete the factor pairs for 12

$1 \times \square = 12$

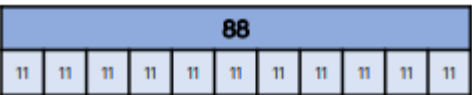
$\square \times \square = 12$

$\square \times 6 = 12$

12 has $\underline{\quad}$ factor pairs. 12 has $\underline{\quad}$ factors altogether.

Problem Solving:

Rosie uses a bar model to represent 88 divided by 11



Explain Rosie's mistake.

Can you draw a bar model to represent 88 divided by 11 correctly?

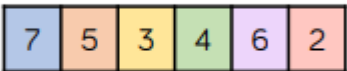
Tommy says



The greater the number, the more factors it will have.

Is Tommy correct?

Make the target number of 84 using three of the digits below.



$\square \times \square \times \square = 84$

Mathematical Talk:

If I know 11×10 is equal to 110, how can I use this to calculate 11×11 ?

Which number is a factor of every whole number?

Do factors always come in pairs?

Do whole numbers always have an even number of factors?

Key Skills: Recall multiples of 7 in any order



Year 5 – Spring 1

This term your child will be learning about: **Multiplication and Division**

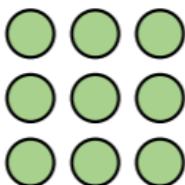
Fluency:

Circle the multiples of 5

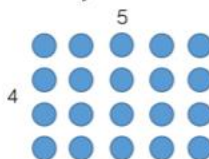
25 32 54 175 554 3000

What do you notice about the multiples of 5?

What does this array show you?
Why is this array square?



If you have twenty counters, how many different ways of arranging them can you find?



How many factors of twenty have you found by arranging your counters in different arrays?

$$36 \times 5 = 180$$

Use this fact to solve the following questions:

$$36 \times 50 = \underline{\quad}$$

$$500 \times 36 = \underline{\quad}$$

$$5 \times 360 = \underline{\quad}$$

$$360 \times 500 = \underline{\quad}$$

Problem Solving:

Dora is thinking of a two-digit number that is both a square and a cube number. What number is she thinking of?

Use the digit cards to fill in the missing digits.



Teddy says,



Factors come in pairs so all numbers must have an even number of factors.

Do you agree?

Explain your reasoning.

$$170 \div 10 = \underline{\quad}$$

$$\underline{\quad}20 \times 10 = 3\underline{\quad}00$$

$$1,8\underline{\quad}0 \div 10 = 1\underline{\quad}6$$

$$\underline{\quad}9 \times 100 = 5\underline{\quad}00$$

$$6\underline{\quad} = 6,400 \div 100$$

Mathematical Talk:

Are all the multiples of 8 multiples of 4?

Do factors always come in pairs?

What is a prime number?

What is a composite number?

Why are square numbers called 'square' numbers?

Key Skills: Recall multiples of all times tables in order up to 12 x 12



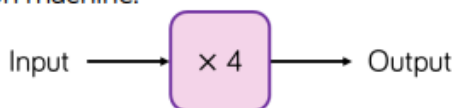
Year 6 – Spring 1

This term your child will be learning about:

Algebra

Fluency:

Here is a function machine.



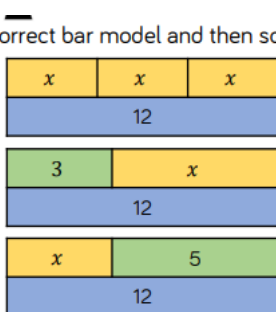
- What is the output if the input is 2?
- What is the output if the input is 7.2?
- What is the input if the output was 20?
- What is the input if the output was 22?

Match each equation to the correct bar model and then solve to find the value of x .

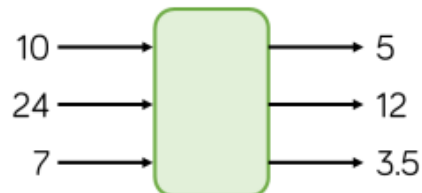
$$x + 5 = 12$$

$$3x = 12$$

$$12 = 3 + x$$



Find the missing function.



If $\star = 7$ and $\heartsuit = 5$, what is the value of:

$$\star + \heartsuit + \heartsuit$$

If $a = 7$ and $b = 5$ what is the value of:

$$a + b + b$$

Problem Solving:

Eva spends 92p on yo-yos and sweets

She buys y yo-yos costing 11p and s sweets costing 4p.

Here are two formulae.

$$p = 2a + 5$$

$$c = 10 - p$$

Can you write an equation to represent what Eva has bought?

Find the value of c when $a = 10$

The rule for making scones is use 4 times as much flour (f) as butter (b).

Which is the correct formula to represent this?

(A)

$$f = \frac{b}{4}$$

(C)

$$f = b + 4$$

(B)

$$f = 4b$$

(D)

$$4f = b$$

Mathematical Talk:

What do you think 'one-step function' means?

What do you think input and output mean?

What is the output if? What is the input if?

Are $2a + 6$ and $6 + 2a$ the same? Explain your answer

Key Skills: To be able to use division to find factors of numbers