Number and place value; addition and subtraction; multiplication and division; fractions; measurements

Year 1

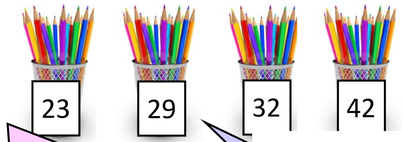
Pitch and Expectations

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

Count forwards from 80 to 110.

Count back from 105.

Count the pencils in the pot. Write a label showing how many are in the pot.



Make each pot hold one less. How many would there be?

Put one more pencil in each pot. How many would there be?

Order the pots from most to least.

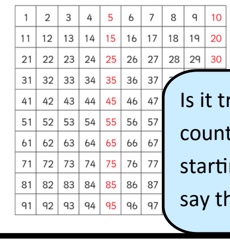
Given a number, identify 1 more or 1 less

Read and write numbers from 1 to 20 in numerals and words

Count, read and write numbers to 100 in numerals; count in multiples of 2, 5 and 10

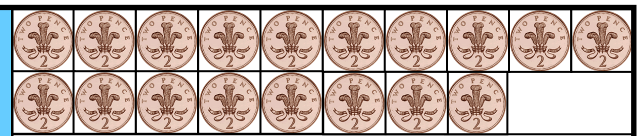
Pupils can count groups of 10 each of 2p,5p and 10p coins.

I can find all the numbers we say when we count the coins on the 100 square. I notice that the numbers have 5 ones or zero ones.



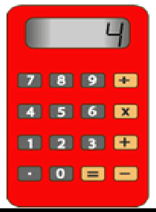
Is it true that if I count in 2s, starting from 2, I'll say the number 9?

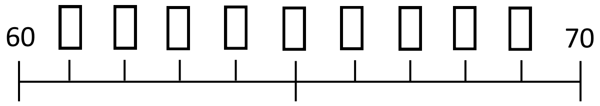
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least



Which row has the most coins? The least? How many more are there?

Pick three number cards and make the numbers with dienes. Order the numbers on the number line.

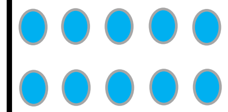




On a calculator, a child keys in 80+1 and presses ===. The partner predicts the number that will appear on the display and log the number on a number line. (Count backwards by keying in 90 –1 ====)

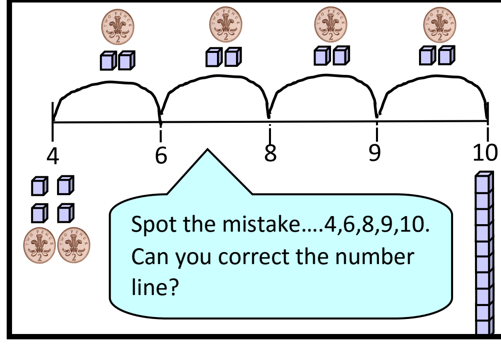
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Kieran had 5 stickers and his friend gave him 5 more. How many stickers did he have?



He had 2 lots of 5. He added 5 to another 5.

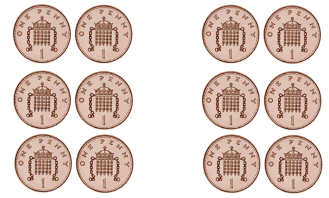
Make connections between arrays, number patterns, and counting in twos, fives and tens



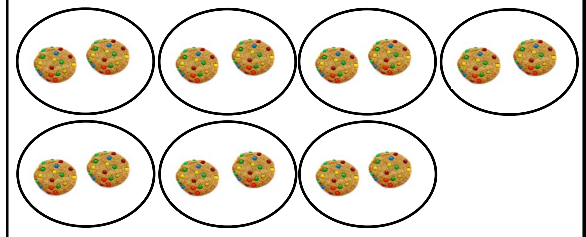
Spot the mistake....4,6,8,9,10. Can you correct the number line?

*Through grouping and sharing small quantities, pupils **begin to understand multiplication and division***

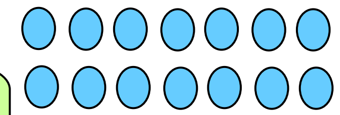
Jenny shared 12p between 2 people. How much do they each get?



Prashant had 14 cookies. He needed to put 2 cookies on each plate. How many plates did he need?

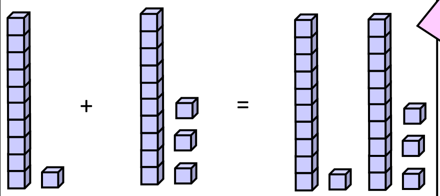


I can also show this by making arrays using coins and counters.



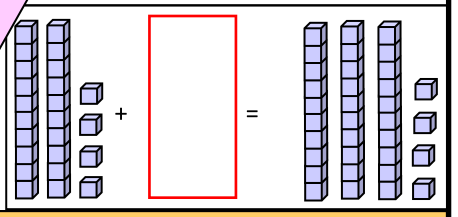
Read, write and interpret mathematical statements involving addition, subtraction and equals signs

11 + 13 = 24



I have the same number of cubes on each side of the **equals** sign. The **value is the same** on each side.

24 + ☐ = 34



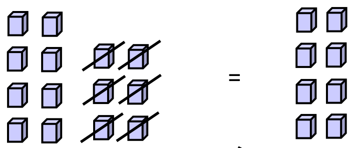
There are **fewer** cubes on this side than that side of the equals sign. I need to make each side the same **value/total** the same.

Solve problems involving term: put together, add, altogether, total, take away, distance between, more than, less than.

Represent and use bonds and related subtraction facts within 20. *Memorise and reason with number bonds to 10 and 20 in several forms.*

I'm thinking of a number. I subtract 6 from it and get 8. What was the number?

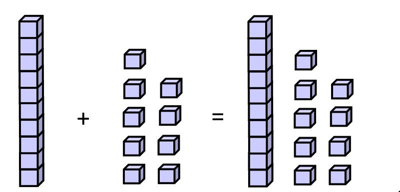
☐ - 6 = 8



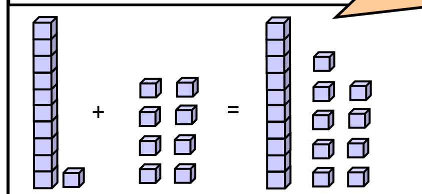
I know that there must have been 8 on both sides of the equals sign, but 6 was taken away so there must have been 8 and 6 more to start with.

Solve missing number problems.

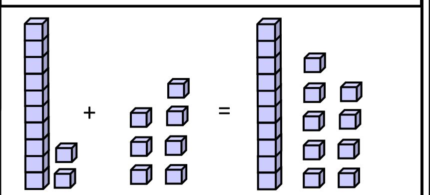
10 + 9 = 19



11 + 8 = 19



12 + 7 = 19

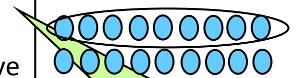


10 + 9 = 19
11 + 8 = 19
12 + 7 = 19
Continue the pattern.

I can show a pattern when I use dienes. I can move one from here to here to make that number one more and that number one less each time The total stays the same, the numbers just move.

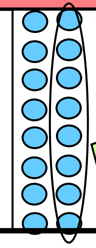
*Through grouping and sharing small quantities, pupils **begin to understand finding double and simple fractions of objects, numbers and quantities***

I think of a number and halve it and I end up with 9. What was my number?



I can work backwards: I have 9 counters and if I double it, I get 18.

16 children go swimming. Half of them wear a hat. How many wear a hat?



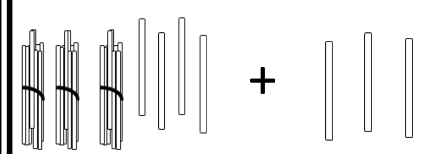
I know that half means I'm putting the counters in 2 equal groups. There are 8 in each group.

Realise the effect of adding zero.

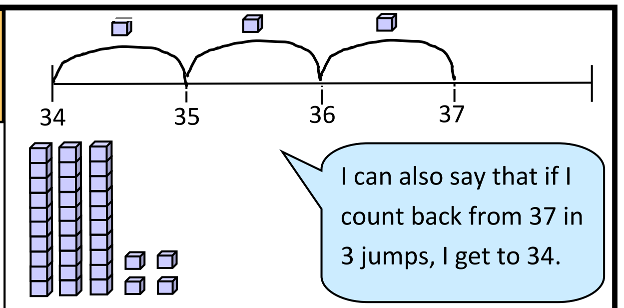
26 - ☐ = 26

Jo thinks the missing number is zero. Is he right? Prove your choice.

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations.



Pupils will be able to explain that '3 ones' added to ' 3 tens' and '4 ones' gives a **total** of 37.



I can also say that if I count back from 37 in 3 jumps, I get to 34.

Add and subtract one-digit and two-digit numbers to 20, including zero.

Make up a difference question with the answer 5.

Show three different ways of proving that 9-6=3

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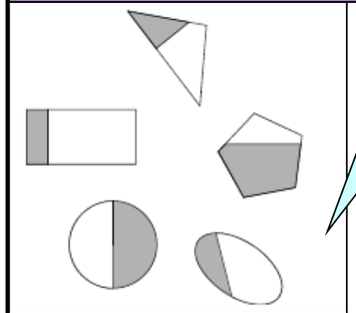
Recognise, find and name a half as one of two equal parts of an object, shape or quantity



Which shape has half blue?
Which shape has more than half blue?
How do you know?

Here is a set of 12 pencils. How many is half the set?

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Connect halves and quarters to the equal sharing and grouping of sets of objects and to measures.

Choose a number of counters. Share them equally so that there are half of them on each of the two plates. Which numbers can be shared equally and which ones can't? Why not?

Sharing 8 apples between 4 children means each child has 1 apple.
True or false?

Recognise and know the value of different denominations of coins

6p 3p 5p 8p

Which items can you pay for with 2 different coins? Which coins? How many different ways can you pay for it?

If you buy the apple and pay with a 10p coin, how much change will you get?

How much more is the orange than the banana?

How much do 3 doughnuts cost?

What does 5p, 2p, 2p and 1p total? Which coin is the same

Ella has two silver coins. How much money could that be?

Using only 3 coins, is it possible to make 5p? 10p?

Tell the time to the hour and half past the hour and draw the hands on a clock to show these times

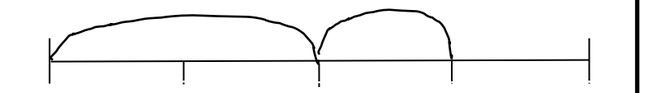
Which clock says half past 4?

Draw the time half past 2 on the blank clock.

Which clock is an hour later than yours?

Jo went to the park at 4 o'clock. He left at half past 5. How long was he at the park?

Sam left the park at 6 o'clock after spending 2 hours there. What time did he get there?



Count up in whole hours and half hours. How much time has gone by?

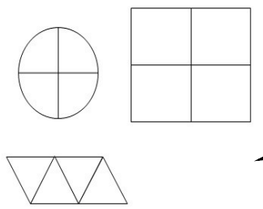
Draw both time on the analogue clocks. How much time has passed? How do you know?

Sequence events in chronological order using language such as: before and after, next, first, today, tomorrow, morning, afternoon and evening.

Here are some picture cards to look at. The pictures on the cards tell a story. Look at your cards and think what the story might be about.

Put the cards in time order.
What do you think happens next?

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity



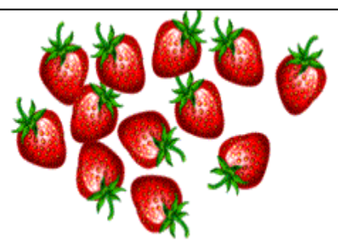
Shade a quarter of each shape. How do you know it is a quarter?

Recognise and combine halves and quarters as parts of a whole

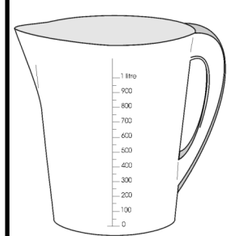
Now shade each shape so that half is shaded. What do you notice? How many parts did you have to shade to make a half?

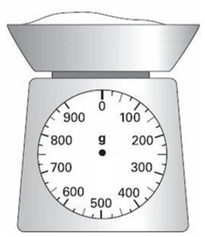
What if there were only 2 children?
What do you notice?

12 strawberries are shared equally between 4 children. How many do they get each?



Compare, describe and solve practical problems for: Lengths and heights; mass and weight; capacity and volume; time





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What objects are longer/taller or shorter than a metre?

What objects are heavier or lighter than kilogram?

Is the liquid in this container more or less than a litre?

Was that activity quicker or slower than a minute? An hour?

Recognise and use language relating to dates, including days of the week, weeks, months and years

Show the seven days of the week on a number line and add an event for each day for a particular week.
What happened on Wednesday evening? When did you go to football club?

If January is the first month of the year, what is the fourth month?

Measure and begin to record: lengths and heights; mass and weight; capacity and volume; time

How much wider is the hall than the classroom? Use metre sticks to find out.

How much more does the bucket hold than the cola bottle? Use a litre jug to find out.

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