Key Facts – Year 4
Autumn 1

Target – To know number bonds to 100

Key Vocabulary:

number bonds tens ones
add difference

Hints:
Make links between number bonds to 10
Refer to the value of the tens and ones
Identify patterns between calculations

Activities

Some examples:

60 + 40 = 100	37 + 63 = 100
40 + 60 = 100	63 + 37 = 100
100 – 40 = 60	100 – 63 = 37
100 – 60 = 40	100 – 37 = 63
75 + 25 = 100	48 + 52 = 100
25 + 75 = 100	52 + 48 = 100
100 – 25 = 75	100 – 52 = 48
100 – 75 = 25	100 – 48 = 52

Questions

- What do I add to 65 to get to 100?
- What is 34 less than 100?
- What is the difference between 100 and 65?

Fun

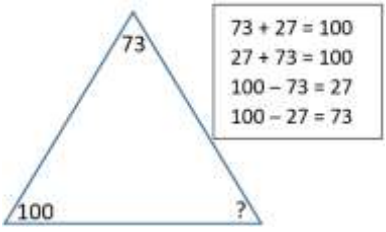
Create a 100 square, drop a counter on a number, who can say the accompany number to make 100 quickest?

When playing Snakes and Ladders ask, "how many more until you get to 100?"

Make a 100 bead string with beads, pasta, conkers etc

Key Questions

- Can children make links between number bonds to 10 and numbers bonds to 100?
- Can children make links between fact families, i.e 25+75 is the same and 75+25 and the inverse is 100-75 and 100-25 (If we know one of them we know them all)
- Can children use number bonds to 100 to help find change from £1



Key Facts – Year 4
Autumn 2

Target – To know the multiplication and division facts for 6 times tables

Key Vocabulary:

multiplication times lots of
division groups of

Hints:
Get children to see the relationship between x and ÷
Point out the 'number families' to children
Identify patterns to children
Double 3x tables to find 6 parts

Activities

6 × 1 = 6	1 × 6 = 6	6 ÷ 6 = 1	6 ÷ 1 = 6
6 × 2 = 12	2 × 6 = 12	12 ÷ 6 = 2	12 ÷ 2 = 6
6 × 3 = 18	3 × 6 = 18	18 ÷ 6 = 3	18 ÷ 3 = 6
6 × 4 = 24	4 × 6 = 24	24 ÷ 6 = 4	24 ÷ 4 = 6
6 × 5 = 30	5 × 6 = 30	30 ÷ 6 = 5	30 ÷ 5 = 6
6 × 6 = 36	6 × 6 = 36	36 ÷ 6 = 6	36 ÷ 6 = 6
6 × 7 = 42	7 × 6 = 42	42 ÷ 6 = 7	42 ÷ 7 = 6
6 × 8 = 48	8 × 6 = 48	48 ÷ 6 = 8	48 ÷ 8 = 6
6 × 9 = 54	9 × 6 = 54	54 ÷ 6 = 9	54 ÷ 9 = 6
6 × 10 = 60	10 × 6 = 60	60 ÷ 6 = 10	60 ÷ 10 = 6
6 × 11 = 66	11 × 6 = 66	66 ÷ 6 = 11	66 ÷ 11 = 6
6 × 12 = 72	12 × 6 = 72	72 ÷ 6 = 12	72 ÷ 12 = 6

Questions

What is 6 multiplied by 8?
What is 8 lots of 6?
What is 36 divided by 6?
If I shared 36 into 6 equal groups, how many would be in each group?

Fun

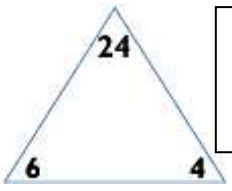
Write down the calculations in different orders. Race each other to see who can finish them first.

Make number cards 0 – 12, turn one over at a time, how quickly can you multiply that number by 6?

Make number cards with numbers on separate cards to create each calculation, turn 3 cards over can you make a calculation with them? If so you keep the cards.

Key Questions

- Can children explain why 6 x 3 = 18 and 18 ÷ 3 = 6
- Can children explain 18 ÷ 3 = 6 but 3 ÷ 18 doesn't = 6
- Can children use resources or equipment to show a multiplication and division fact



How many calculations can you make using these numbers?

I have 42 in my calculation?
Which calculation could it be?

Key Facts – Year 4
Spring 1

Target – To know the multiplication and division facts for 9 and 11 times tables

Key Vocabulary:

multiplication times lots of
division groups of

Hints:
Get children to see the relationship between x and ÷
Point out the 'number families' to children
Identify patterns to children
Use known facts, 9 x 3 is the same as 3 x 9

Activities

9 × 1 = 9	9 ÷ 9 = 1	11 × 1 = 11	11 ÷ 11 = 1
9 × 2 = 18	18 ÷ 9 = 2	11 × 2 = 22	22 ÷ 11 = 2
9 × 3 = 27	27 ÷ 9 = 3	11 × 3 = 33	33 ÷ 11 = 3
9 × 4 = 36	36 ÷ 9 = 4	11 × 4 = 44	44 ÷ 11 = 4
9 × 5 = 45	45 ÷ 9 = 5	11 × 5 = 55	55 ÷ 11 = 5
9 × 6 = 54	54 ÷ 9 = 6	11 × 6 = 66	66 ÷ 11 = 6
9 × 7 = 63	63 ÷ 9 = 7	11 × 7 = 77	77 ÷ 11 = 7
9 × 8 = 72	72 ÷ 9 = 8	11 × 8 = 88	88 ÷ 11 = 8
9 × 9 = 81	81 ÷ 9 = 9	11 × 9 = 99	99 ÷ 11 = 9
9 × 10 = 90	90 ÷ 9 = 10	11 × 10 = 110	110 ÷ 11 = 10
9 × 11 = 99	99 ÷ 9 = 11	11 × 11 = 121	121 ÷ 11 = 11
9 × 12 = 108	108 ÷ 9 = 12	11 × 12 = 132	132 ÷ 11 = 12

Questions

What is 9 multiplied by 8?
What is 8 lots of 9?
What is 121 divided by 11?
If I shared 108 into 12 equal groups, how many would be in each group?

Fun

Write down the calculations in different orders. Race each other to see who can finish them first.

Make number cards 0 – 12, turn one over at a time, how quickly can you multiply that number by 9?

Make number cards with numbers on separate cards to create each calculation, turn 3 cards over can you make a calculation with them? If so you keep the cards.

Key Questions

- Can children explain why 9 x 6 = 54 and 54 ÷ 9 = 6
- Can children explain 54 ÷ 9 = 6 but 9 ÷ 54 doesn't = 6
- Can children use resources or equipment to show a multiplication and division fact

Multiply by 10 and subtract the original number, what do you notice?
What about if you add the original number?

If you multiply a number by 9, the digits in the answer will always add up to 0.

Is this always true?

What multiplication calculation gives the same answers as 81?

Key Facts – Year 4
Spring 2

Target – To know the multiplication and division facts for 7 times tables

Key Vocabulary:

multiplication times lots of
division groups of

Hints:
Get children to see the relationship between x and ÷
Point out the 'number families' to children
Identify patterns to children
Use known facts, 7 x 4 is the same as 4 x 7

Activities

7 × 1 = 7	1 × 7 = 7	7 ÷ 7 = 1	7 ÷ 1 = 7
7 × 2 = 14	2 × 7 = 14	14 ÷ 7 = 2	14 ÷ 2 = 7
7 × 3 = 21	3 × 7 = 21	21 ÷ 7 = 3	21 ÷ 3 = 7
7 × 4 = 28	4 × 7 = 28	28 ÷ 7 = 4	28 ÷ 4 = 7
7 × 5 = 35	5 × 7 = 35	35 ÷ 7 = 5	35 ÷ 5 = 7
7 × 6 = 42	6 × 7 = 42	42 ÷ 7 = 6	42 ÷ 6 = 7
7 × 7 = 49	7 × 7 = 49	49 ÷ 7 = 7	49 ÷ 7 = 7
7 × 8 = 56	8 × 7 = 56	56 ÷ 7 = 8	56 ÷ 8 = 7
7 × 9 = 63	9 × 7 = 63	63 ÷ 7 = 9	63 ÷ 9 = 7
7 × 10 = 70	10 × 7 = 70	70 ÷ 7 = 10	70 ÷ 10 = 7
7 × 11 = 77	11 × 7 = 77	77 ÷ 7 = 11	77 ÷ 11 = 7
7 × 12 = 84	12 × 7 = 84	84 ÷ 7 = 12	84 ÷ 12 =7

Questions

What is 7 multiplied by 6?
What is 6 lots of 7?
What is 84 divided by 12?
If I shared 56 into 8 equal groups, how many would be in each group?

Fun

Counting tennis – Take it in turns to count up in 7s, saying one number at a time

Using 1 set of playing cards (each card represents a digit) how many multiples of 7 can you make using each card once?

Set up a scavenger hunt. Hide answers around an area, give children a calculation, they then find the answers

Key Questions

- Can children quickly recall multiplication and division facts – instant recall
- Can children quickly give fact families for a multiplication? i.e 7 x 8 = 56
  8 x 7 = 56
  56 ÷ 7 = 8
  56 ÷ 8 = 7

8 56 7

How many calculations can you give with these numbers?

I know that 7 x 2 = 14.

So what else do I know?

I know that 70 x 2 = 140

Key Facts – Year 4
Summer 1

Target – To recall multiplication and division facts for times tables up to 12 x 12

Key Vocabulary:

multiply divide lots of groups of inverse number families

Hints:

Get children to see the relationship between x and ÷

Point out the 'number families' to children

Identify patterns to children

Activities

12 x 12 multiplication grid

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Key Questions

- Can your child make links between different multiplication facts?
- Can your child use inverse operations?

Key Facts – Year 4
Summer 2

Target – To recognise decimal equivalents of fractions

Key Vocabulary:

tenths hundredths fractions decimals

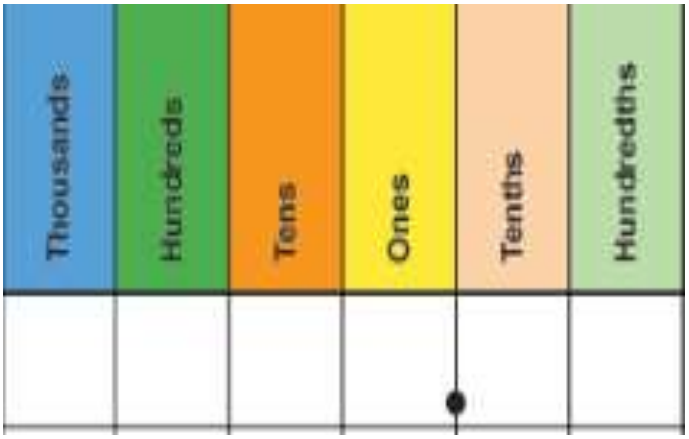
Hints:
Highlight the place value of each digit in a decimal number
Make links to decimals and monetary value

Activities

$\frac{1}{2} = 0.5$
$\frac{1}{4} = 0.25$
$\frac{3}{4} = 0.75$

$\frac{1}{10} = 0.1$
$\frac{2}{10} = 0.2$
$\frac{5}{10} = 0.5$
$\frac{6}{10} = 0.6$
$\frac{9}{10} = 0.9$

$\frac{1}{100} = 0.01$
$\frac{7}{100} = 0.07$
$\frac{21}{100} = 0.21$
$\frac{75}{100} = 0.75$
$\frac{99}{100} = 0.99$



Questions

- Show me 0.2 on a place value grid
- What is bigger 0.3 or $\frac{2}{100}$ How do you know?

Games

Put fractions and decimals on different cards use them to:
Play snap
Play dominoes
Play the memory game

Key Questions

- Can children explain the link between the value of a digit in a decimal number and a fraction?
- Can children count in tenths?

What is 0.7 as a fraction? Hmmmmm, well I know 0.7 has 7 tenths. I can write 7 tenths like this $\frac{7}{10}$

So. 0.7 must = $\frac{7}{10}$