Key Instant Recall Facts
YEAR 4 – Autumn 1

I know number bonds to 100

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly.**

Some examples:

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

Key Vocabulary

What do I **add** to 65 to make 100?

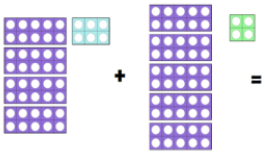
What is 100 **take away** 6?

What is 13 **less than** 100?

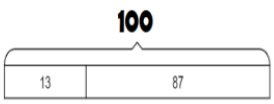
How many more than 98 is 100?

What can this look like?

Concrete:



Pictorial:



Abstract:

49 + ◯ = 100

100 – ◯ = 72

Useful Websites:

https://www.topmarks.co.uk/maths-games/hit-the-button - Number bonds to 100

https://wordwall.net/en-gb/community/number-bonds-to-100 - Various number bonds to 100 games

https://www.studyzone.tv/game275-code13fe7c386fa4ad7bb0ecdf05c8cec747

http://www.snappymaths.com/addition/make100/make100.htm

Things to try

Chants- Practice chanting the number bonds.

Everyday Objects- Gather together objects and separate them in s many different ways as possible, write the calculation to match each one.

Make a poster – We use lots of concrete, pictorial and abstract methods in school. Your child could make a poster showing different methods to make the number bonds to 100.

Use your number bonds to 10 – Think about your number bonds to 10 and how they might help you. E.g.4+6=10 therefore 40+60=100.

Key Instant Recall Facts

YEAR 4 – Autumn 2

I can recall multiplication & division facts for the 6 and 12x tables.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly.**

1 x 6 = 6	6 ÷ 6 = 1	1 x 12 =12	12 ÷ 12 = 1
2 x 6 = 12	12 ÷ 6 = 2	2 x 12 = 24	24 ÷ 12 = 2
3 x 6 = 18	18 ÷ 6 = 3	3 x 12 = 36	36 ÷ 12 = 3
4 x 6 = 24	24 ÷ 6 = 4	4 x 12 = 48	48 ÷ 12 = 4
5 x 6 = 30	30 ÷ 6 = 5	5 x 12 = 60	60 ÷ 12 = 5
6 x 6 = 36	36 ÷ 6 = 6	6 x 12 = 72	72 ÷ 12 = 6
7 x 6 = 42	42 ÷ 6 = 7	7 x 12 = 84	84 ÷ 12 = 7
8 x 6 = 48	48 ÷ 6 = 8	8 x 12 = 96	96 ÷ 12 = 8
9 x 6 = 54	54 ÷ 6 = 9	9 x 12 = 108	108 ÷ 12 = 9
10 x 6 = 60	60 ÷ 6 = 10	10 x 12 = 120	120 ÷ 12 = 10
11 x 6 = 66	66 ÷ 6 = 11	11 x 12 = 132	132 ÷ 12 = 11
12 x 6 = 72	72 ÷ 6 = 12	12 x 12 = 144	144 ÷ 12 = 12

They should be able to answer these questions in any order, including missing number questions e.g.

6 x ☐ = 72 or ☐ ÷ 6

What can this look like?

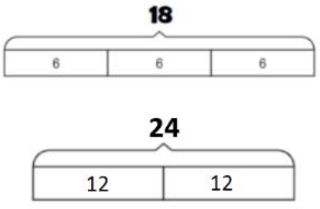
Concrete:

6 × 2 = 12

6 x ◯ = 24

◯ ÷12= 3

Pictorial:



Abstract:

Six multiplied by ____ is equal to thirty

Twelve multiplied by ___ is equal to thirty six

Things to try

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online.

Double your threes (for 6s & 6s for 12s) – Multiplying a number by 6 is the same as multiplying by 3 then doubling the answer. 7 x 3 = 21 and double 21 is 42, so 7 x 6 = 42

Buy one get three free – If your child knows one fact (e.g. 3 x 6 = 18), can they tell you the other three facts in the same fact family?

Useful Websites:

https://ttrockstars.com/ - Ask your teacher to set your TT Rockstar account to 6 and 12x tables.

www.timestables.co.uk

http://www.timestables.me.uk/

https://www.turtlediary.com/game/6-times-table.html

Key Instant Recall Facts
YEAR 4 – Spring 1

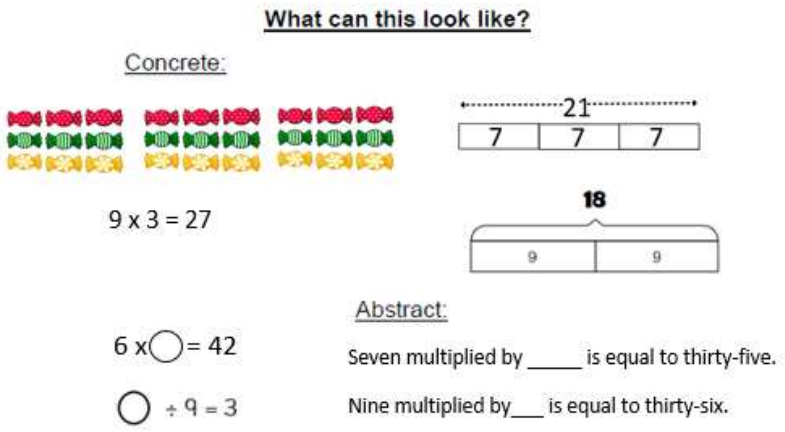
I can recall multiplication & division facts for the 7 and 9x tables.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly.**

1 x 7 = 7	7 ÷ 7 = 1	1 x 9 =9	9 ÷ 9 = 1
2 x 7 = 14	14 ÷ 7 = 2	2 x 9 = 18	18 ÷ 9 = 2
3 x 7 = 21	21 ÷ 7 = 3	3 x 9 = 27	27 ÷ 9 = 3
4 x 7 = 28	28 ÷ 7 = 4	4 x 9 = 36	36 ÷ 9 = 4
5 x 7 = 35	35 ÷ 7 = 5	5 x 9 = 45	45 ÷ 9 = 5
6 x 7 = 42	42 ÷ 7 = 6	6 x 9 = 54	54 ÷ 9 = 6
7 x 7 = 49	49 ÷ 7 = 7	7 x 9 = 63	63 ÷ 9 = 7
8 x 7 = 56	56 ÷ 7 = 8	8 x 9 = 72	72 ÷ 9 = 8
9 x 7 = 63	63 ÷ 7 = 9	9 x 9 = 81	81 ÷ 9 = 9
10 x 7 = 70	70 ÷ 7 = 10	10 x 9 = 90	90 ÷ 9 = 10
11 x 7 = 77	77 ÷ 7 = 11	11 x 9 = 99	99 ÷ 9 = 11
12 x 7 = 84	84 ÷ 7 = 12	12 x 9 = 108	108 ÷ 9 = 12

They should be able to answer these questions in any order, including missing number questions e.g.

6 x ☐ = 72 or ☐ ÷ 6



Things to Try

Chants- Practice chanting the times table.

Use 10 times table (for your 9's) – Multiply a number by 10 then subtract off the original number. E.g. 7x10=70 subtract off the original number 70-7=63 so 9x7=63

Use your other times tables – You've already learnt most of your other times tables. All of these included your 7's.

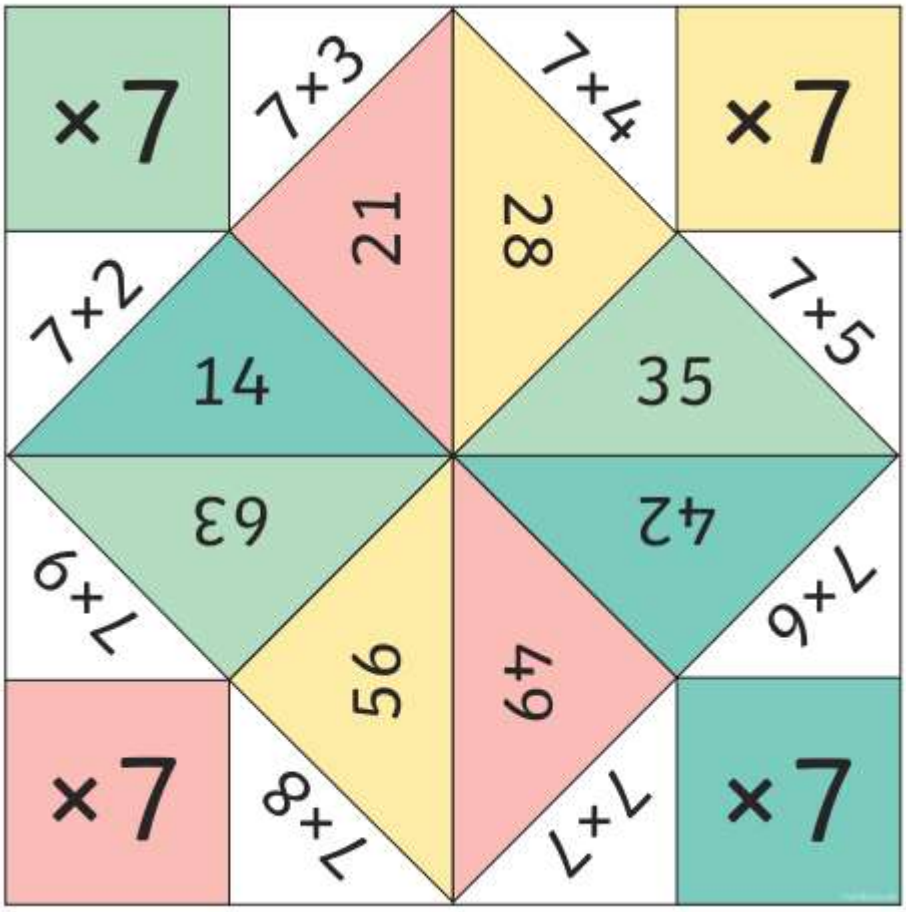
Useful Websites:

https://ttrockstars.com/ - Ask your teacher to set your TT Rockstar account to 7 and 9x tables.

www.timestables.co.uk

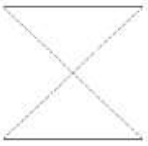
http://www.timestables.me.uk/

https://www.turtlediary.com/game/7-times-table.html

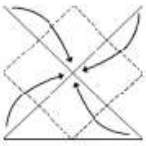


7 Times Table Fortune Teller

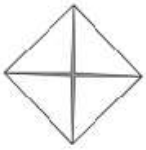
Instructions

① 

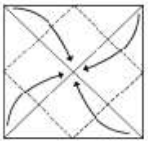
With pictures face down, fold on both diagonal lines. Unfold.

② 

Fold all four corners to the centre.

③ 

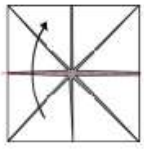
Turn paper over.

④ 

Once again, fold all corners to the centre.

⑤ 

Fold paper in half and unfold.

⑥ 

Fold in half from top to bottom. Do not unfold.

⑦ 

Slide thumbs and forefingers under the squares and move the fortune teller back and forth to play.

Key Instant Recall Facts
YEAR 4 – Spring 2

I know how to tell the time to the nearest minute on an analogue clock

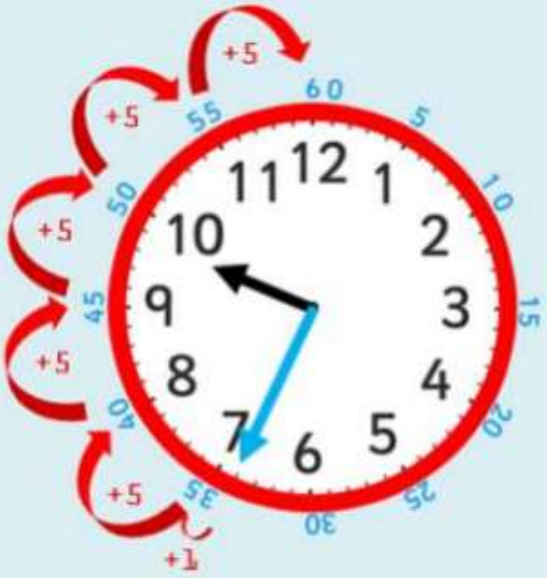
By the end of this half term, children should know how to tell the time to the nearest minute on an analogue clock. The aim is for them to recall these facts **instantly.**

Reading the time to the hour needs a little more concentration than with minutes past the hour.

A simple method is to count the blocks of 5 minutes to the hour from '0' at the top, then any more minutes there may be.

This show 5 lots of 5 minutes and 1 more minute.

What is the exact time ?



Key vocabulary and Questions

Hour hand (little hand)/minute hand (big hand) minutes/time/hours/ o'clock/quarter/ half

What time is on the clock?
What time will be in 2 hours?
Show me 2 minutes past 7 on the clock?

9 minutes past 12

Try to ensure there is an analogue clock in the house somewhere as this will be an invaluable learning aid. Talk about time as much as possible and give your child opportunities to tell the time all the time!

In Year 4, children also continue to learn Roman numerals. So looking at clocks with Roman numerals will be helpful too.

Things to Try

Paper Plate Clocks

Use paper plates to make your own clock faces using pieces of card to make the hands and a split pin to hold them together in the middle. Write the numbers around the edges and your clock is ready to use.

Hoop Clocks

Take learning outside and reinforce the concept of telling the time on an analogue clock by using a hoop as a clock face. Place pebbles or stones around the inside edges to denote each five-minute interval and use twigs as hands. Call out a time and see if your child can show you the time on the 'clock face'.

Useful Websites:

https://mathsframe.co.uk/en/resources/resource/116/telling_the_time#

https://www.iknowit.com/lessons/d-time-nearest-minute.html

https://www.visnos.com/demos/clock

Key Instant Recall Facts

YEAR 4 – Summer 1

I can multiply and divide single-digit numbers by 10 and 100

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

7 x 10 = 70	30 x 10 = 300	0.8 x 10 = 8
10 x 7 = 70	10 x 30 = 300	10 x 0.8 = 8
70 ÷ 7 = 10	300 ÷ 30 = 10	8 ÷ 0.8 = 10
70 ÷ 10 = 7	300 ÷ 10 = 30	8 ÷ 10 = 0.8
6 x 100 = 600	40 x 100 = 4000	0.2 x 10 = 2
100 x 6 = 600	100 x 40 = 4000	10 x 0.2 = 2
600 ÷ 6 = 100	4000 ÷ 40 = 100	2 ÷ 0.2 = 10
600 ÷ 100 = 6	4000 ÷ 100 = 40	2 ÷ 10 = 0.2

Key Vocabulary

What is 5 **multiplied by** 10?

What is 10 **times** 0.8?

What is 700 **divided by** 70?

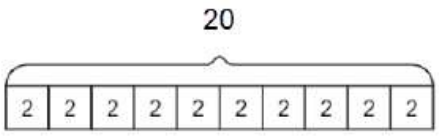
Thousands, hundreds, tens, ones, tenths , hundredths

What can this look like?

Concrete:

10 x 3 = 30

Pictorial:



2 × 10 = 20

Abstract:

8 x ◯ = 800

◯ ÷ 10 = 0.5

Things to try

It is tempting to tell children that to multiply by ten or one hundred it is just a case of adding zeroes to the end of a number. This way of thinking, however, can cause problems when they are trying to multiply and divide decimal numbers as the rule does not work for these numbers.

Why not use/draw out a place value chart like this one to help.
Remember when multiplying, the digits move to the left.
When dividing, the digits move to the right.

1000	100	10	1	.	$\frac{1}{10}$	$\frac{1}{100}$
				.		
				.		
				.		
				.		
				.		

Useful Websites:

https://www.topmarks.co.uk/Flash.aspx?f=bingotimesordivide -
Try this website for an interactive Bingo game

Key Instant Recall Facts

YEAR 4 – Summer 2

I can recall simple equivalent fractions including decimals.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts instantly.

$\frac{1}{2} = 0.5$

$\frac{1}{4} = 0.25$

$\frac{3}{4} = 0.75$

$\frac{1}{10} = 0.1$

$\frac{2}{10} = 0.2$

$\frac{5}{10} = 0.5$

$\frac{6}{10} = 0.6$

$\frac{9}{10} = 0.9$

$\frac{1}{100} = 0.01$

$\frac{7}{100} = 0.07$

$\frac{21}{100} = 0.21$

$\frac{75}{100} = 0.75$

$\frac{99}{100} = 0.99$

Key Vocabulary

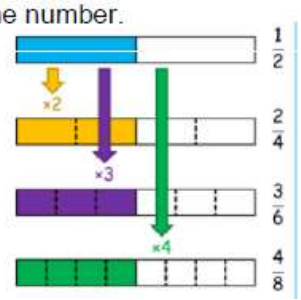
How many **tenths** is 0.8?

How many **hundredths** is 0.12?

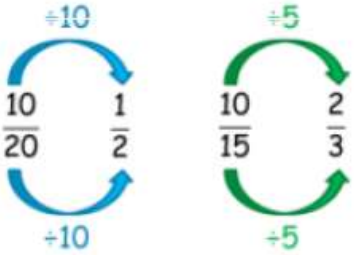
Write 0.75 as a **fraction.**

Write ¼ as a **decimal.**

You can find equivalent fractions quickly by multiplying the numerator & denominator by the same number.



You can cancel a fraction to its simplest form by dividing the numerator and denominator by the same amount.

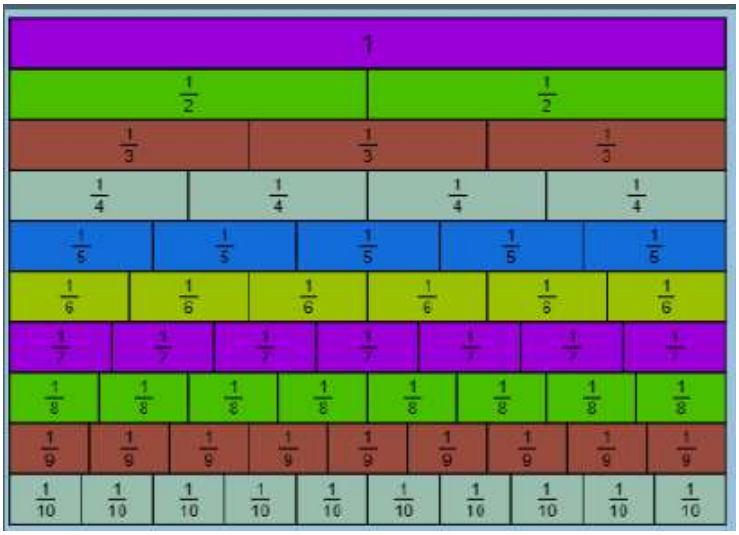


What is an **equivalent fraction** to $\frac{1}{2}$?

Is $\frac{2}{4}$ **equivalent** to $\frac{1}{2}$?

What is an **equivalent fraction** to $\frac{1}{3}$?

What is an **equivalent fraction** to $\frac{1}{5}$?



Things to try

Play games – Make some cards with pairs of equivalent fractions and decimals. Use these to play the memory game or snap. Or make your own dominoes with fractions on one side and decimals on the other.

Websites

https://phet.colorado.edu/sims/html/fractions-equality/latest/fractions-equality_en.html - Games to help understand equivalent fractions