## Autumn 1

## I know number bonds to 100 .

Some examples:

$$
\begin{array}{ll}
60+40=100 & 37+63=100 \\
40+60=100 & 63+37=100 \\
100-40=60 & 100-63=37 \\
100-60=40 & 100-37=63 \\
& \\
75+25=100 & 48+52=100 \\
25+75=100 & 52+48=100 \\
100-25=75 & 100-52=48 \\
100-75=25 & 100-48=52
\end{array}
$$

## Key Vocabulary <br> What do I add to 65 to make 100? <br> What is 100 take away 6? <br> What is 13 less than 100 ? <br> How many more than 98 is <br> 100? <br> What is the difference between 89 and 100 ?

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions e.g. $49+\bigcirc=100$ or $100-\bigcirc=72$.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day. If you would like more ideas, please speak to your child's teacher.

Buy one get three free - If your child knows one fact (e.g. $8+5=13$ ), can they tell you the other three facts in the same fact family?

Use number bonds to $\mathbf{1 0}$ - How can number bonds to 10 help you work out number bonds to 100 ?

Play games - There are missing number questions at www.conkermaths.com. See how many questions you can answer in just 90 seconds. You can also practise number bonds by searching for and playing 'Hit the Button' online.

## Autumn 2

## I know the multiplication \& division facts for $\mathbf{6}$ \& $\mathbf{1 2}$ times tables.

| $6 \times 1=6$ | $6 \div 6=1$ | $12 \times 1=12$ | $12 \div 12=1$ |
| :--- | :--- | :--- | :--- |
| $6 \times 2=12$ | $12 \div 6=2$ | $12 \times 2=24$ | $24 \div 12=2$ |
| $6 \times 3=18$ | $18 \div 6=3$ | $12 \times 3=36$ | $36 \div 12=3$ |
| $6 \times 4=24$ | $24 \div 6=4$ | $12 \times 4=48$ | $48 \div 12=4$ |
| $6 \times 5=30$ | $30 \div 6=5$ | $12 \times 5=60$ | $60 \div 12=5$ |
| $6 \times 6=36$ | $36 \div 6=6$ | $12 \times 6=72$ | $72 \div 12=6$ |
| $6 \times 7=42$ | $42 \div 6=7$ | $12 \times 7=84$ | $84 \div 12=7$ |
| $6 \times 8=48$ | $48 \div 6=8$ | $12 \times 8=96$ | $96 \div 12=8$ |
| $6 \times 9=54$ | $54 \div 6=9$ | $12 \times 9=108$ | $108 \div 12=9$ |
| $6 \times 10=60$ | $60 \div 6=10$ | $12 \times 10=120$ | $120 \div 12=10$ |
| $6 \times 11=66$ | $66 \div 6=11$ | $12 \times 11=132$ | $132 \div 12=11$ |
| $6 \times 12=72$ | $72 \div 6=12$ | $12 \times 12=144$ | $144 \div 12=12$ |

## Key Vocabulary

What is 6 multiplied by $\mathbf{1 2}$ ?
What is the product of 12 and 12 ?

What is 24 divided by 6 ?

Children should already have fast recall of the 2, 5, 10, 3, 4 and 8 times tables by the end of year 3. Please practise these first if your child is not yet confident.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

Songs and Chants - You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Buy one get three free_- If your child knows one fact (e.g. $3 \times 6=18$ ), can they tell you the other three facts in the same fact family?

Online games - Play Times Table Rockstars to practise times tables and related division facts or search for 'Hit The Button' to play timed games online.

## Spring 1

## I know the multiplication \& division facts for 9 \& 11 times tables.

| $9 \times 1=9$ | $9 \div 9=1$ | $11 \times 1=11$ | $11 \div 11=1$ |
| :--- | :---: | :--- | :--- |
| $9 \times 2=18$ | $18 \div 9=2$ | $11 \times 2=22$ | $22 \div 11=2$ |
| $9 \times 3=27$ | $27 \div 9=3$ | $11 \times 3=33$ | $33 \div 11=3$ |
| $9 \times 4=36$ | $36 \div 9=4$ | $11 \times 4=44$ | $44 \div 11=4$ |
| $9 \times 5=45$ | $45 \div 9=5$ | $11 \times 5=55$ | $55 \div 11=5$ |
| $9 \times 6=54$ | $54 \div 9=6$ | $11 \times 6=66$ | $66 \div 11=6$ |
| $9 \times 7=63$ | $63 \div 9=7$ | $11 \times 7=77$ | $77 \div 11=7$ |
| $9 \times 8=72$ | $72 \div 9=8$ | $11 \times 8=88$ | $88 \div 11=8$ |
| $9 \times 9=81$ | $81 \div 9=9$ | $11 \times 9=99$ | $99 \div 11=9$ |
| $9 \times 10=90$ | $90 \div 9=10$ | $11 \times 10=110$ | $110 \div 11=10$ |
| $9 \times 11=99$ | $99 \div 9=11$ | $11 \times 11=121$ | $121 \div 11=11$ |
| $9 \times 12=108$ | $108 \div 9=12$ | $11 \times 12=132$ | $132 \div 11=12$ |

Key Vocabulary<br>What is 8 multiplied by 9 ?<br>What is the product of 9<br>and 4?<br>What is 22 divided by 11 ?

They should be able to answer these questions in any order, including missing number questions e.g. $9 \times \bigcirc=54$ or $\bigcirc \div 9=11$.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

Look for patterns - These times tables are full of patterns for your child to find. How many can they spot?

Use your ten times table_- Multiply a number by 10 and subtract the original number (e.g. $7 \times 10-7=70-7=63$ ). What do you notice?

What do you already know? - Your child will already know many of these facts from the 2, $3,4,5,6,8$ and 10 times tables. It might be worth practising these again!

Online games - Play Times Table Rockstars to practise times tables and related division facts or search for 'Hit The Button' to play timed games online.

## Spring 2

## I can recognise decimal equivalent fractions.

$$
\begin{array}{lll}
\frac{1}{2}=0.5 & \frac{1}{10}=0.1 & \frac{1}{100}=0.01 \\
\frac{1}{4}=0.25 & \frac{2}{10}=0.2 & \frac{7}{100}=0.07 \\
\frac{3}{4}=0.75 & \frac{5}{10}=0.5 & \frac{21}{100}=0.21 \\
& \frac{6}{10}=0.6 & \frac{75}{100}=0.75 \\
& \frac{9}{10}=0.9 & \frac{99}{100}=0.99
\end{array}
$$

## Key Vocabulary

How many tenths is 0.8 ?
How many hundredths is
0.12 ?

Write 0.75 as a fraction.
Write $1 / 4$ as a decimal

Children should be able to convert between decimals and fractions for $1 / 2,1 / 4,3 / 4$ and any number of tenths and hundredths.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: start with tenths before moving on to hundredths. If you would like more ideas, please speak to your child's teacher.

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.

Summer 1
I know the multiplication \& division facts for the $\mathbf{7}$ times tables.

| $7 \times 1=7$ | $1 \times 7=7$ | $7 \div 7=1$ | $7 \div 1=7$ |
| :---: | :---: | :---: | :---: |
| $7 \times 2=14$ | $2 \times 7=14$ | $14 \div 7=2$ | $14 \div 2=7$ |
| $7 \times 3=21$ | $3 \times 7=21$ | $21 \div 7=3$ | $21 \div 3=7$ |
| $7 \times 4=28$ | $4 \times 7=28$ | $28 \div 7=4$ | $28 \div 4=7$ |
| $7 \times 5=35$ | $5 \times 7=35$ | $35 \div 7=5$ | $35 \div 5=7$ |
| $7 \times 6=42$ | $6 \times 7=42$ | $42 \div 7=6$ | $42 \div 6=7$ |
| $7 \times 7=49$ | $7 \times 7=49$ | $49 \div 7=7$ | $49 \div 7=7$ |
| $7 \times 8=56$ | $8 \times 7=56$ | $56 \div 7=8$ | $56 \div 8=7$ |
| $7 \times 9=63$ | $9 \times 7=63$ | $63 \div 7=9$ | $63 \div 9=7$ |
| $7 \times 10=70$ | $10 \times 7=70$ | $70 \div 7=10$ | $70 \div 10=7$ |
| $7 \times 11=77$ | $11 \times 7=77$ | $77 \div 7=11$ | $77 \div 11=7$ |
| $7 \times 12=84$ | $12 \times 7=84$ | $84 \div 7=12$ | $84 \div 12=7$ |

Key Vocabulary
What is 7 multiplied by 6 ?
What is 7 times 8 ?
What is the product of 7 and 3 ?
What is 84 divided by 7 ?

They should be able to answer these questions in any order, including missing number questions e.g. $7 \times \bigcirc=28$ or $\bigcirc \div 6=7$.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once:
perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

Songs and Chants - You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Order of difficulty - Ask your child to order these facts from easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

Online games - Play Times Table Rockstars to practise times tables and related division facts or search for 'Hit The Button' to play timed games online.

## Summer 2

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

| $7 \times 10=70$ | $30 \times 10=300$ | $0.8 \times 10=8$ |
| :--- | :--- | :--- |
| $10 \times 7=70$ | $10 \times 30=300$ | $10 \times 0.8=8$ |
| $70 \div 7=10$ | $300 \div 30=10$ | $8 \div 0.8=10$ |
| $70 \div 10=7$ | $300 \div 10=30$ | $8 \div 10=0.8$ |
|  |  |  |
| $6 \times 100=600$ | $40 \times 100=4000$ | $0.2 \times 10=2$ |
| $100 \times 6=600$ | $100 \times 40=4000$ | $10 \times 0.2=2$ |
| $600 \div 6=100$ | $4000 \div 40=100$ | $2 \div 0.2=10$ |
| $600 \div 100=6$ | $4000 \div 100=40$ | $2 \div 10=0.2$ |


| Key Vocabulary |
| :--- |
| What is 5 multiplied by $10 ?$ |
| What is 10 times $0.9 ?$ |
| What is 700 divided by 70? |
| hundreds, tens, ones, |
| tenths, hundredths |

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. 10 $\times \bigcirc=5$ or $\bigcirc \div 10=60$.

## Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

