## Year 3 Autumn 1 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

| KIRF this term is: $4 \times$ table and related division facts |  |  |
| :---: | :---: | :---: |
| $1 \times 4=4$ |  | $4 \div 4=1$ |
| $2 \times 4=8$ |  | $8 \div 4=2$ |
| $3 \mathrm{x} 4=12$ |  | $12 \div 4=3$ |
| $4 \times 4=16$ | 488 | $16 \div 4=4$ |
| $5 \times 4=20$ | $11{ }^{12} 1$ | $20 \div 4=5$ |
| $6 \times 4=24$ | 4010 | $24 \div 4=6$ |
| $7 \times 4=28$ | 3648484 | $28 \div 4=7$ |
| $8 \times 4=32$ | 8 | $32 \div 4=8$ |
| $9 \times 4=36$ | 28 24 | $36 \div 4=9$ |
| $10 \times 4=40$ |  | $40 \div 4=10$ |
| $11 \times 4=44$ |  | $44 \div 4=11$ |
| $12 \times 4=48$ |  | $48 \div 4=12$ |

In addition you can help by practising the following:

| Read and write 3-digit numbers |  |
| :---: | :---: |
| Number bonds to 100 in multiples of 10 | $10+90=100 \quad 30+70=100 \quad 50+50=100$ |
| Quadrilateral |  |
| Addition and subtraction facts for multiples of 100 to 1000 | $100+300=400 \quad 500+200=700 \quad 600-100=500$ |
| Double all numbers to 20 and inverse | Double 20 is 40 , Half of 26 is 13 |
| Count in $1 / 2$ past 1 | $1 / 2,1,11 / 2,2,21 / 2,3 \ldots$ |
| Counting money up to $£ 1$ |  |

## Year 3 Autumn 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

| KIRF this term is: $8 x$ table and related division facts |  |  |
| :---: | :---: | :---: |
| $1 \times 8=8$ |  | $8 \div 8=1$ |
| $2 \times 8=16$ |  | $16 \div 8=2$ |
| $3 \times 8=24$ |  | $24 \div 8=3$ |
| $4 \times 8=32$ |  | $32 \div 8=4$ |
| $5 \times 8=40$ | 881212 | $40 \div 8=5$ |
| $6 \times 8=48$ |  | $48 \div 8=6$ |
| $7 \times 8=56$ | 7298 | $56 \div 8=7$ |
| $8 \times 8=64$ | ) | $64 \div 8=8$ |
| $9 \times 8=72$ | 56 48 | $72 \div 8=9$ |
| $10 \times 8=80$ |  | $80 \div 8=10$ |
| $11 \times 8=88$ |  | $88 \div 8=11$ |
| $12 \times 8=96$ |  | $96 \div 8=12$ |

In addition you can help by practising the following:

| Value of each digit in 3-digit numbers | 6546 is worth 6005 is worth 504 is worth 4 |
| :---: | :---: |
| All number bonds to 100 | $11+89=100 \quad 32+68=100 \quad 53+47=100$ |
| Hemisphere Triangular prism |  |
| Addition and subtraction facts for multiples of 5 to 100 | $15+35=50 \quad 50+25=75 \quad 65-10=55$ |
| Double all numbers to 50 and inverse | Double 20 is 40, Half of 26 is 13 |
| Count in $1 / 4$ past 1 | $1 / 4,1 / 2,3 / 41,11 / 4,11 / 2,13 / 4,2,21 / 4,21 / 2,23 / 4,3 \ldots$ |
| Counting money past $£ 1$ |  |

## Year 3 Spring 1 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

| KIRF this term is: $3 x$ table and related division facts |  |  |
| :---: | :---: | :---: |
| $1 \times 3=3$ |  | $3 \div 3=1$ |
| $2 \times 3=6$ |  | $6 \div 3=2$ |
| $3 \times 3=9$ |  | $9 \div 3=3$ |
| $4 \times 3=12$ | 36 | $12 \div 3=4$ |
| $5 \times 3=15$ | $11{ }^{12} 1$ | $15 \div 3=5$ |
| $6 \times 3=18$ |  | $18 \div 3=6$ |
| $7 \times 3=21$ | 27.930 | $21 \div 3=7$ |
| $8 \times 3=24$ | ) | $24 \div 3=8$ |
| $9 \times 3=27$ | 2118 | $27 \div 3=9$ |
| $10 \times 3=30$ |  | $30 \div 3=10$ |
| $11 \times 3=33$ |  | $33 \div 3=11$ |
| $12 \times 3=36$ |  | $36 \div 3=12$ |

In addition you can help by practising the following:

| Find 10 more / less than a 3-digit number | 10 less is 294 | 304 | 10 more is 314 |
| :---: | :---: | :---: | :---: |
| Number bonds to $100$ | $28+$ | $28 \frac{\square}{3}$ | $100$ |
| Parallel Perpendicular |  |  |  |
| Addition and subtraction facts for number pairs with a total of 100 | $\begin{gathered} 34+66=100 \\ 100-66=34 \\ 100-34=66 \end{gathered}$ | $\begin{gathered} 23+77=100 \\ 100-77=23 \\ 100-23=77 \end{gathered}$ | $\begin{gathered} 98+2=100 \\ 100-2=98 \\ 100-98=2 \end{gathered}$ |
| Double multiples of 10 to 500 | Double 50 is 100 , double 120 is 240 |  |  |
| 3 quarters and 2 thirds |  |  |  |
| Change from $£ 1$ | Costs 34 p Pay $£ 1$ Change is 66 p |  |  |

## Year 3 Spring 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

> KIRF this term is:
> Number bonds to 100 $1+99=100 \quad 2+98=100$ $3+97=100 \ldots 48+52=100$ $49+51=100 \quad 50+50=100$

Please learn these facts with their inverses e.g. $100-7=93$ and commutative pairs e.g. $8+92$ is the same as $92+8$

In addition you can help by practising the following:


## Year 3 Summer 1 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

KIRF this term is:

$$
\begin{array}{lll}
20+30=50 & 20+40=60 & 20+50=70 \\
20+60=80 & 20+70=90 & 30+40=70 \\
30+50=80 & 30+60=90 & 40+50=90
\end{array}
$$

In addition you can help by practising the following:


## Year 3 Summer 2 KIRFs

Key Instant Recall Facts (KIRFs) are designed to support the development of the mental skills that underpin much of the maths work in school. Instant recall facts help enormously with mental agility within maths lessons.

$$
\begin{aligned}
& \text { KIRF this term is: Number bonds to multiples of } 10 \\
& \begin{array}{ll}
1+89=90 & 2+88=90 \text { etc. } \\
1+79=80 & 2+78=80 \text { etc. } \\
1+69=70 & 2+68=70 \text { etc. } \\
1+59=60 & 2+58=60 \text { etc. } \\
1+49=50 & 2+48=50 \text { etc. } \\
1+39=40 & 2+38=40 \text { etc. } \\
1+29=30 & 2+28=30 \text { etc. }
\end{array} .
\end{aligned}
$$

In addition you can help by practising the following:

| Acute and obtuse angles |  |
| :---: | :---: |
| Count in 50s | $50,100,150,200,250,300,350 \ldots$ |
| Add and subtract mentally 3 digit and 100s | $469-200=269 \quad 624+300=924$ |
| Halve multiples of 100 to 5000 | Half of 500 is 250 Half of 600 is 300 |
| $3 x$ <br> table and related division facts | $1 \times 3=3$ $2 \times 3=6$ $3 \times 3=9$ $4 \times 3=12$ <br> $5 \times 3=15$ $6 \times 3=18$ $7 \times 3=21$ $8 \times 3=24$ <br> $9 \times 3=27$ $10 \times 3=30$ $11 \times 3=33$ $12 \times 3=36$ <br> $3 \div 3=1$ $6 \div 3=2$ $9 \div 3=3$ $12 \div 3=4$ <br> $15 \div 3=5$ $18 \div 3=6$ $21 \div 3=7$ $24 \div 3=8$ <br> $27 \div 3=9$ $30 \div 3=10$ $33 \div 3=11$ $36 \div 3=12$ |
| Recognise non unit fractions small denominator |  |
| Change from other multiple of 10 up to $£ 1$ | Cost 54 p, paid 60 p so $6 p$ change Cost 72 p, paid 90 p so 18 p change |

