

Year 1 KIRFs	Examples
I can count in 1s within boundaries (Ext. Count back)	Can say 1, 2, 3, 4, 5, 6, 7, 8, 9 Can say 11, 12...19 21, 22...29 Can say 91, 92... 99
I can count in 10s to 100 (Ext. Count back)	Can say 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 Can answer "What comes after 60?" etc
I can count in 1s across boundaries (Ext. Count back)	Can say 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11... Can say 18, 19, 20, 21, 22... 68, 69, 70, 71, 72...
I can count in 2s to 20 (Ext. Count back)	Can say 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 Can answer "What comes after 14?" etc
I can count in 5s (Ext. Count back)	Can say 5, 10, 15, 20, 25.....80, 85, 90, 95, 100 Can answer "What comes after 45?" etc
I know all of the pairs of numbers that make 5	5 = 0+5 5 = 1+4 5 = 2+3 5 = 3+2 5 = 4+1 5 = 5+0
I know all of the pairs of numbers that make 10	0+10=10 1+9=10 10 = 2+8 3+7=10 10 = 4+6 5+5=10 10 = 6+4 7+3=10 10 = 8+2 9+1=10
I know all of the pairs of numbers that make 20	0+20=20 1 + 9 = 10, so 1+19 = 20 2 + 8 = 10, so 2 +18 = 20 3 + 7 = 10, so 3 + 17 = 20 4 + 6 = 10, so 4 + 16 = 20 5 + 5 = 10,...
I know all odd and even numbers up to 20	Can say 1, 3, 5, 7, 9, 11, 13, 15, 17, 19 are odd Can say 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 are even
I know all doubles to double 5	1+1=2 double 2 = 4 3+3=6 double 4 = 8 5+5=10
I know all doubles to double 10	double 6 = 12 7+7=14 double 8 = 16 9+9=18 double 10 = 20
I know the halves of all even numbers to 10	Half of 2=1 Half of 4=2 Half of 6=3 Half of 8=4 Half of 10=5
I know the days of week in order	Can say Monday to Sunday in order. Can say the days in a 'loop' starting at any point: Thursday, Friday, Saturday...

Year 2 KIRFs	Examples
All of 2x table facts 1x to 12x in random order	1x2=2 2x2=4 3x2=6 2x4=8 5x2=10 2x6=12 7x2=14 2x8=16 9x2=18 2x10=20 11x2=22 2x12=24
Count in 10s across boundaries (forwards & back)	10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120... 180, 190, 200, 210, 220... 780, 790, 800, 810, 820...
All of 10x table facts 1x to 12x in random order	1x10=0 10x2=20 3x10=30 10x4=40 5x10=50 10x6=60 7x10=70 10x8=80 9x10=90 10x10=100 11x10=110 12x10=120
All of 5x table facts 1x to 12x in random order	1x5=5 2x5=10 5x3=15 4x5=20 5x5=25 5x6=30 7x5=35 5x8=40 9x5=45 5x10=50 11x5=55 12x5=60
I know all of the subtraction facts from 10	10-0=10 9=10-1 10-2=8 7=10-3 10-4=6 5=10-5 10-6=4 3=10-7 10-8=2 1=10-9
I know all of the subtraction facts from 20	20-19=1 20-18=2 20-17=3 20-16=4 20-15=5... ...and so on to.... 20-3=17 20-2=18 20-1=19 20-0=20
I know the halves of all odd numbers to 10	Half of 1= a half Half of 3= 1 ½ Half of 5=2 1/2 Half of 7=3 1/2 etc
I know all the multiples of ten that are addition pairs to 100	100+0=100 90+10=100 80+20=100 70+30=100 60+40=100 ...and so on to... 20+80=100 10+90=100 20+80=100
I know the doubles of multiples of 10 up to 50	Double 10=20 Two times 20=40 Double 30=60 Two times 40=80 Double 50=100
I know the doubles of multiples of 5 up to 50	Double 5=10 Two times 10=20 Double 15=30 Two times 20=40 ...and so on to..... Double 40=80 Two times 45=90 Double 50=100
I know the halves of multiples of 10 up to 100 (Tens digit even)	Half of 20 40 ÷ 2 Half of 60 80 ÷ 2 Half of 100
I know the halves of multiples of 10 up to 100 (Tens digit odd)	Half of 10 30 ÷ 2 Half of 50 70 ÷ 2 Half of 90
I know the doubles of 2 digit numbers ending in 1, 2, 3 or 4 to 50	Double 11, 12, 13, 14 Double 21, 22, 23, 24 Double 31, 32, 33, 34 Double 41, 42, 43, 44
I know the inverse for all of the 2, 10 & 5 times table facts	2÷2=1 2 = 4÷2 6÷2=3... 10÷10=1 2 = 20÷10 30÷10=3... 5÷5=1 2 = 10÷5 15÷5=3

Year 3 KIRFs	Examples
I know that $0.5 = \frac{1}{2}$	$0.5 = \frac{1}{2}$ $1.5 = 1\frac{1}{2}$ $2\frac{1}{2} = 2.5...$
I can convert between cm and mm	E.g. 7cm = 70mm 90mm = 9cm 27cm = 270mm 37mm = 3.7cm
I know all of the 3 times table facts	All of 3x table facts 1x to 12x in random order
I know all of the 4 times table facts	All of 4x table facts 1x to 12x in random order
I know all of the 8 times table facts	All of 8x table facts 1x to 12x in random order
I know how to use known number facts to solve problems with bigger numbers	E.g. $4 \times 2 = 8$, so $4 \times 20 = 80$ $12 \div 3 = 4$, so $1200 \div 3 = 400$ $3 + 7 = 10$, so $300 + 700 = 1000...$
I know the inverse for all of the 3 times table facts	$3 \div 3 = 1$ $6 \div 3 = 2$ $9 \div 3 = 3$ $12 \div 3 = 4$ $15 \div 3 = 5$ $18 \div 3 = 6$ $21 \div 3 = 7$ $24 \div 3 = 8$ $27 \div 3 = 9$ $30 \div 3 = 10$ $33 \div 3 = 11$ $36 \div 3 = 12$
I know the inverse for all of the 4 times table facts	$4 \div 4 = 1$ $8 \div 4 = 2$ $12 \div 4 = 3$ $16 \div 4 = 4$ $20 \div 4 = 5$ $24 \div 4 = 6$ $28 \div 4 = 7$, $32 \div 4 = 8$ $36 \div 4 = 9$ $40 \div 4 = 10$ $44 \div 4 = 11$ $48 \div 4 = 12$
I know the inverse for all of the 8 times table facts	$8 \div 8 = 1$ $16 \div 8 = 2$ $24 \div 8 = 3$ $32 \div 8 = 4$ $40 \div 8 = 5$ $48 \div 8 = 6$ $56 \div 8 = 7$, $64 \div 8 = 8$ $72 \div 8 = 9$ $80 \div 8 = 10$ $88 \div 8 = 11$ $96 \div 8 = 12$

Year 4 KIRFs	Examples
I know all of the 11 times table facts	All of 11x table facts 1x to 12x in random order
I know all of the 6 times table facts	All of 6x table facts 1x to 12x in random order
I know all of the 12 times table facts	All of 12x table facts 1x to 12x in random order
I know all of the 7 times table facts	All of 7x table facts 1x to 12x in random order
I know all of the 9 times table facts	All of 9x table facts 1x to 12x in random order
I can multiply a decimal (with 1d.p.) by 10	Eg $1.2 \times 10 = 12$ $4.6 \times 10 = 46$ $8.2 \times 10 = 82$ $12.5 \times 10 = 125$ $73.9 \times 10 = 739$ etc
I can multiply any whole number up to 100 by 10	Eg $4 \times 10 = 40$ $35 \times 10 = 350$ $62 \times 10 = 620$ $83 \times 10 = 830$ $99 \times 10 = 990$ etc
I can multiply any whole number up to 100 by 100	Eg $3 \times 100 = 300$ $46 \times 100 = 4600$ $78 \times 100 = 7800$ $99 \times 100 = 9900$ etc
I can divide any whole number up to 100 by 10	Eg $3 \div 10 = 0.3$ $34 \div 10 = 3.4$ $62 \div 10 = 6.2$ $77 \div 10 = 7.7$ $99 \div 10 = 9.9$ etc
I can divide any whole number up to 100 by 100	Eg $5 \div 100 = 0.05$ $28 \div 100 = 0.28$ $57 \div 100 = 0.57$ $81 \div 100 = 0.81$ $99 \div 100 = 0.99$ etc
I know all of the decimal pairs to 1 (to 1 decimal place)	$0.1 + 0.9 = 1$ $0.2 + 0.8 = 1$ $0.3 + 0.7 = 1$ $0.4 + 0.6 = 1$ $0.5 + 0.5 = 1$ $0.6 + 0.4 = 1$ $0.7 + 0.3 = 1$ $0.8 + 0.2 = 1$ $0.9 + 0.1 = 1$
I can convert between pounds (£) and pence (p)	E.g. 235p = £2.35 89p = £0.89 £9.04 = 904p...
I know the inverse for all of the 11 times table facts	$11 \div 11 = 1$ $22 \div 11 = 2$ $33 \div 11 = 3$ $44 \div 11 = 4$ $55 \div 11 = 5$ $66 \div 11 = 6$ $77 \div 11 = 7$ $88 \div 11 = 8$ $99 \div 11 = 9$ $110 \div 11 = 10$ $121 \div 11 = 11$ $132 \div 11 = 12$
I know the inverse for all of the 6 times table facts	$6 \div 6 = 1$ $12 \div 6 = 2$ $18 \div 6 = 3$ $24 \div 6 = 4$ $30 \div 6 = 5$ $36 \div 6 = 6$ $42 \div 6 = 7$
I know the inverse for all of the 12 times table facts	$12 \div 12 = 1$ $24 \div 12 = 2$ $36 \div 12 = 3$ $48 \div 12 = 4$ $60 \div 12 = 5$ $72 \div 12 = 6$ $84 \div 12 = 7$
I know the inverse for all of the 7 times table facts	$7 \div 7 = 1$ $14 \div 7 = 2$ $21 \div 7 = 3$ $28 \div 7 = 4$ $35 \div 7 = 5$ $42 \div 7 = 6$ $49 \div 7 = 7$ $56 \div 7 = 8$ $63 \div 7 = 9$ $70 \div 7 = 10$ $77 \div 7 = 11$ $84 \div 7 = 12$
I know the inverse for all of the 9 times table facts	$9 \div 9 = 1$ $18 \div 9 = 2$ $27 \div 9 = 3$ $36 \div 9 = 4$ $45 \div 9 = 5$ $54 \div 9 = 6$ $63 \div 9 = 7$ $72 \div 9 = 8$ $81 \div 9 = 9$ $90 \div 9 = 10$ $99 \div 9 = 11$ $108 \div 9 = 12$

Year 5 KIRFs	Examples
I know all of my times tables and corresponding divisions	I can answer any question from the tables 2x, 10x, 5x, 3x, 4x, 9x, 11x, 6x, 7x, 8x, 12x
I can multiply any whole number to 100 by 1000	Eg $4 \times 1000 = 4000$ $25 \times 1000 = 25000$ $59 \times 1000 = 59000$ $99 \times 1000 = 99000$ etc
I can divide any whole number to 100 by a 1000	Eg $7 \div 1000 = 0.007$ $45 \div 1000 = 0.045$ $61 \div 1000 = 0.061$ $99 \div 1000 = 0.099$
I can convert between m and km, & mm and m	E.g. $3450\text{m} = 3.45\text{km}$ $7.025\text{km} = 7025\text{m}$ $8\text{m} = 8000\text{mm}$ $539\text{mm} = 0.539\text{m}...$
I know that $0.5 = \frac{1}{2}$, $0.25 = \frac{1}{4}$ & $0.75 = \frac{3}{4}$	E.g. $3.5 = 3 \frac{1}{2}$ $6 \frac{1}{4} = 6.25$ $9.75 = 9 \frac{3}{4} ...$
I know that $0.5 / \frac{1}{2} = 50\%$, $0.25 / \frac{1}{4} = 25\%$ $0.75 / \frac{3}{4} = 75\%$	E.g. $75\% = \frac{3}{4}$ $0.25 = 25\%$ $\frac{1}{2} = 50\% ...$
I know all of the decimal pairs to 10 (to 1 decimal place)	$1.0 + 9.0 = 10$ $1.1 + 8.9 = 10$ $1.2 + 8.8 = 10$ $1.3 + 8.7 = 10$...and so on... $2.9 + 7.1 = 10$ $3.0 + 7.0 = 10$...and so on to... $9.7 + 0.3 = 10$ $9.8 + 0.2 = 10$ $9.9 + 0.1 = 10$
I can X a decimal (to 2 d.p.) by 10 / divide a number with a ones digit by 10	$0.3 \times 10 = 3$ $10 \times 0.24 = 2.4$ $0.07 \times 10 = 0.7$... $8 \div 10 = 0.8$ $26 \div 10 = 2.6$ $342 \div 10 = 34.2$...
I can X a decimal (to 2 d.p.) by 100 / divide a 2-digit or 1 digit number by 100	$100 \times 0.9 = 90$ $0.56 \times 100 = 56$ $100 \times 0.08 = 8$... $70 \div 100 = 0.7$ $91 \div 100 = 0.91$ $5 \div 100 = 0.05$
I can X a decimal (to 2 d.p.) by 1000 / divide a 3, 2 or 1-digit number by 1000	$0.5 \times 1000 = 500$ $1000 \times 0.48 = 480$ $0.09 \times 1000 = 90$... $400 \div 1000 = 0.4$ $750 \div 1000 = 0.75$ $30 \div 1000 = 0.03$
I can count in 25s to 500	Can say 25, 50, 75, 100, 125...and so on to...450,475, 500 Can answer "What comes after 325?" etc
I know all prime numbers to 10	2, 3, 5, 7 Can answer "What is the next prime number after 3?"
I know all square numbers to 12x12	$1 \times 1 = 1$ $2 \times 2 = 4$ $3 \times 3 = 9$ $4 \times 4 = 16$ $5 \times 5 = 25$ $6 \times 6 = 36$ $7 \times 7 = 49$ $8 \times 8 = 64$ $9 \times 9 = 81$ $10 \times 10 = 100$ $11 \times 11 = 121$ $12 \times 12 = 144$
I know the square roots of all numbers to 144	Square root of 1=1 Square root of 4=2 Square root of 9=3 Square root of 16=4 ...and so on to... Square root of 121=11 Square root of 144=12

Year 6 KIRFs	Examples
I know all of my times tables and corresponding divisions	I can answer any question from the tables 2x, 10x, 5x, 3x, 4x, 9x, 11x, 6x, 7x, 8x, 12x
I know all prime numbers to 20	2, 3, 5, 7, 11, 13, 17, 19 Can answer "What is the next prime number after 11?"
I know the cubes of all numbers up to 5	$1 \times 1 \times 1 = 1$ $2 \times 2 \times 2 = 8$ $3 \times 3 \times 3 = 27$ $4 \times 4 \times 4 = 64$ $5 \times 5 \times 5 = 125$
I can convert between units of measurement	$100\text{cm} = 1\text{m}$ so $320\text{cm} = 3.2\text{m}$ etc $1\text{km} = 1000\text{m}$ so $453\text{km} = 453000\text{m}$ etc
I can convert fractions with denominators of 10 or 100 into decimals	$1/10 = 0.1$ $3/10 = 0.3$ $7/10 = 0.7$ $1/100 = 0.01$ $5/100 = 0.05$ $12/100 = 0.12$ $74/100 = 0.74$
I can convert simple fractions into percentages and decimals	Eg $\frac{1}{2} = 50\% = 0.5$ $\frac{1}{4} = 25\% = 0.25$ $1/3 = 33.3\% = 0.33$ $1/5 = 20\% = 0.2$ etc
I can find percentages of amounts using division	E.g. 10% by $\div 10$ 1% by $\div 100$ 50% by $\div 2$ 25% by $\div 4$ 20 % by $\div 5$ 10% of 230 1% of 8300 50% of 42 25% of 320 20% of 360