St Silas
Church of England Primary Academy
A member of CIDARI

Year 5: 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.**

0.6+0.4=1	3.7+6.3=10
0.4+0.6=1	6.3+3.7=10
1-0.6=0.4	10-6.3=3.7
1-0.4=0.6	10-3.7=6.3
0.75+0.25=1	4.8+5.2=10
0.25+0.75=1	5.2+4.8=10
1-0.25=0.75	10-5.2=4.8
1-0.75=0.25	10-4.8=5.2

This list includes **SOME** of the facts that children should know. There are many other combinations which make 1 and 10 and children should know them all. Children should also be able to answer missing number questions such as 0.49+___=1 or ___+7.2=10

Key Vocabulary

What do I **add** to 0.8 to make 1?
What is 1 **take away** 0.06?
What is 1.3 **less than** 10?
How many more than 9.2 is 10?
What is the **difference** between 0.92 and 1?

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Buy one get three free: If your child knows one fact (eg. 2.8+7.2=10), can they tell you the other three facts in that family?

Use number bonds to 10: Do bonds to 10 and 100 help? Are there any connections?

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Year 5: Autumn 2
I can recognise decimal and fraction equivalents.

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

½=0.5	1/10=0.1	1/100=0.01
¼=0.25	2/10=0.2	7/100=0.07
¾=0.75	5/10=0.5	21/100=0.21
	6/10=0.6	75/100=0.75
	9/10=0.9	

This list includes **SOME** of the facts that children should know. Children should be able to recognise the decimal equivalent of **ANY** number of tenths and **ANY** number of hundredths.

Key Vocabulary

How many **tenths** is 0.8?
How many **hundredths** is 0.12?
What could 0.75 be as a **fraction?** Are there any other **fractions** equivalent to 0.75?
What is ¼ as a **decimal?**

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst walking to school or during a car journey? You don't need to practise them all at once: If you would like more ideas, please see your child's class teacher.

Play test the parent: Can your child test you on the facts? Get some questions deliberately wrong to see if your child spots your 'mistake.'

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Year 5: Spring 1
I can recall metric conversions.
By the end of this half term, children should know the following facts**.** The aim is for them to recall these facts **instantly.**

1 kilogram = 1000 grams   1kg=1000g

1 kilometre =1000 metres   1km=1000m
1 metre = 100 centimetres   1m=100cm
1 metre = 1000 millimetres   1m=1000mm
1 centimetre = 10 millimetres   1cm=10mm

1 litre = 1000 millilitres   1l=1000ml

Children should also be able to apply this knowledge to answer questions such as: how many metres in 1½ km? Or, how many litres is 4500ml?

Key Vocabulary (and abbreviations)

Kilogram = kg
Gram = g
Kilometre = km
Metre = m
Centimetre = cm
Millimetre = mm
Litre = l
Millilitre = ml

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Look at the prefixes to the words: Can your child work out the meanings of the prefixes *kilo-, centi- and milli?* What other words begin with these prefixes?

How far? Can you work out some unusual measurements? Eg. How tall are you in millimetres? How far is it to London in metres?

Year 5: Spring 2
I can identify prime and composite numbers up to 20.

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

A **prime number** is any number with only two factors, 1 and itself.

The following are **prime numbers** up to 20:
2,3,5,7,11,13,17,19.

A **composite number** is any number that is divisible by other numbers as well as itself and 1. It has more than two factors.

The following are **composite numbers** up to 20:
4,6,8,9,10,12,14,15,16,18,20.

Key Vocabulary

Prime number
Composite number
Factor
Multiple
Divisible by

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Using mathematical vocabulary: It is very important that your child uses mathematical vocabulary correctly. Choose a number between 2 and 20. How many correct statements can your child make about this number using the vocabulary above?

Sorting activities: Can your child sort all the numbers from 2 to 20 into groups using the vocabulary above as the group headings?

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Year 5: Summer 1
I can recall square numbers up to 12².

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

1²=1x1=1	√1=1
2²=2x2=4	√4=2
3²=3x3=9	√9=3
4²=4x4=16	√16=4
5²=5x5=25	√25=5
6²=6x6=36	√36=6
7²=7x7=49	√49=7
8²=8x8=64	√64=8
9²=9x9=81	√81=9
10²=10x10=100	√100=10
11²=11x11=121	√121=11
12²=12x12=144	√144=12

Key Vocabulary

What is 8 **squared**?
What is 7 **multiplied by itself**?
What is the **square root** of 144?
Is 81 a **square number**?

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Cycling squares: At www.nrich.maths.org/1151 there is a challenge involving square numbers. Can you complete it and create your own examples?

Year 5: Summer 2
I can find factor pairs for a number.

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

Children should know all of the multiplication and division facts up to 12x12 by now. When given a number the children should be able to state all the factor pairs for that given number. Eg:

3x8   6x4

24

1x24   2x12

36x1   18x2

36   6x6

4x9   3x12
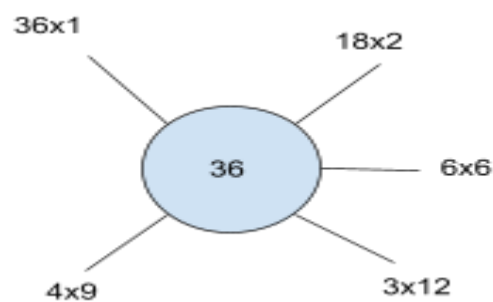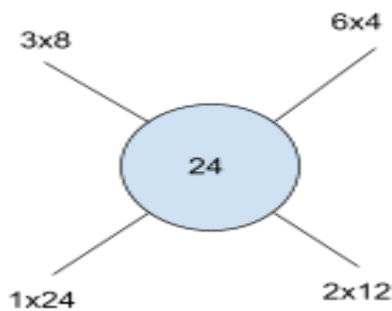
Key Vocabulary

Can you find a **factor** of 28?
Find two numbers whose **product** is 20.
I know that 6 is a **factor** of 72 because 6x12=72.

Top Tips:
The secret to success is practising little and often. Use your time wisely. Can you practise these KIRFs whilst 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 see your child's class teacher.

Think of a question: One player thinks of a times table question (Eg. 4x12=48) and states the ANSWER but not the question. The other partner has to guess the original question.