Optional Topic Homework

How it works:

You will get four house points for handing in one of the Topic tasks by Friday 8th January 2027. You can present your homework in the style of your choice.



- Make your own switch.
- Design your own circuit.
- Design an electronic game and draw the circuit.
- Make an electrical safety poster.
- Conduct a search around your home to find battery-operated and mains-operated appliances.
- Find out about a renewable source of electricity, such as wind power or solar power.
- Research the person who founded electricity.
- An idea of your own linked to our topic.

Great places to visit that are not too far away. Check for booking before travelling:

Thinktank:

www.birminghammuseums.org.uk/thinktank

Year 4

Topic Homework

Autumn 2

Our Science Topic is Electricity

Useful Google searches:

BBC KS2 Bitesize Circuits

Primary Homework Help Electricty

DK Find Out Electricity

Year 4 Autumn 2 Spellings Group 2

How it works:

These are the spellings your child will see each week on Spelling Shed. Each Friday your child will see a new list of spellings to learn at home. A dictation will take place the following Wednesday to test how well your child has learned their spellings. Your child's spelling score will be sent home in the back of their CGP homework book.

Week 1 Words ending -ation	Week 2 Words ending in -ly	Week 3 Words ending in -lly	Week 4 ch makes sh sound	Week 5 Challenge words	Week 6 Words ending in -sion	Week 7 Words ending in -ous
determination	sadly	usually	chef	favourite	expansion	poisonous
observation	nervously	finally	chalet	complete	tension	dangerous
sensation	happily	beautifully	machine	continue	comprehension	tremendous
combination	bravely	thoughtfully	brochure	experiment	explosion	enormous
adoration	gently	wonderfully	parachute	February	erosion	jealous
exploration	proudly	carefully	chute	naughty	invasion	precious
child	Christmas	climb	could	material	door	every
children	class	clothes	cold	knowledge	even	everybody
question	actual	circle	experience	remember	length	perhaps
special	breathe	disappear	history	famous	notice	probably

Dear parent/carers

As part of our development of maths fluency and number recall, we have a Key Instant Recall Fact (KIRF) focus each half term for each year group. These are number facts the children need to recall fluently. In school, within the mental maths sessions, one objective will be practised for each half term in order for children to really embed and learn the facts quickly and deeply.

In order for the children to practise these at home as well, we are providing you with an information sheet, which explains the KIRF in more detail, with examples of what it looks like, games to play and websites to visit. The idea is that you can help them recall the facts little and often and work with us to ensure our children are as fluent with recalling number facts as they can be.

Many thanks,

Mrs Pickering -Ernst

Assistant Headteacher and Maths Lead

KIRF's Key Stage Two Overview

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Three	Multiplication and division facts for 3 times table	Counting in 4's and 8's	Multiplication and division facts for 4 times table	Multiplication and division facts for 8 times table	Use known multiplication facts to find facts scaled by 10 *For example:* *5 x 3 = 15* *50 x 3 = 150*	Number bonds to 100
Four	Multiplication and division facts for 6 times table	Multiplication and division facts for 9 times table	Multiplication and division facts for 7 times table	Multiplication and division facts for 12 times tables	Multiplication and division facts for 11 times tables	Use known multiplication facts to find facts scaled by 100 *For example:* *5 x 3 = 15* *so 500 x 3 = 1500*
Five	Multiplication and division facts for all numbers up to 12 x 12	Use known multiplication facts to find facts scaled by tenths **or** hundredths *For example:* *5 x 3 = 15* *0.5 x 3 = 1.5*	Factors pairs of whole numbers (recognising prime numbers to 20)	Decimal pairs to 1 *For example:* *0.7 + 0.3 = 1* *0.12 + 0.82= 1*	Square numbers and the number squared	Doubles and halves of numbers to 100
Six	Multiplication and division facts for all numbers up to 12 x 12	Multiply and divide numbers by 10, 100 and 1000 up to 3 decimal places	Use known multiplication facts to derive facts scaled by tens, tenths **and** hundredths *For example:* *5 x 3 = 15* *0.5 x 30 = 15*	Common multiples and factors pairs of whole numbers	Recall prime numbers to 20 and know prime numbers to 100	Doubles and halves of numbers to 1000

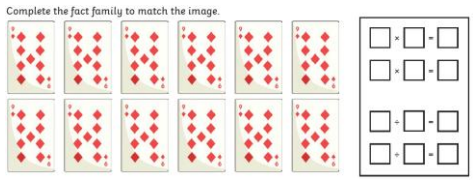
Key Instant Recall Facts (KIRFs)
Year 4 Autumn 2

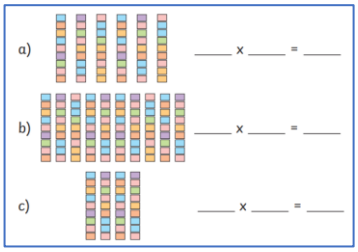
Key Instant Recall Facts are number facts that we want our children to be fluent with and able to recall instantly.

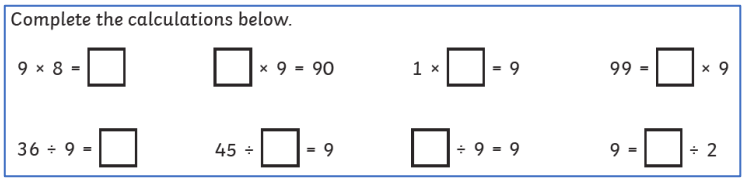
By the end of this half term children in year 4 should be able to

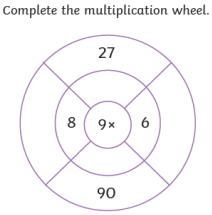
recall multiplication and division facts for 9

What this looks like:









Practical ideas

Count in multiples of 9 with a partner- how quickly can you get to 108?
Roll 2 dice and multiply the value by 9.
Get an adult to write you 10 questions and 10 answers. How quickly can you match them?

Vocabulary

equal groups of 9
lots of
multiple
share
divide
multiply
times

Online games:

Daily 10 - Mental Maths Challenge – Topmarks Level 4, x 9
Hit the Button - Quick fire maths practise for 6-11 year olds (topmarks.co.uk)
Division facts, hit the answer ÷ 9, Hit the question ÷ 9
Coconut Multiples - Reinforce Times Tables (topmarks.co.uk) x 9

The secret to success is practising little and often. Can you practise these KIRFs while walking to school or during a car journey? You do not 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.