



Home Learning Policy

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Believe, Grow, Achieve

What is home learning?

Home learning refers to any task which pupils are asked to complete by their teacher, outside lesson time and may also be referred to as homework. Home learning at our school focuses on the practice of key skills and recall of key knowledge. Research shows that regular practice of key skills and knowledge develops their rapid recall. In turn this reduces pressure on the working memory; with key facts at their fingertips, children assimilate new learning more easily, leading to a deeper understanding.

The purpose of home learning is to

Consolidate and reinforce skills, knowledge and understanding, predominantly in English and maths.

Enable children to practise knowledge and skills in different ways from those experienced in the classroom.

Support parents to help their children to practise and develop skills by informing them of the next key steps and ways in which to practise them.

How much time should be spent on home learning?

- Home learning tasks are set regularly and the amount increases as the child gets older. The policy has been designed to allow flexibility so tasks can be completed at times to fit in with family situations and other musical, sporting, artistic and club activities in which children are involved.
- As a guide, a range of home learning activities should take approximately the following amounts of time over 5 nights, dependant on individual needs:

Reception	5-10 minutes a night
Years 1 and 2	15-25 minutes a night
Years 3 and 4	20-30 minutes a night
Years 5 and 6	30-45 minutes a night

Reading at home

- We value reading as a lifelong learning skill and expect children to read at home for a short time each day. This could be their reading book, an age appropriate magazine, a book from home or a library book. Children or parents should then record when and what has been read in the child's learning log.
- The make-up of this reading time and the number of pages read will vary depending on the age of your child, for example:
- Year R children = spend at least 5 minutes reading, the rest of the time sharing a book
- KS1 children = spend at least 10 minutes reading, the rest of the time sharing a book
- KS2 children = around 15-20 minutes reading. If your child is happy to read for longer than this, please encourage them to do so.
- Parents are encouraged to spend time reading *to* their children in addition to the time their child spends reading themselves.
- More details on supporting reading at home can be found in Appendix A.

What to expect

- Home learning will be differentiated, taking into account the range of pupil capabilities, in order to provide an equal and appropriate challenge for individuals.
- Home learning activities will be based on a range of materials including online resources. For children without online access at home, parents may request paper copies from the class teacher.
- Weekly spellings to be learned will be recorded in the learning log which should be brought into school daily. Weekly testing will also be recorded in the learning log. Ideas for making learning spellings fun can be found in Appendix B.

- In Year R and KS1, children will be given sets of common exception words to learn. We call these creepy crawly and bird words (See Appendix C and Appendix D). Children are expected to learn these words by sight through regular practice.
- Those learning sounds when undertaking the Read Write Inc phonics programme will be sent home sound sheets to support children and parents practise the pronunciation and writing of sounds.
- In maths, we expect children to practise their rapid recall of number facts (KIRFs) as they progress through school and aim for children to be on track with their year group expectations (see Appendix E and F). As part of this, children are expected to know all times table facts by heart to 12x12 by the end of Year 4, with consolidation of these facts practised in Y5 & Y6. Parental support with regular practice and revisiting of these is vital. 'Top Tips' for parents to support the learning of KIRFS at home, term by term, can be found in Appendix G.
- When learning facts, finding opportunities to practise in everyday situations such as walking to school, in the car and by putting them around the house where they can be seen are all useful strategies.
- For children with special learning needs, extra activities may be set more regularly. These may replace or be in addition to other home learning.
- If a child is going to be set extra home learning to help with an area of difficulty, parents will be consulted and asked to support this. Parents who request extra activities for their child will be given advice and/or extra home learning at the discretion of the teacher.
- In Year 6, additional home learning to prepare for SATs tests may be set.
- Most homework will not require a teacher to mark it as online platforms mark automatically and give the child instant feedback. Teachers will monitor the completion of online activities and use the feedback to inform teaching and target further practise or support as required.
- Pupils are encouraged to complete their home learning to the best of their ability.

Parents as partners

Parents are partners with school in the child's learning experiences. Parents are encouraged to let the child's teacher know via their child's learning log if home learning has not been completed for any reason, or if it is too difficult or too easy.

In the case of maths and English activities, parents are encouraged to take an interest in their children's home learning, to discuss it with them and to give them help when necessary, but not to do it for them.

Parents will be invited to workshops e.g. on maths and literacy activities to give them a clearer understanding of how they can support the work done at school.

Home learning should be enjoyable! Sometimes, however, children should be encouraged to reflect on the benefits of hard work. Parents should praise children for good effort. Parents are encouraged to let the teacher know if their child has tried particularly hard on a piece of home learning.

Appendix A - Supporting Your Child's Reading

At Kinton Primary School, we value reading as a lifelong learning skill. We know how important it is to work in partnership with parents, carers and grandparents to encourage our children to develop a love of reading.

We expect:

- **Children to read at home for a short time daily.**
- **Children or parents to record when and what has been read in this learning log.**
- **An adult in school to check this daily.**

In school, we do lots of reading, whether it is in phonics sessions, hearing your child read 1-1, paired reading, whole class guided reading, shared reading and class story sessions. We also help children who find the skills to become confident, fluent readers challenging, with interventions and opportunities for additional reading.

We ask all our children outside school to read every day for a short time. This could be their reading book, an age appropriate magazine, their own book or library book. Reading a range of texts is important and it helps them practise their skills. Younger children may read for a short amount of time themselves and then enjoy sharing a book with an adult.

The make-up of this reading time and the number of pages read will vary depending on the age of your child, for example:

Year R children = spend at least 5 minutes reading, the rest of the time sharing a book

KS1 children = spend at least 10 minutes reading, the rest of the time sharing a book

KS2 children = around 15-20 minutes reading. If your child is happy to read for longer than this, please encourage them to do so.

Please see the next page for more information about the types of books children will bring home.

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Early Readers (those who are undertaking the RWI phonics programme)

Children will bring home three different types of books each week.

1. **Read Write Inc (RWI) books**

When children bring home the book they have been reading in their phonics lesson, we expect they will be able to read it without support as they have been taught for accuracy, fluency and understanding. Children should read this book in their practised 'storyteller voice'. This is an opportunity for them to show off their super reading skills to you.

485081536. **Read Write Inc Book Bag Books**

Every time your child brings a RWI book home, they will also bring a Bookbag Book that has many of the same words but in a new story. They will have practised the RWI book in school but won't have read the Bookbag Book so may need a little more guidance to ensure that they use their sounds carefully.

Listen to your child read the same Bookbag book again and again until they become confident and speedy.

- o 1st read – focus on accuracy (decoding)
- o 2nd read – read more quickly (fluency)
- o 3rd read – develop understanding of what they have read (comprehension)
- Encourage them to use 'Special Friends', 'Fred Talk', 'read the word'
- Discuss the story and encourage their storyteller voice.

485081032. **Sharing Books**

You can teach your child about reading by reading to them. So we also send home sharing/library picture books that may be above the child's current level of decoding. By reading with your child, it will give them an opportunity to be exposed to language and story lines they may not otherwise come across.

B) Proficient Readers (those not on the RWI programme)

1. Independent reading

Children will bring home books they have selected matched to their reading ability.

Before

Live life in all its fullness (John 10:10)

If it is the first time your child has read the book, look at the cover and title with them to predict what they think the book might be about. Make links to other books read with similar themes, the same characters and/or similar authors/illustrators. Give them time to flick through the book and read the blurb.

During

Encourage children to track the words with their finger or use a reading ruler if this helps them.

Help the children to decode (read) the words and ask them about the meaning of more challenging words.

Afterwards

Talk with your child the content of what they have read – use the reading prompt questions at the back of the learning log to help you cover the different skills.

485081704. Shared reading

Whatever stage children are at, it is valuable for them to hear others reading stories. It will support their development of expression and intonation. An audiobook is a wonderful way to do this or to have a family book you dip into is also a special way to celebrate reading together.

What else can you do to help?

The stages of learning to read happen in the following sequence:

Fluency -> Pace -> Expression -> Comprehension

We are aiming for children to use reading as a tool to unlock new knowledge and skills so comprehension must be our ultimate goal.

5 reasons why reading with your child is essential

1. Reading with your child is the most important thing you can do to help your child succeed in school.
2. Books exposure your child to new words that help build language and understanding
3. Reading together is fun and helps build relationships.
4. Reading with children shows it is important, valued and is likely to inspire them to read themselves.
5. The impact lasts a lifetime. Confident readers are healthier and have better job opportunities.

Daily reading has a significant impact on attainment. Children who read daily are four times more likely to read above the level expected for their age.

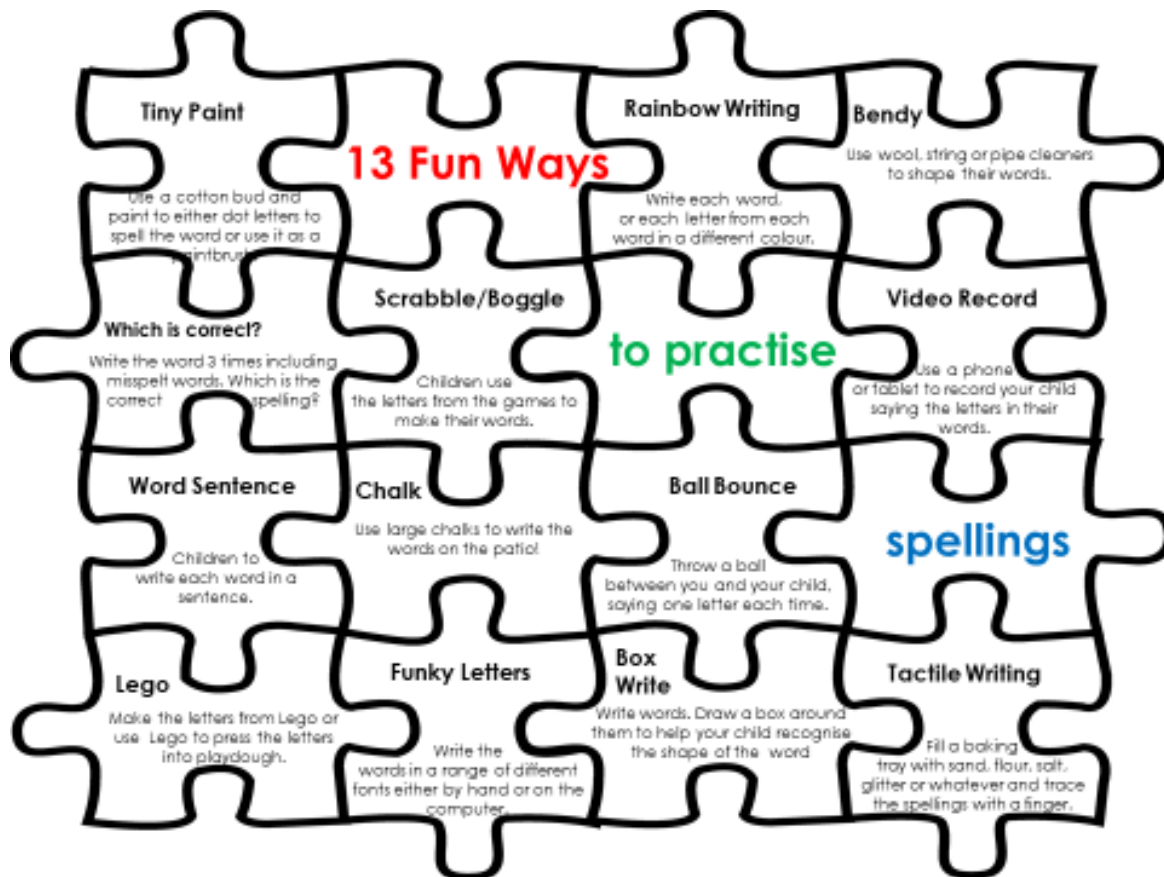
Some ways you can promote and support your child reading at home:

- When you read to your child, make the experience interactive - ask questions about the story, the pictures, and what they think of the characters
- Enrol your child at the local library so they can try new books regularly
- Keep an eye out for the themes that catch your child's imagination at school - and help follow it up with more reading
- When you come across an unusual or funny-sounding word, help your child find out what it means.
- Listen to your children read their books from school, but it's very important to keep reading to children.
- Try reading longer stories or chapter books that can be read a chapter each day. Help your child to read aloud with expression so the story comes to life. This will help them read more fluently.
- Ask your child questions about the story to check their understanding (use the reading prompt questions at the back of this learning log).
- Read for information, not just stories for entertainment.

Reading Dos and Don'ts

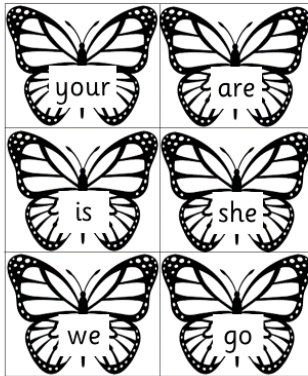
Do	Don't
Do give lots of praise. Do find a quiet place to read. Do try to read every day. Do reread books and paragraphs to help understanding. Do ignore mistakes if it doesn't change the meaning. Do stop if either of you gets fed up or angry. Do fill in or help your child to record reading in their learning log. Do talk to about unusual or new words. Do enjoy reading with your child.	Don't have the T.V. on at the same time. Don't get cross or shout. Don't forget that any reading is good reading!

Appendix B – 13 fun ways to practise spellings

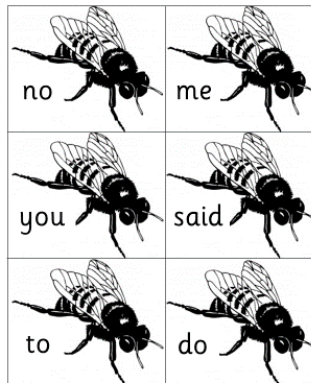


Appendix C – Creepy Crawly Words

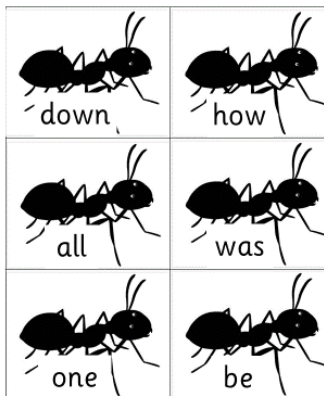
Set 3 – Butterflies



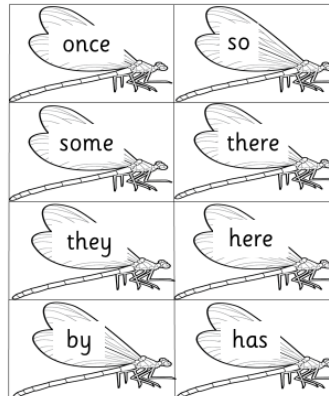
Set 2 – Bees



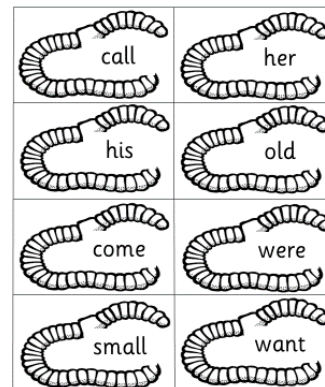
Set 4 – Ants



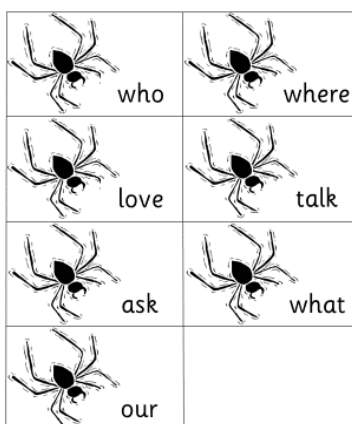
Set 5 – Dragonflies



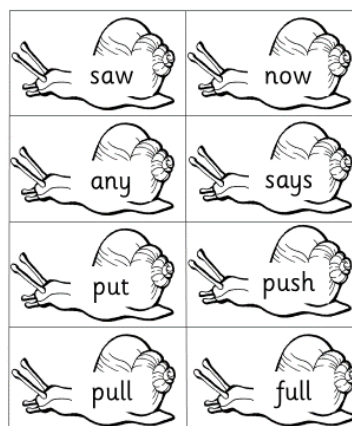
Set 6 – Worms



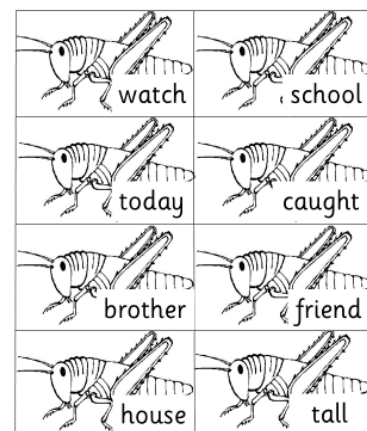
Set 7 – Spiders



Set 8 – Snails

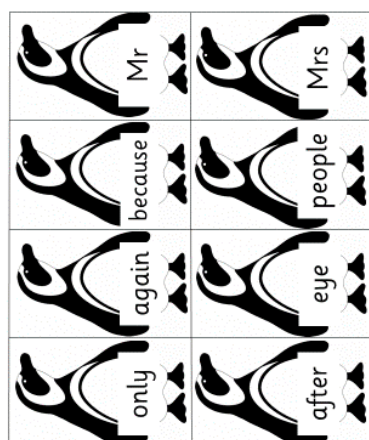


Set 9 – Grasshoppers

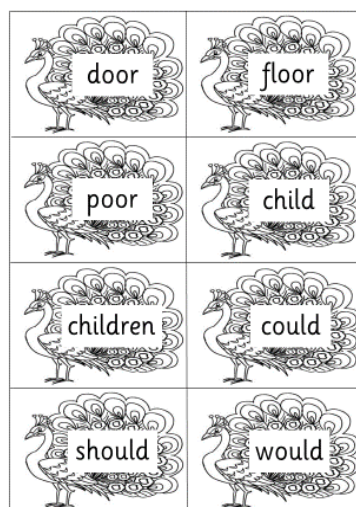


Appendix D – Bird Words

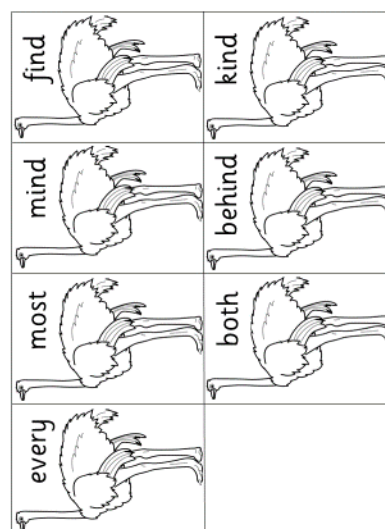
Set 1 – Penguins



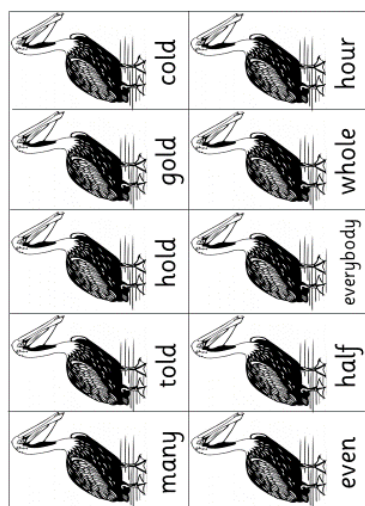
Set 2 – Peacocks



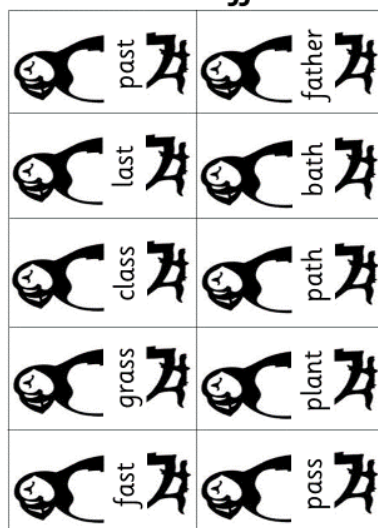
Set 3 – Ostriches



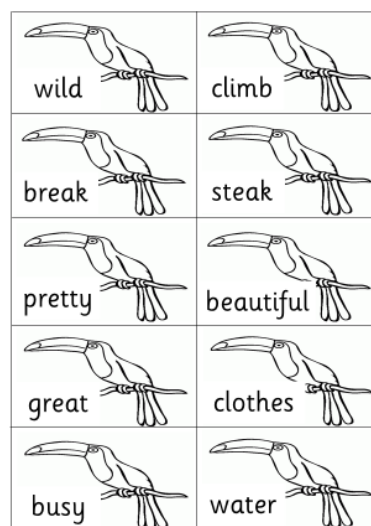
Set 4 – Pelicans



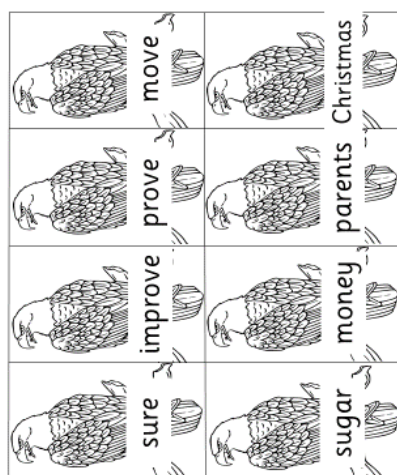
Set 5 – Puffins



Set 6 – Toucans



Set 7 – Eagles



Key Recall Facts (KIRFs)

Term 2	Spring 1	Spring 2	Summer 1	Summer 2
Recognise 2d and 3d shapes	Recognise numbers to 20	1 less than numbers to 10	Doubles to 5	Number bonds to 5
Number bonds to 10	Number bonds of 10	Time – nearest hour and half hour	Number bonds of 7 and 8.	Number bonds of 9 and 10
Multiplication and division facts – 2x table	Doubles and halves to 20	Multiplication and division facts – 10 x table	Time – nearest ¼ hour and 5 minutes	Multiplication and division facts – 5 x table
Multiplication and division facts – 3 x table	Durations of time	Multiplication and division facts – 4 x table	Time – nearest minute	Multiplication and division facts – 8 x table

Year 4	Multiplication and division facts – 6 x table	Multiplication and division facts – 9 and 11 x table	Multiplication and division facts – 7 x table	Multiplication and division facts to 12x12	Decimal equivalents of fractions	Multiply and divide by 10 and 100
Year 5	Number bonds to 100	Decimal number bonds to 1 and 10	Metric measurement conversions	Prime numbers to 20	Square numbers up to 12^2 and their square roots	Factor pairs of a given number
Year 6	Revision- Multiplication and division facts to 12x12	Revision - Factor pairs of a given number	Convert between fractions, decimals and %s	Prime numbers to 50		

Appendix F – Maths Key Instant Recall Facts (KIRFs) Questions

KIRFs Reception – Year 6

Reception KIRFs 2020-2021.pdf - Adobe Acrobat Reader DC

File Edit View Sign Window Help

Home Tools Reception KIRFs 20... x

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Reception - Autumn 1
Recognise numbers to 10
1,2,3,4,5,6,7,8,9,10

Reception - Autumn 2
Recognise 2D shapes

Reception - Autumn 2
Recognise amounts to 10

Reception - Autumn 2
1 more than up to 10

1+1, 2+1, 3+1, 4+1, 5+1, 6+1, 7+1, 8+1, 9+1

Reception - Spring 1
Recognition of number up to 20

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20

Reception - Spring 2
Recognition amounts to 20

Reception - Spring 2
1 less than up to 10

1-1, 2-1, 3-1, 4-1, 5-1, 6-1, 7-1, 8-1, 9-1, 10-1

Reception - Summer 1
Doubles to 5

1+1, 2+2, 3+3, 4+4, 5+5

Reception - Summer 2
Number facts 1,2 & 3

0+1, 1+0, 1+1, 1+0, 0+2, 3+0, 1+1

Reception - Summer 2
Number Facts

0+4, 4+0, 1+3, 3+1, 2+2, 0+5, 5+0, 4+1, 1+4, 3+2, 2+3

Year 1 – Autumn 1

I know number bonds for each number to 6

$0+1=1$	$0+4=4$	$0+6=6$
$1+0=1$	$1+3=4$	$1+5=6$
	$2+2=4$	$2+4=6$
$0+2=2$	$3+1=4$	$3+3=6$
$1+1=2$	$4+0=4$	$4+2=6$
$2+0=2$		$5+1=6$
	$0+5=5$	$6+0=6$
$0+3=3$	$1+4=5$	
$1+2=3$	$2+3=5$	
$2+1=3$	$3+2=5$	
$3+0=3$	$4+1=5$	
	$5+0=5$	

Year 1 – Autumn 2

I know doubles and halves of numbers to 10

$0+0=0$	$\frac{1}{2} \text{ of } 0=0$
$1+1=2$	$\frac{1}{2} \text{ of } 2=1$
$2+2=4$	$\frac{1}{2} \text{ of } 4=2$
$3+3=6$	$\frac{1}{2} \text{ of } 6=3$
$4+4=8$	$\frac{1}{2} \text{ of } 8=4$
$5+5=10$	$\frac{1}{2} \text{ of } 10=5$
$6+6=12$	
$7+7=14$	
$8+8=16$	
$9+9=18$	
$10+10=20$	

Year 1 – Spring 1

I know number bonds to 10

$0+10=10$	$2+8=10$	$4+6=10$
$10+0=10$	$8+2=10$	$6+4=10$
$10-10=0$	$10-8=2$	$10-6=4$
$10-0=10$	$10-2=8$	$10-4=6$
$1+9=10$	$3+7=10$	$5+5=10$
$9+1=10$	$7+3=10$	$10-5=5$
$10-9=1$	$10-7=3$	
$10-1=9$	$10-3=7$	

Year 1 – Spring 2

I can tell the time

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

I can tell the time to the nearest hour.

I can tell the time to the nearest half hour.

Year 1 – Summer 1

I know number bonds for each number to 7 & 8

$0+7=7$	$0+8=8$
$1+6=7$	$1+7=8$
$2+5=7$	$2+6=8$
$3+4=7$	$3+5=8$
$4+3=7$	$4+4=8$
$5+2=7$	$5+3=8$
$6+2=8$	$6+2=8$
$7+1=8$	$7+1=8$
$8+0=8$	$8+0=8$

Year 1- Summer 2

I know number bonds for each number to 9 & 10

$0 + 9 = 9$	$0 + 10 = 10$
$1 + 8 = 9$	$1 + 9 = 10$
$2 + 7 = 9$	$2 + 8 = 10$
$3 + 6 = 9$	$3 + 7 = 10$
$4 + 5 = 9$	$4 + 6 = 10$
$5 + 4 = 9$	$5 + 5 = 10$
$6 + 3 = 9$	$6 + 4 = 10$
$7 + 2 = 9$	$7 + 3 = 10$
$8 + 1 = 9$	$8 + 2 = 10$
$9 + 0 = 9$	$9 + 1 = 10$
	$10 + 0 = 10$

Year 2 – Autumn 1

I know number bonds to 20

$0 + 20 = 20$	$20 + 0 = 20$	$20 - 0 = 20$	$20 - 20 = 0$
$1 + 19 = 20$	$19 + 1 = 20$	$20 - 1 = 19$	$20 - 19 = 1$
$2 + 18 = 20$	$18 + 2 = 20$	$20 - 2 = 18$	$20 - 18 = 2$
$3 + 17 = 20$	$17 + 3 = 20$	$20 - 3 = 17$	$20 - 17 = 3$
$4 + 16 = 20$	$16 + 4 = 20$	$20 - 4 = 16$	$20 - 16 = 4$
$5 + 15 = 20$	$15 + 5 = 20$	$20 - 5 = 15$	$20 - 15 = 5$
$6 + 14 = 20$	$14 + 6 = 20$	$20 - 6 = 14$	$20 - 14 = 6$
$7 + 13 = 20$	$13 + 7 = 20$	$20 - 7 = 13$	$20 - 13 = 7$
$8 + 12 = 20$	$12 + 8 = 20$	$20 - 8 = 12$	$20 - 12 = 8$
$9 + 11 = 20$	$11 + 9 = 20$	$20 - 9 = 11$	$20 - 11 = 9$
$10 + 10 = 20$		$20 - 10 = 10$	

Year 2 – Autumn 2

I know the multiplication and division facts for the 2 times table

$2 \times 1 = 2$	$2 \div 2 = 1$
$2 \times 2 = 4$	$4 \div 2 = 2$
$2 \times 3 = 6$	$6 \div 2 = 3$
$2 \times 4 = 8$	$8 \div 2 = 4$
$2 \times 5 = 10$	$10 \div 2 = 5$
$2 \times 6 = 12$	$12 \div 2 = 6$
$2 \times 7 = 14$	$14 \div 2 = 7$
$2 \times 8 = 16$	$16 \div 2 = 8$
$2 \times 9 = 18$	$18 \div 2 = 9$
$2 \times 10 = 20$	$20 \div 2 = 10$
$2 \times 11 = 22$	$22 \div 2 = 11$
$2 \times 12 = 24$	$24 \div 2 = 12$

Year 2 – Spring 1

I know doubles and halves of numbers to 20

$0 + 0 = 0$	$\frac{1}{2} \text{ of } 0 = 0$	
$1 + 1 = 2$	$\frac{1}{2} \text{ of } 2 = 1$	$11 + 11 = 22$
$2 + 2 = 4$	$\frac{1}{2} \text{ of } 4 = 2$	$12 + 12 = 24$
$3 + 3 = 6$	$\frac{1}{2} \text{ of } 6 = 3$	$13 + 13 = 26$
$4 + 4 = 8$	$\frac{1}{2} \text{ of } 8 = 4$	$14 + 14 = 28$
$5 + 5 = 10$	$\frac{1}{2} \text{ of } 10 = 5$	$15 + 15 = 30$
$6 + 6 = 12$	$\frac{1}{2} \text{ of } 12 = 6$	$16 + 16 = 32$
$7 + 7 = 14$	$\frac{1}{2} \text{ of } 14 = 7$	$17 + 17 = 34$
$8 + 8 = 16$	$\frac{1}{2} \text{ of } 16 = 8$	$18 + 18 = 36$
$9 + 9 = 18$	$\frac{1}{2} \text{ of } 18 = 9$	$19 + 19 = 38$
$10 + 10 = 20$	$\frac{1}{2} \text{ of } 20 = 10$	$20 + 20 = 40$

Year 2 – Spring 2

I know the multiplication and division facts for the 10 times table

$10 \times 1 = 10$	$10 \div 10 = 1$
$10 \times 2 = 20$	$20 \div 10 = 2$
$10 \times 3 = 30$	$30 \div 10 = 3$
$10 \times 4 = 40$	$40 \div 10 = 4$
$10 \times 5 = 50$	$50 \div 10 = 5$
$10 \times 6 = 60$	$60 \div 10 = 6$
$10 \times 7 = 70$	$70 \div 10 = 7$
$10 \times 8 = 80$	$80 \div 10 = 8$
$10 \times 9 = 90$	$90 \div 10 = 9$
$10 \times 10 = 100$	$100 \div 10 = 10$
$10 \times 11 = 110$	$110 \div 10 = 11$
$10 \times 12 = 120$	$120 \div 10 = 12$

Year 2 – Summer 1

I can tell the time

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

I can tell the time to the nearest hour.

I can tell the time to the nearest half hour.

I can tell the time to the nearest quarter hour.

I can tell the time to the nearest five minutes.

Year 2 - Summer 2

I know the multiplication and division facts for the 5 times table

$5 \times 1 = 5$	$5 \div 5 = 1$
$5 \times 2 = 10$	$10 \div 5 = 2$
$5 \times 3 = 15$	$15 \div 5 = 3$
$5 \times 4 = 20$	$20 \div 5 = 4$
$5 \times 5 = 25$	$25 \div 5 = 5$
$5 \times 6 = 30$	$30 \div 5 = 6$
$5 \times 7 = 35$	$35 \div 5 = 7$
$5 \times 8 = 40$	$40 \div 5 = 8$
$5 \times 9 = 45$	$45 \div 5 = 9$
$5 \times 10 = 50$	$50 \div 5 = 10$
$5 \times 11 = 55$	$55 \div 5 = 11$
$5 \times 12 = 60$	$60 \div 5 = 12$

Year 3 – Autumn 1

I know number bonds for all numbers to 20

$2 + 9 = 11$	$5 + 9 = 14$	Examples of a fact family
$3 + 8 = 11$	$6 + 8 = 14$	$6 + 9 = 15$
$4 + 7 = 11$	$7 + 7 = 14$	$9 + 6 = 15$
$5 + 6 = 11$	$6 + 9 = 15$	$15 - 9 = 6$
$3 + 9 = 12$	$7 + 8 = 15$	$15 - 9 = 6$
$4 + 8 = 12$	$7 + 9 = 16$	
$5 + 7 = 12$	$8 + 8 = 16$	Examples of other facts
$6 + 6 = 12$	$8 + 9 = 17$	$4 + 5 = 9$
$4 + 9 = 13$	$9 + 9 = 18$	$13 + 5 = 18$
$5 + 8 = 13$		$19 - 7 = 12$
$6 + 7 = 13$		$10 - 6 = 4$

Year 3 – Autumn 2

I know the multiplication and division facts for the 3 times table

$3 \times 1 = 3$	$1 \times 3 = 3$	$3 \div 3 = 1$	$3 \div 1 = 3$
$3 \times 2 = 6$	$2 \times 3 = 6$	$6 \div 3 = 2$	$6 \div 2 = 3$
$3 \times 3 = 9$	$3 \times 3 = 9$	$9 \div 3 = 3$	$9 \div 3 = 3$
$3 \times 4 = 12$	$4 \times 3 = 12$	$12 \div 3 = 4$	$12 \div 4 = 3$
$3 \times 5 = 15$	$5 \times 3 = 15$	$15 \div 3 = 5$	$15 \div 5 = 3$
$3 \times 6 = 18$	$6 \times 3 = 18$	$18 \div 3 = 6$	$18 \div 6 = 3$
$3 \times 7 = 21$	$7 \times 3 = 21$	$21 \div 3 = 7$	$21 \div 7 = 3$
$3 \times 8 = 24$	$8 \times 3 = 24$	$24 \div 3 = 8$	$24 \div 8 = 3$
$3 \times 9 = 27$	$9 \times 3 = 27$	$27 \div 3 = 9$	$27 \div 9 = 3$
$3 \times 10 = 30$	$10 \times 3 = 30$	$30 \div 3 = 10$	$30 \div 10 = 3$
$3 \times 11 = 33$	$11 \times 3 = 33$	$33 \div 3 = 11$	$33 \div 11 = 3$
$3 \times 12 = 36$	$12 \times 3 = 36$	$36 \div 3 = 12$	$36 \div 12 = 3$

Year 3 – Spring 1

I can recall facts about durations of time

There are 60 seconds in a minute.

There are 60 minutes in an hour.

There are 24 hours in a day.

There are 7 days in a week.

There are 12 months in a year.

There are 365 days in a year.

There are 366 days in a leap year.

Number of days in each month

January	31	July	31
February	28/29	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

Year 3 – Spring 2

I know the multiplication and division facts for the 4 times table

$4 \times 1 = 4$	$1 \times 4 = 4$	$4 \div 4 = 1$	$4 \div 1 = 4$
$4 \times 2 = 8$	$2 \times 4 = 8$	$8 \div 4 = 2$	$8 \div 2 = 4$
$4 \times 3 = 12$	$3 \times 4 = 12$	$12 \div 4 = 3$	$12 \div 3 = 4$
$4 \times 4 = 16$	$4 \times 4 = 16$	$16 \div 4 = 4$	$16 \div 4 = 4$
$4 \times 5 = 20$	$5 \times 4 = 20$	$20 \div 4 = 5$	$20 \div 5 = 4$
$4 \times 6 = 24$	$6 \times 4 = 24$	$24 \div 4 = 6$	$24 \div 6 = 4$
$4 \times 7 = 28$	$7 \times 4 = 28$	$28 \div 4 = 7$	$28 \div 7 = 4$
$4 \times 8 = 32$	$8 \times 4 = 32$	$32 \div 4 = 8$	$32 \div 8 = 4$
$4 \times 9 = 36$	$9 \times 4 = 36$	$36 \div 4 = 9$	$36 \div 9 = 4$
$4 \times 10 = 40$	$10 \times 4 = 40$	$40 \div 4 = 10$	$40 \div 10 = 4$
$4 \times 11 = 44$	$11 \times 4 = 44$	$44 \div 4 = 11$	$44 \div 11 = 4$
$4 \times 12 = 48$	$12 \times 4 = 48$	$48 \div 4 = 12$	$48 \div 12 = 4$

Year 3 – Summer 1

I can tell the time

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

- ▶ I can tell the time to the nearest hour.
- ▶ I can tell the time to the nearest half hour.
- ▶ I can tell the time to the nearest quarter hour.
- ▶ I can tell the time to the nearest five minutes.
- ▶ I can tell the time to the nearest minute.

Year 3 - Summer 2

I know the multiplication and division facts for the 8 times table

$8 \times 1 = 8$	$1 \times 8 = 8$	$8 \div 8 = 1$	$8 \div 1 = 8$
$8 \times 2 = 16$	$2 \times 8 = 16$	$16 \div 8 = 2$	$16 \div 2 = 8$
$8 \times 3 = 24$	$3 \times 8 = 24$	$24 \div 8 = 3$	$24 \div 3 = 8$
$8 \times 4 = 32$	$4 \times 8 = 32$	$32 \div 8 = 4$	$32 \div 4 = 8$
$8 \times 5 = 40$	$5 \times 8 = 40$	$40 \div 8 = 5$	$40 \div 5 = 8$
$8 \times 6 = 48$	$6 \times 8 = 48$	$48 \div 8 = 6$	$48 \div 6 = 8$
$8 \times 7 = 56$	$7 \times 8 = 56$	$56 \div 8 = 7$	$56 \div 7 = 8$
$8 \times 8 = 64$	$8 \times 8 = 64$	$64 \div 8 = 8$	$64 \div 8 = 8$
$8 \times 9 = 72$	$9 \times 8 = 72$	$72 \div 8 = 9$	$72 \div 9 = 8$
$8 \times 10 = 80$	$10 \times 8 = 80$	$80 \div 8 = 10$	$80 \div 10 = 8$
$8 \times 11 = 88$	$11 \times 8 = 88$	$88 \div 8 = 11$	$88 \div 11 = 8$
$8 \times 12 = 96$	$12 \times 8 = 96$	$96 \div 8 = 12$	$96 \div 12 = 8$

Year 4 – Autumn 1

I know the multiplication and division facts for the 6 times table

$6 \times 1 = 6$	$1 \times 6 = 6$	$6 \div 6 = 1$	$6 \div 1 = 6$
$6 \times 2 = 12$	$2 \times 6 = 12$	$12 \div 6 = 2$	$12 \div 2 = 6$
$6 \times 3 = 18$	$3 \times 6 = 18$	$18 \div 6 = 3$	$18 \div 3 = 6$
$6 \times 4 = 24$	$4 \times 6 = 24$	$24 \div 6 = 4$	$24 \div 4 = 6$
$6 \times 5 = 30$	$5 \times 6 = 30$	$30 \div 6 = 5$	$30 \div 5 = 6$
$6 \times 6 = 36$	$6 \times 6 = 36$	$36 \div 6 = 6$	$36 \div 6 = 6$
$6 \times 7 = 42$	$7 \times 6 = 42$	$42 \div 6 = 7$	$42 \div 7 = 6$
$6 \times 8 = 48$	$8 \times 6 = 48$	$48 \div 6 = 8$	$48 \div 8 = 6$
$6 \times 9 = 54$	$9 \times 6 = 54$	$54 \div 6 = 9$	$54 \div 9 = 6$
$6 \times 10 = 60$	$10 \times 6 = 60$	$60 \div 6 = 10$	$60 \div 10 = 6$
$6 \times 11 = 66$	$11 \times 6 = 66$	$66 \div 6 = 11$	$66 \div 11 = 6$
$6 \times 12 = 72$	$12 \times 6 = 72$	$72 \div 6 = 12$	$72 \div 12 = 6$

Year 4 – Autumn 2

I know the multiplication and division facts for the 9 and 11 times tables

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

Year 4 – Spring 1

I know the multiplication and division facts for the 7 times table

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

Year 4 – Spring 2

I know the multiplication and division facts for all times tables up to 12×12

$12 \times 1 = 12$	$12 \div 12 = 1$
$12 \times 2 = 24$	$24 \div 12 = 2$
$12 \times 3 = 36$	$36 \div 12 = 3$
$12 \times 4 = 48$	$48 \div 12 = 4$
$12 \times 5 = 60$	$60 \div 12 = 5$
$12 \times 6 = 72$	$72 \div 12 = 6$
$12 \times 7 = 84$	$84 \div 12 = 7$
$12 \times 8 = 96$	$96 \div 12 = 8$
$12 \times 9 = 108$	$108 \div 12 = 9$
$12 \times 10 = 120$	$120 \div 12 = 10$
$12 \times 11 = 132$	$132 \div 12 = 11$
$12 \times 12 = 144$	$144 \div 12 = 12$

Year 4 – Summer 1

I can recognise decimal equivalents of fractions

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

Year 4 - Summer 2

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

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

Year 5 – Autumn 1

I know number bonds to 100

Some examples:

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

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

Year 5 – Autumn 2

I know decimal number bonds to 1 and 10

Some examples:

$$\begin{array}{ll} 0.6 + 0.4 = 1 & 3.7 + 6.3 = 10 \\ 0.4 + 0.6 = 1 & 6.3 + 3.7 = 10 \\ 1 - 0.4 = 0.6 & 10 - 6.3 = 3.7 \\ 1 - 0.6 = 0.4 & 10 - 3.7 = 6.3 \end{array}$$

$$\begin{array}{ll} 0.75 + 0.25 = 1 & 4.8 + 5.2 = 10 \\ 0.25 + 0.75 = 1 & 5.2 + 4.8 = 10 \\ 1 - 0.25 = 0.75 & 10 - 5.2 = 4.8 \\ 1 - 0.75 = 0.25 & 10 - 4.8 = 5.2 \end{array}$$

Year 5 – Spring 1

I can recall metric conversions

1 kilogram = 1000 grams

1 kilometre = 1000 metres
1 metre = 100 centimetres
1 metre = 1000 millimetres
1 centimetre = 10 millimetres

1 litre = 1000 millilitres

Year 5 – Spring 2

I can identify prime numbers up to 20

A prime number is a number with no factors other than itself and one.

The following numbers are prime numbers:

2, 3, 5, 7, 11, 13, 17, 19

A composite number is divisible by a number other than 1 or itself.

The following numbers are composite numbers:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20

Year 5 – Summer 1

I can recall square numbers up to 12^2 and their square roots

$$\begin{array}{ll} 1^2 = 1 \times 1 = 1 & \sqrt{1} = 1 \\ 2^2 = 2 \times 2 = 4 & \sqrt{4} = 2 \\ 3^2 = 3 \times 3 = 9 & \sqrt{9} = 3 \\ 4^2 = 4 \times 4 = 16 & \sqrt{16} = 4 \\ 5^2 = 5 \times 5 = 25 & \sqrt{25} = 5 \\ 6^2 = 6 \times 6 = 36 & \sqrt{36} = 6 \\ 7^2 = 7 \times 7 = 49 & \sqrt{49} = 7 \\ 8^2 = 8 \times 8 = 64 & \sqrt{64} = 8 \\ 9^2 = 9 \times 9 = 81 & \sqrt{81} = 9 \\ 10^2 = 10 \times 10 = 100 & \sqrt{100} = 10 \\ 11^2 = 11 \times 11 = 121 & \sqrt{121} = 11 \\ 12^2 = 12 \times 12 = 144 & \sqrt{144} = 12 \end{array}$$

Year 5 - Summer 2

I can find factor pairs of a number

Children should now know all multiplication and division facts up to 12×12 . When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

Live life in all its fullness (John 10:10)

$24 = 4 \times 6$
 $24 = 8 \times 3$
 $56 = 7 \times 8$
 $54 = 9 \times 6$

$42 = 6 \times 7$
 $25 = 5 \times 5$
 $84 = 7 \times 12$
 $15 = 5 \times 3$

Year 6 – Autumn 1

I know the multiplication and division facts for all times tables up to 12×12

$12 \times 1 = 12$	$12 \div 12 = 1$
$12 \times 2 = 24$	$24 \div 12 = 2$
$12 \times 3 = 36$	$36 \div 12 = 3$
$12 \times 4 = 48$	$48 \div 12 = 4$
$12 \times 5 = 60$	$60 \div 12 = 5$
$12 \times 6 = 72$	$72 \div 12 = 6$
$12 \times 7 = 84$	$84 \div 12 = 7$
$12 \times 8 = 96$	$96 \div 12 = 8$
$12 \times 9 = 108$	$108 \div 12 = 9$
$12 \times 10 = 120$	$120 \div 12 = 10$
$12 \times 11 = 132$	$132 \div 12 = 11$
$12 \times 12 = 144$	$144 \div 12 = 12$

Year 6 – Autumn 2

I can identify common factors of a pair of numbers

The factors of a number are all numbers which divide it with no remainder.

E.g. the factors of 24 are 1, 2, 3, 4, 6, 8, 12, and 24. The factors of 56 are 1, 2, 4, 7, 8, 14, 28 and 56.

The common factors of two numbers are the factors they share.

E.g. the common factors of 24 and 56 are 1, 2, 4 and 8.

The greatest common factor of 24 and 56 is 8.

Year 6 – Spring 1

I can convert between decimals, fractions and percentages

$$\frac{1}{2} = 0.5$$

$$\frac{1}{100} = 0.01$$

$$\frac{1}{4} = 0.25$$

$$\frac{7}{100} = 0.07$$

$$\frac{3}{4} = 0.75$$

$$\frac{21}{100} = 0.21$$

$$\frac{1}{10} = 0.1$$

$$\frac{75}{100} = 0.75$$

$$\frac{1}{5} = 0.2$$

$$\frac{99}{100} = 0.99$$

$$\frac{3}{5} = 0.6$$

$$\frac{9}{10} = 0.9$$

Year 6 – Spring 2

I can identify prime numbers up to 50

A prime number is a number with no factors other than itself and one.

The following numbers are prime numbers:

2, 3, 5, 7, 11, 13, 17, 19, 23,

29, 31, 37, 41, 43, 47

A composite number is divisible by a number other than 1 or itself.

The following numbers are composite numbers:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20,

22, 24, 25, 26, 27, 28, 30, 32, 34, 35, 36,

38, 39, 40, 42, 44, 45, 46, 48, 49, 50

Appendix G – Maths Key Instant Recall Facts (KIRFs) Top Tips By Term

Year 1 – Autumn 1

I know number bonds for each number to 6

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.

Use practical resources – Your child has one potato on their plate and you give them three more. Can they predict how many they will have now?

Play games – You can play number bond pairs online at www.conkermaths.org and then see how many questions you can answer in just one minute.

Year 1 – Autumn 2

I know doubles and halves of numbers to 10

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.

Ping Pong – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online – Go to www.conkermaths.org and see how many questions you can answer in just 90 seconds

Year 1 – Spring 1

I know number bonds to 10

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.

Use practical resources – Your child has six peas on their plate and you give them three more. Can they predict how many they will have now?

Play games – You can play number bond pairs online at www.conkermaths.org and then see how many questions you can answer in just one minute.

Year 1 – Spring 2

I can tell the time

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

I can tell the time to the nearest hour.

I can tell the time to the nearest half hour.

The secret to success is practising **little** and **often**. If you would like more ideas, please speak to your child's teacher.

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands.

Play "What's the time Mr Wolf?" – You could also give your child some responsibility for watching the clock :

Read books about time

Year 1 – Summer 1

I know number bonds for each number to 7 & 8

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.

Year 1- Summer 2

I know number bonds for each number to 9 & 10

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.

Year 2 – Autumn 1

I know number bonds to 20

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.

Use what you already know – Use number bonds to 10 (e.g. $7 + 3 = 10$) to work out related number bonds to 20 (e.g. $17 + 3 = 20$).

Use practical resources – Make collections of 20 objects. Ask questions such as, "How many more conkers would I need to make 20?"

Make a poster – We use Numicon at school. Find pictures of the Numicon shapes online – your child could make a poster showing the different ways of making 20.

Play games – You can play number bond pairs online at www.conkermaths.org and then see how many questions you can answer in just one minute

Year 2 – Autumn 2

I know the multiplication and division facts for the 2 times table

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.

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.

Use what you already know – If your child knows that $2 \times 5 = 10$, they can use this fact to work out that $2 \times 6 = 12$.

Test the Parent – Your child can make up their own tricky division questions for you e.g. *What is 18 divided by 2?* They need to be able to multiply to create these questions and of course know the correct answer too!

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 2 – Spring 1

I know doubles and halves of numbers to 20

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.

Use what you already know – Encourage your child to find the connection between the 2 times table and double facts.

Ping Pong – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online – Go to www.conkermaths.org and see how many questions you can answer in just 90 seconds.

Year 2 – Spring 2

I know the multiplication and division facts for the 10 times table

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.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between **thirteen** and **thirty**.

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.

Test the Parent – Your child can make up their own tricky division questions for you e.g. *What is 70 divided by 7?* They need to be able to multiply to create these questions and of course know the correct answer too!

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?

Year 2 – Summer 1

I can tell the time

Children need to be able to tell the time using a clock with hands. This target can be broken down into several steps.

The secret to success is practising little and often. If you would like more ideas, please speak to your child's teacher.

Talk about time – Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands.

Ask your child the time regularly – You could also give your child some responsibility for watching the clock :

"The cakes need to come out of the oven at quarter past four."

"We need to leave the house at half past eight."

Year 2 - Summer 2

I know the multiplication and division facts for the 5 times table

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.

Live life in all its fullness (John 10:10)

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.

Spot patterns – What patterns can your child spot in the 5 times table? Are there any similarities with the 10 times table?

Test the Parent – Your child can make up their own tricky division questions for you e.g. *What is 45 divided by 5?* They need to be able to multiply to create these questions and of course know the correct answer too!

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 3 – Autumn 1

I know number bonds for all numbers to 20

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? (e.g. $5 + 8 = 13$, $13 - 8 = 5$, $13 - 5 = 8$).

Use doubles and near doubles – If you know that $6 + 6 = 12$, how can you work out $6 + 7$? What about $5 + 7$?

Play games – There are missing number questions at www.conkermaths.org. See how many questions you can answer in just one minute.

Year 3 – Autumn 2

I know the multiplication and division facts for the 3 times table

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. $3 \times 5 = 15$), can they tell you the other three facts in the same fact family?

Warning! – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g. $3 \times 12 = 36$. The answer to the multiplication is 36, so $36 \div 3 = 12$ and $36 \div 12 = 3$

Year 3 – Spring 1

I can recall facts about durations of time

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E.g. $3 \times 12 = 36$. The answer to the multiplication is 36, so $36 \div 3 = 12$ and $36 \div 12 = 3$

Year 3 – Spring 2

I know the multiplication and division facts for the 4 times table

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. $3 \times 5 = 15$), can they tell you the other three facts in the same fact family?

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E.g. $3 \times 12 = 36$. The answer to the multiplication is 36, so $36 \div 3 = 12$ and $36 \div 12 = 3$

Year 3 – Summer 1

I can tell the time

The secret to success is practising little and often. Use time wisely. If you would like more ideas, please speak to your child's teacher.

Live life in all its fullness (John 10:10)

Talk about time - Discuss what time things happen. When does your child wake up? What time do they eat breakfast? Make sure that you have an analogue clock visible in your house or that your child wears a watch with hands. Once your child is confident telling the time, see if you can find more challenging clocks e.g. with Roman numerals or no numbers marked.

Ask your child the time regularly – You could also give your child some responsibility for watching the clock :

“The cakes need to come out of the oven at twenty-two minutes past four exactly.”

“We need to leave the house at twenty-five to nine.”

Year 3 - Summer 2

I know the multiplication and division facts for the 8 times table

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.

Double your fours – Multiplying a number by 8 is the same as multiply by 4 and then doubling the answer. $8 \times 4 = 32$ and double 32 is 64, so $8 \times 8 = 64$.

Five six seven eight – fifty-six is seven times eight ($56 = 7 \times 8$).

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 4 – Autumn 1

I know the multiplication and division facts for the 6 times table

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.

Double your threes – Multiplying a number by 6 is the same as multiplying by 3 and then doubling the answer. $7 \times 3 = 21$ and double 21 is 42, so $7 \times 6 = 42$.

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?

Warning! – When creating fact families, children sometimes get confused by the order of the numbers in the division number sentence. It is tempting to say that the biggest number goes first, but it is more helpful to say that the answer to the multiplication goes first, as this will help your child more in later years when they study fractions, decimals and algebra.

E.g. $6 \times 12 = 72$. The answer to the multiplication is 72, so $72 \div 6 = 12$ and $72 \div 12 = 6$

Year 4 – Autumn 2

I know the multiplication and division facts for the 9 and 11 times tables

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 happens if you add your original number instead?

(e.g. $7 \times 10 + 7 = 70 + 7 = 77$)

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!

Year 4 – Spring 1

I know the multiplication and division facts for the 7 times table

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 the easiest to the most challenging. Can they explain why some facts are easier to remember? Then focus on practising the most challenging facts.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 4 – Spring 2

I know the multiplication and division facts for all times tables up to 12×12

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

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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.

Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Online games – There are many games online which can help children practise their multiplication and division facts. www.conkermaths.org is a good place to start.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 4 – Summer 1

I can recognise decimal equivalents of fractions

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.

Year 4 - Summer 2

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

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.

Year 5 – Autumn 1

I know number bonds to 100

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 10 - How can number bonds to 10 help you work out number bonds to 100?

Play games – There are missing number questions at www.conkermaths.org. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.

Year 5 – Autumn 2

I know decimal number bonds to 1 and 10

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 10 - How can number bonds to 10 help you work out number bonds to 100?

Play games – There are missing number questions at www.conkermaths.org. See how many questions you can answer in just 90 seconds. There is also a number bond pair game to play.

Year 5 – Spring 1

I can recall metric conversions

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.

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

Be practical – Do some baking and convert the measurements in the recipe.

How far? – Calculate some distances using unusual measurements. How tall is your child in mm? How far away is London in metres?

Year 5 – Spring 2

I can identify prime numbers up to 20

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.

It's really important that your child uses mathematical vocabulary accurately. Choose a number between 2 and 20. How many correct

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statements can your child make about this number using the vocabulary above?

Make a set of cards for the numbers from 2 to 20. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite numbers?

Year 5 – Summer 1

I can recall square numbers up to 12^2 and their square roots

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.

Cycling Squares – At <http://nrich.maths.org/1151> there is a challenge involving square numbers. Can you complete the challenge and then create your own examples?

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 5 - Summer 2

I can find factor pairs of a number

Children should now know all multiplication and division facts up to 12×12 . When given a number in one of these times tables, they should be able to state a factor pair which multiply to make this number. Below are some examples:

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Play games – There is an activity at www.conkermaths.org to practise finding factor pairs

Think of the question – One player thinks of a times table question (e.g. 4×12) and states the answer. The other player has to guess the original question.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 6 – Autumn 1

I know the multiplication and division facts for all times tables up to 12×12

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Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Online games – There are many games online which can help children practise their multiplication and division facts. www.conkermaths.org is a good place to start.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.

Year 6 – Autumn 2

I can identify common factors of a pair of numbers

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? If your child is not yet confident with identifying factor pairs of a number, you may want to refer to the Year 5 Summer 2 sheet to practise this first. If you would like more ideas, please speak to your child's teacher.

There are many online games to practise finding the greatest common factor, for example:

<http://www.fun4thebrain.com/beyondfacts/gcfsketch.html>

Choose two numbers. Take it in turns to name factors. Who can find the most?

Year 6 – Spring 1

I can convert between decimals, fractions and percentages

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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.

Year 6 – Spring 2

I can identify prime numbers up to 50

A prime number is a number with no factors other than itself and one. A composite number has at least one factor other than 1 and itself.

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It's really important that your child uses mathematical vocabulary accurately. Choose a number between 2 and 50. How many correct statements can your child make about this number using the vocabulary above?

Make a set of cards for the numbers from 2 to 50. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite numbers?

