Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 1

Say the number names in order to 5

Learning to count is fun with a range of counting games. Start with simple counting games and progress to counting a maximum of 5 objects.

Why not try:

- Counting the number of items or toys as you put these back in the box.
- Sorting the washing into different colours, pair the socks or count and match the clothes pegs.
- putting away the shopping and counting how many tins of beans or cartons of milk you've bought.
- Simple counting songs also help children count up and down.

FIVE little ducks went swimming one day,
Over the hill and far away.
Mamma duck said: 'Quack, quack, quack, quack!'
And only FOUR little ducks came back.

FOUR little ducks went swimming one day,
Over the hill and far away.
Mamma duck said: 'Quack, quack, quack, quack!'
And only THREE little ducks came back.

THREE little ducks went swimming one day,
Over the hill and far away.
Mamma duck said: 'Quack, quack, quack, quack!'
And only TWO little ducks came back.

TWO little ducks went swimming one day,
Over the hill and far away.
Mamma duck said: 'Quack, quack, quack, quack!'
And only ONE little duck came back.

ONE little duck went swimming one day,
Over the hill and far away.
Mamma duck said: 'Quack, quack, quack, quack!'
And all her five little ducks came back!

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 2

Begin to know the days of the week

Talk with your child and use the names of the week as well as the terms tomorrow and yesterday.

"How many days are there in a week?"

"Which day comes after Wednesday?"

"7 days in a week that's right!" "Thursday well done!"

"Well done - let's look on the calendar to see what we are doing today".

Songs can also help:

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in a week.

I like to sing them quiet. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in week.

I like to sing them loud. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in week.

I like to clap them out. (Clap with each one) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in week.

I like to stomp them out. (Stomp sound for each one) Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in week. I sing them proud.

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday – Seven days are in week.

I like to sing again. Seven days are in a week.
I like it one more time. Seven days are in a week.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 3

Say the numbers in order to 10

Continuing to learn to count can be fun with a range of counting activities.

Keep a "counting box" in the house with various items that are safe for your child to count independently, and a set of cups with numbers.

When your child needs something to do, you can say, "Get out the counting box!" Children will never tire of this activity if you keep a colourful selection of things to count, so that each time your child opens the box, there's something new to explore.

Here is an idea for a counting game to try at home:

What You Need: 11 paper cups, markers, 55 small objects (like cotton balls, pennies, beans, pasta, jelly beans, screws, or anything else that's fun to touch)

What You Do: 1. After you've decided on the counting objects, get 11 medium-sized paper cups. Write the numbers 0 through 10 on each cup. Then mix up the cups and give them to your child. Ask your child to place the cups in order from smallest to biggest.

2. Give your child a collection of 55 objects. Tell them that the point of the game is to look at the number on each cup and put in the matching amount of objects. Be sure to remind your child to count out loud as they place each object in the cup. This helps to reinforce counting skills and lets you check their ability to count with one-to-one correspondence.

3. When your child is finished, empty the cups one at a time and have them check that the number of objects matches the number on the cup.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 4

Know the odd and even numbers to 10

You can continue to use various items from your house to practice looking at odd and even numbers. Count objects in pairs and talk about each object having a friend- these are even numbers. When you have an object left over without a friend, this is an odd number.

Try this song to help your child remember the odd and even numbers:

Even numbers, even numbers,
Even numbers, shout them out!
2, 4, 6, 8, 10!
Line them up by twos and then,
All the evens have a friend!
2, 4, 6, 8, 10!
All the evens have a friend.
Odd numbers, odd numbers,
Odd numbers, shout them out!
1, 3, 5, 7, 9!
When you try to group by twos,
There's an extra you can't use.
1, 3, 5, 7, 9!
Odd man out, no friend in line.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 5

Know the number bonds to 5

Number bonds are also often referred to as 'number pairs'. They are simply the pairs of numbers that make up a given number.

Children might be given a number, such as 5, and then asked to select two groups of objects that will add up to that number, or they can be given a number and asked what other number they need to make 5.

Ideas

Give your child ten counters (Lego bricks, pasta shapes, buttons, sweets) and ask them questions such as: What do you add to 3 to make 5? What do you add to 2 to make 5? Encourage them to use the counters to work it out.

Print out number cards and ask your child to match them up into number pairs or number bonds (this can be done as a game of Snap).

There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Red 6

Count to 20 or higher

Continuing to learn to count to higher numbers is a really important skill for your child to learn. Continue to practise as you go about everyday life. Children can practice counting anything: their toys, how many birds they can see in the garden, the number of stairs or how many lamp posts you pass whilst walking to school!

You can also practice counting down from 20 so that your child is familiar with the numbers going down as well as up. Try a 20 second countdown to their favourite food or a treat!

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 1

Know all the number bonds to 10

Number bonds are also often referred to as 'number pairs'. They are simply the pairs of numbers that make up a given number. The number bonds to 10 are the pairs of numbers which add to make 10:

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

Children start to learn about number bonds in the Foundation stage, when they might be given a number, such as 5, and then asked to select two groups of objects that will add up to that number.

Ideas

Give your child ten counters (Lego bricks, pasta shapes, buttons, sweets) and ask them questions such as: What do you add to 3 to make 10? What do you add to 2 to make 10? Encourage them to use the counters to work it out.

Print out number cards and ask your child to match them up into number pairs or number bonds (this can be done as a game of Snap).

Write a list of ten numbers then time your child to see how long it takes them to write down the other number that makes up each pair (2 and 8; 5 and 5; 4 and 6).

There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 2

Know all additions and subtraction facts for all numbers between 0 and 10

Your child should now look at adding and subtracting numbers between 0 and 10, where the total is not greater than 10. The table below shows the facts they will be expected to know. Remind your child that if they know 6 + 3 = 9, then they also know 3 + 6 = 9 (so they only need to know half of these fact!)

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

Help your child with these ideas:

- List pairs of numbers. Jot the opposite and related statements alongside, e.g.
  7 + 3= 10 3 + 7 = 10 10 – 7 = 3 10 – 3 = 7
- Help your child design their own number facts poster and display it in their room or on the fridge.
- Take advantage of real-life contexts such as shopping, laying the table, planting seeds in rows, organising and sharing out toys or snacks, etc. to help you introduce number facts into everyday life.
- There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 3

Know all number bonds to 20

Children learn and use the number pairs which make 20. This means they will become familiar with and practise all the different combinations of adding and subtracting numbers to a total of 20. There are 10 pairs of numbers which total 20:

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

You can try these activities to help your child learn these pairs:

- Print out number cards and ask your child to match them up into number pairs or number bonds (this can be done as a game of Snap).
- Use objects to consider the bonds in a practical way.
- Look at the patterns with both objects and numbers e.g. as one number increases the other one decreases.
- Practise with the numbers in order and chosen randomly - remember the aim is for the child to be able to respond immediately.
- There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 4

Know the days of the week and the months of the year

- Try some of these activities:
- Write out the days of the week on a piece of paper and decorate them.
- Cut out the days of the week and put them in the correct order.
- Cut up an old calendar. Ask children to order the months and talk about the seasons.
- Talk with your child and use the names of the week as well as the terms tomorrow and yesterday.
- Make a poll of family birthdays and put them in order throughout the year.
- Discuss the day and month each day- ask your child what day it was yesterday and what it will be tomorrow.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 5

Know all doubles and halves to 10

Your child should be practising doubling and halving the numbers 0 to 10. When children are confident with doubles ask them to find the corresponding halves. Practise halving at least as often as doubling. This will help children with subtraction at a later date.

Use items around the home, such as:

"If there are 10 shoes. How many people can have a pair of shoes? 5! Can you tell me why?"

You can also practice by counting with objects, or when playing board games which use 2 dice!

There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Another game you can play is Number Ping Pong:

Play number ping pong!

Start of saying 'ping', child replies with 'pong'.

Repeat and then convert to numbers i.e. say '8' and they reply '16', or say, '20' and they say '10'.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Orange 6

Count to 100 in 10s

Counting in 10s will help prepare your child for learning times tables in the future, and will also help them to count larger amounts easily. Counting in 10s, forwards and backwards, can be practiced at any time. Try challenging your child by giving them different starting numbers, such as 20 or 70, rather than always starting at 0. It may help at first to look at the hundred square in your child's planner and see what they notice. You could then cover some of the numbers- can they work out what's covered up?

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Yellow 1

Know all addition and subtraction facts for all numbers between 0 and 20

This is building on the skill of knowing the number bonds to 20. Children should now become familiar with and practise all the different combinations of adding and subtracting numbers to a total of 20 (for example, 2 + 16 = 18, 17 – 5 = 12, 5 + 3 = 8, 6 + 7 = 13, 20 – 9 = 11, etc.) They already know all of the combinations to a total of 10 (KIRF Orange 2)

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

- Play games involving 2 dice and ask your child to add the total for each player.
- Use objects to consider the bonds in a practical way.
- Look at the patterns with both objects and numbers e.g. as one number increases the other one decreases.
- Practise with the numbers in order and chosen randomly - remember the aim is for the child to be able to respond immediately.
- There are activities which practice this skill on Numbots.

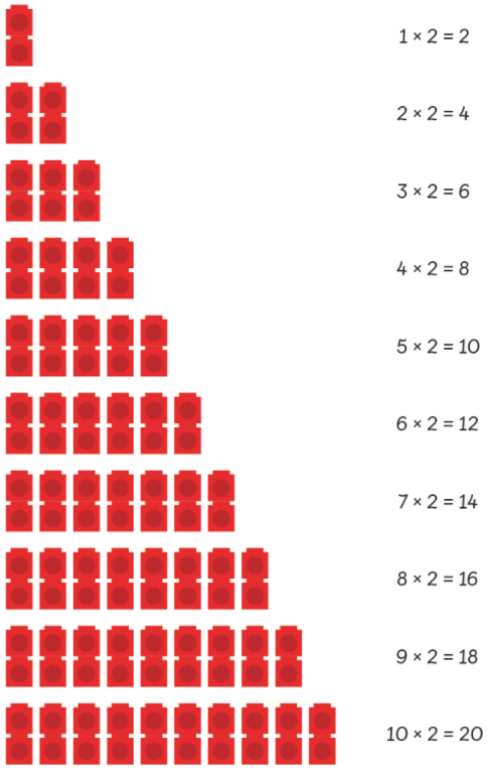
Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Yellow 2

Know all multiplication and division facts for 2x table

- You can use pairs of objects, such as pairs of socks, to help practice the 2x table.



- You can also use small plates and objects to calculate problems such as: "I have 4 plates and 2 sweets on each plate. How many sweets do I have altogether?
- Learn the 2 times tables through rote repetition, games, songs and quick-fire questions.
- Ask questions such as: Which is the number before 16 in the 2x table? What is the answer to 6x2? 9x2?

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Yellow 3

Know all multiplication and division facts for 5x and 10x table

This can be practised in a similar way to learning the 2x table. Use objects where possible, sing songs and practice rote repetition. Ask questions such as:

Which is the number before 40 in the 5x table?

What is the answer to 6 x 5?

6 x 10?

Look at the patterns in these times tables. Can your child find all of the times table on a hundred square and colour in the squares?

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

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

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Yellow 4

Know all doubles and halves of all numbers to 20

Your child should be practising doubling and halving the numbers 0 to 20. When children are confident with doubles ask them to find the corresponding halves. Practise halving at least as often as doubling. This will help children with subtraction at a later date.

Use items around the home and create word problems to test their knowledge, such as:

"If there are 20 tyres, how many bikes can have a pair of wheels? 10! Can you tell me why?"

There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Another game you can play is Number Ping Pong:

Play number ping pong!

Start of saying 'ping', child replies with 'pong'.

Repeat and then convert to numbers i.e. say '12' and they reply '24' (doubles to 20), or say, '36' and they say '18'.

Round Hill Primary School
Key Instant Recall Facts

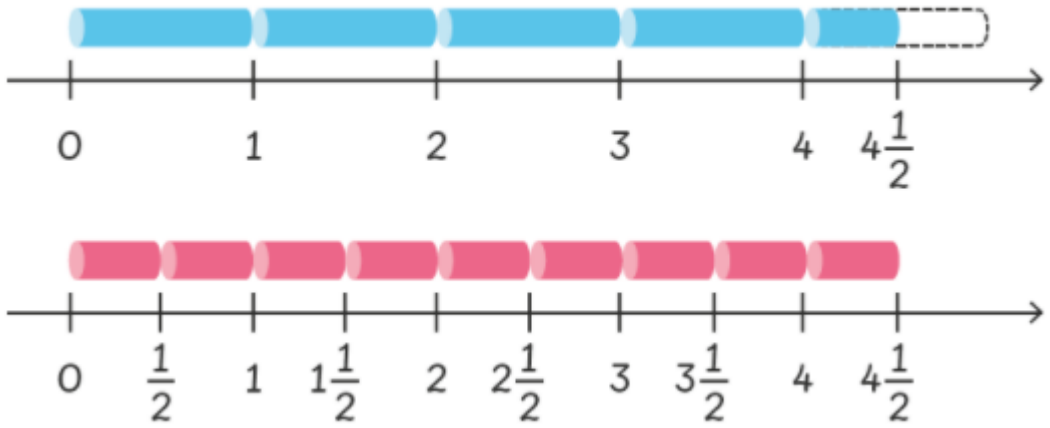
Your child is now working on:

Yellow 5

Count in halves up to 10

Using real life examples will help your child to count in halves. Try cutting foods in half and then counting the total amount. It is important that children understand that 2 halves make one whole.

Looking at a number line might also be useful.



Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Yellow 6

Know all addition and subtraction facts for multiples of 10 to 100

Children should know and be able to use pairs of numbers which are multiples of 10 (e.g. 20, 40, 70), which add to make 100. Remind children that if they know 7 + 3 = 10 they also know that 70 + 30 = 100. From this fact, they also know that 30 + 70 = 100 and that 100 – 30 = 70.

10+90

20+80

30+70

40+60

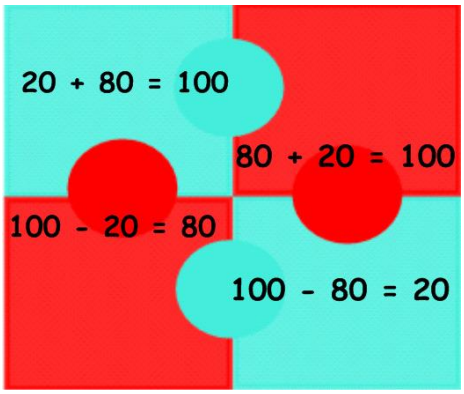
50+50

60+40

70+30

80+20

90+10



Print out number cards and ask your child to match them up into number pairs or number bonds (this can be done as a game of Snap).

Write a list of multiples of 10 then time your child to see how long it takes them to write down the other number that makes up each pair (20 and 80; 50 and 50; 40 and 60).

There are also activities on Numbots which work on this skill. Check with your child's teacher if you do not have a login.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Green 1

Count to 1000 in 100s

Counting in 100s will help prepare your child to count larger amounts easily. Counting in 100s, forwards and backwards, can be practiced at any time. Try challenging your child by giving them different starting numbers, such as 200 or 700, rather than always starting at 0. Practice little and often, and make the most of times such as walking to school to practice.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Green 2

Know how to check if a number is divisible by 2, 5 or 10

Being able to easily spot if a number can be divided by 2, 5 or 10 is a really handy skill. Your child has already learnt the 2, 5 and 10 x tables and will probably have spotted patterns in the answers to these. Knowing these rules will help them to know if a number is in the 2, 5 or 10 x table even if it is past their knowledge of up to 12x!

A number is divisible by 2 if its last digit is even.

A number is divisible by 5 if its last digit is 0 or 5.

A number is divisible by 10 if its last digit is a 0.

Practice and challenge your child with lots of different numbers, particularly numbers larger than 100.

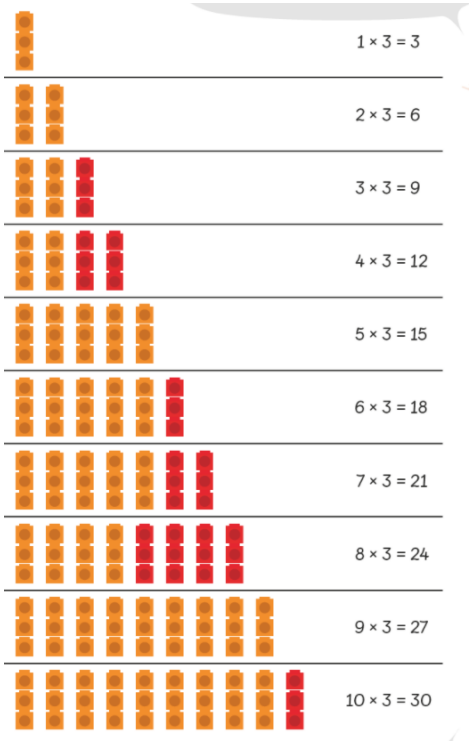
Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Green 3

Know all multiplication and division facts for 3x table

Use objects for the lower numbers so that your child can see the groups of 3.



Encourage your child to think about facts they know to help them work out other facts, such as if they know 3 x 2 = 6, then they can double this to find 3 x 4.

You can also practice the 3x table through rote repetition, games, songs and quick-fire questions. Ask questions such as: Which is the number before 27 in the 3x table? What is the answer to 6x3? 3x8?

Your child could also play games on Times Table Rock Stars to help build their times table knowledge.

Round Hill Primary School
Key Instant Recall Facts

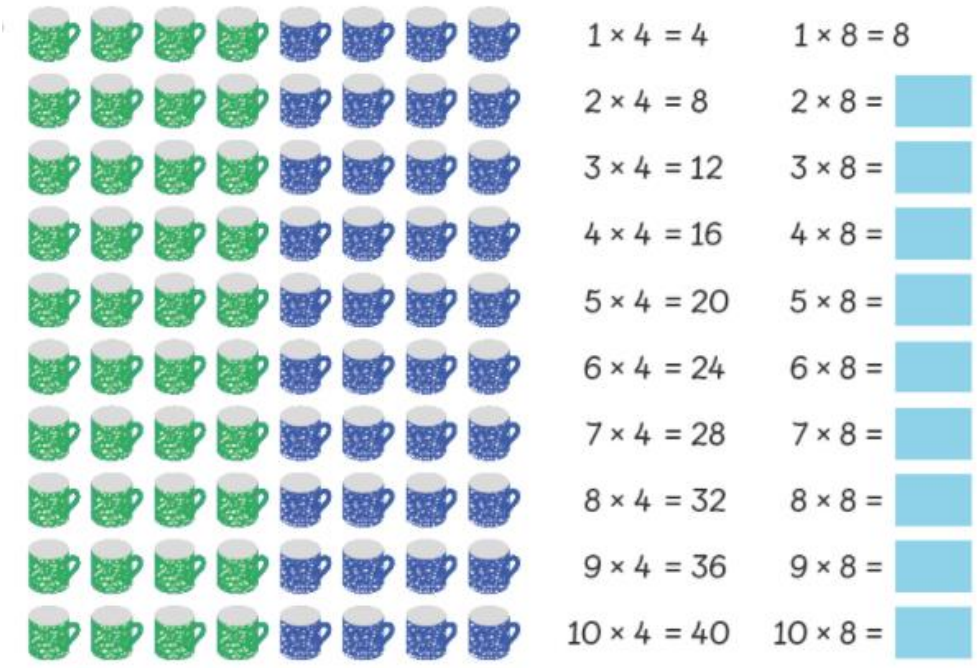
Your child is now working on:

Green 4

Know multiplication and division facts for 4x and 8x table

Practice the 4 and 8 x tables using rote learning, songs and games. You can find lots of songs on the internet. If your child creates their own song, this can make the times table more memorable.

Encourage your child to think about facts they know to help them work out other facts. If they learn the 4x table first, they can use this to work out the 8x table by doubling their fours – Multiplying a number by 8 is the same as multiply by 4 and then doubling the answer. 8 × 4 = 32 and double 32 is 64, so 8 × 8 = 64.



Your child could also play games on Times Table Rock Stars to help build their times table knowledge.

Once learned deeply, your child should be able to answer questions in any order, including missing number questions e.g. 8 x ? = 16 or

? ÷ 8 = 7.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Green 5

Recall facts about duration of time

The following facts are important for children to learn. They may create rhymes or stories to help them remember these facts, or create a poster with these facts on and put it somewhere they look regularly.

Regularly ask your child about these facts- just 2 or 3 at a time. It doesn't need to be a test! Looking at a clock may help them to remember the number of seconds in a minute/ minutes in an hour. Remember to give lots of praise for remembering these facts!

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.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Green 6

Know the number of days in each month

Number of days is a 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

Using rhymes and memory games can help children remember which months have 30 days. There are also poems describing the months of the year in order.

Thirty days hath September,
April, June and November;
All the rest have thirty-one,
Excepting February alone.
Which only has but twenty-eight days clear
And twenty-nine in each leap year.

You can also use this trick:

1. Ball your hands into fists and hold them front of you.
2. Count the months on your knuckles and the grooves in between, starting with January on your leftmost knuckle, which is your left pinky.
3. Don't count your thumb's knuckles or any space between your hands. Each of the seven months that land on a knuckle will be months with 31 days. The five months that fall on the grooves all have 30 days.
4. Remember the one exception – February – that falls on a groove. It has 28 days, or 29 in a leap year.

Children also need to know the order of the months in a year. They should be able to apply these facts to answer questions, such as: What day comes after 30th April? What day comes before 1st February?

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 1

Consolidate known times table facts (x2, x5, x10, x3, x4, x8)

This is a chance for your child to practice and become more confident with the times table facts they already know. Practice these times tables in different ways, using games, quizzes and songs. Using Times Table Rock Stars will help your child develop their speed. 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. Remember to practice related division facts.

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	120	132
12	24	36	48	60	72	84	96	108	120	132	144

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 2

Know multiplication and division facts for the 6x and 9x Tables

Alongside songs and rote learning, you can develop your child's understanding of these times table. Start by asking your child questions which they already know from other times tables, such as 1 x 6, 2 x 6, 5 x 6, 10 x 6. This will build up on their most secure existing table facts

Add in 3 x 6 and 4 x 6 when step 1 is frequently recalled correctly and instantly. Then build up with 6 x 6, 7 x 6, 8 x 6. When looking at 9 x 6, 11 x 6 and 12 x 6, children should look at finding 10 x 6 and take away or add the appropriate groups of 6. Encourage them to remember the last 2 numbers in the sequence that they have learnt (66 and 72).

Add in related division facts. For some children, this step can be integrated from step 1 onwards. For others, they will need time to develop recall all of multiplication facts first before adding this in.

This process can be repeated for the 9 times table.

1	x	6	=	6	1	x	9	=	9
2	x	6	=	12	2	x	9	=	18
3	x	6	=	18	3	x	9	=	27
4	x	6	=	24	4	x	9	=	36
5	x	6	=	30	5	x	9	=	45
6	x	6	=	36	6	x	9	=	54
7	x	6	=	42	7	x	9	=	63
8	x	6	=	48	8	x	9	=	72
9	x	6	=	54	9	x	9	=	81
10	x	6	=	60	10	x	9	=	90
11	x	6	=	66	11	x	9	=	99
12	x	6	=	72	12	x	9	=	108

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 3

Know all multiplication and division facts for 7x table

You can continue to use songs, games, posters, rhymes, quizzes and any other strategies you've found to practice the 7x times table! You can also work through the times table in a similar way to the strategy in Blue 2. Remember to keep practising the division facts alongside the multiplication facts.

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

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 4

Know all multiplication and division facts for 11x and 12x table.

These are the final two times tables that your child will need to learn.

11 x 1 = 11	12 x 1 = 12
11 x 2 = 22	12 x 2 = 24
11 x 3 = 33	12 x 3 = 36
11 x 4 = 44	12 x 4 = 48
11 x 5 = 55	12 x 5 = 60
11 x 6 = 66	12 x 6 = 72
11 x 7 = 77	12 x 7 = 84
11 x 8 = 88	12 x 8 = 96
11 x 9 = 99	12 x 9 = 108
11 x 10 = 110	12 x 10 = 120
11 x 11 = 121	12 x 11 = 132
11 x 12 = 132	12 x 12 = 144

When learning these times table, encourage your child to look for patterns- how many can they spot?

Children can also use their ten times table knowledge – Multiply a number by 10 and add the original number (e.g. 9 × 10 + 9 = 90 + 9 = 99). What do they notice?

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!

Prompt your child to "Buy one get three free!" – If your child knows one fact (e.g. 3 × 11 = 33), can they tell you the other three facts in the same fact family?

Continuing to play on Times Table Rock Stars regularly will also support your child's developing times table knowledge.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 5

Multiply and divide single-digit numbers by 10 and 100

7 × 10 = 70	30 × 10 = 300	0.8 × 10 = 8
10 × 7 = 70	10 × 30 = 300	10 × 0.8 = 8
70 ÷ 7 = 10	300 ÷ 30 = 10	8 ÷ 0.8 = 10
70 ÷ 10 = 7	300 ÷ 10 = 30	8 ÷ 10 = 0.8
6 × 100 = 600	40 × 100 = 4000	0.2 × 10 = 2
100 × 6 = 600	100 × 40 = 4000	10 × 0.2 = 2
600 ÷ 6 = 100	4000 ÷ 40 = 100	2 ÷ 0.2 = 10
600 ÷ 100 = 6	4000 ÷ 100 = 40	2 ÷ 10 = 0.2

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. 10 × ? = 500 or ? ÷ 10 = 60.

When multiplying by 10 or 100, remind your child that each digit has become 10 or 100 times larger, and so moves to a higher column in our place value system. We discourage children from thinking of "adding a 0" as this can cause problems when working with decimals!

When dividing by 10 or 100, the opposite happens and the digits move to the right on our place value chart.

Your child might find it helpful to draw themselves a place value chart to practice with.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Blue 6

Know all decimal number bonds to 1 (1 decimal place)

Your child can use their knowledge of the number bonds to 10 to support them with these facts. These are number bonds (a pair of numbers), each with 1 decimal place, which add to make 1.

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

Once these facts are known, your child should be able to apply them to answer other questions, including missing number questions, for example:

I know 0.6 + 0.4 = 1

so I also know: 0.4 + 0.6 = 1 1 – 0.4 = 0.6 and 1– 0.6 = 0.4

You can practice these number bonds in various ways, such as writing out each number and asking your child to match up the pairs which make 1.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Indigo 1

Consolidate all multiplication and division facts for all tables up to 12x12

1 × 1	1 × 2	1 × 3	1 × 4	1 × 5	1 × 6	1 × 7	1 × 8	1 × 9	1 × 10	1 × 11	1 × 12
2 × 1	2 × 2	2 × 3	2 × 4	2 × 5	2 × 6	2 × 7	2 × 8	2 × 9	2 × 10	2 × 11	2 × 12
3 × 1	3 × 2	3 × 3	3 × 4	3 × 5	3 × 6	3 × 7	3 × 8	3 × 9	3 × 10	3 × 11	3 × 12
4 × 1	4 × 2	4 × 3	4 × 4	4 × 5	4 × 6	4 × 7	4 × 8	4 × 9	4 × 10	4 × 11	4 × 12
5 × 1	5 × 2	5 × 3	5 × 4	5 × 5	5 × 6	5 × 7	5 × 8	5 × 9	5 × 10	5 × 11	5 × 12
6 × 1	6 × 2	6 × 3	6 × 4	6 × 5	6 × 6	6 × 7	6 × 8	6 × 9	6 × 10	6 × 11	6 × 12
7 × 1	7 × 2	7 × 3	7 × 4	7 × 5	7 × 6	7 × 7	7 × 8	7 × 9	7 × 10	7 × 11	7 × 12
8 × 1	8 × 2	8 × 3	8 × 4	8 × 5	8 × 6	8 × 7	8 × 8	8 × 9	8 × 10	8 × 11	8 × 12
9 × 1	9 × 2	9 × 3	9 × 4	9 × 5	9 × 6	9 × 7	9 × 8	9 × 9	9 × 10	9 × 11	9 × 12
10 × 1	10 × 2	10 × 3	10 × 4	10 × 5	10 × 6	10 × 7	10 × 8	10 × 9	10 × 10	10 × 11	10 × 12
11 × 1	11 × 2	11 × 3	11 × 4	11 × 5	11 × 6	11 × 7	11 × 8	11 × 9	11 × 10	11 × 11	11 × 12
12 × 1	12 × 2	12 × 3	12 × 4	12 × 5	12 × 6	12 × 7	12 × 8	12 × 9	12 × 10	12 × 11	12 × 12

This is a chance for children to consolidate their knowledge of multiplication and division facts and to increase their speed of recall.

They should be able to answer these questions in any order, including missing number questions e.g. 7 × ◯ = 28 or ◯ ÷ 6 = 7.

Your child can use Times Table Rock Stars to help practice their times table knowledge, and challenge themselves to become quicker at answering questions. They could also fill in blank times table charts, and try to do this as quickly as they can!

For another challenge, they could try taking two packs of playing cards (removing 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.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Indigo 2

Multiply and divide numbers by 10, 100 and 1000

30 × 10 = 300	0.8 × 10 = 8	7 x 1000 = 7000
10 × 30 = 300	10 × 0.8 = 8	1000 x 7 = 7000
300 ÷ 30 = 10	8 ÷ 0.8 = 10	7000 ÷ 7 = 1000
300 ÷ 10 = 30	8 ÷ 10 = 0.8	7000 ÷ 1000 = 7
40 × 100 = 4000	0.2 × 10 = 2	2.3 x 1000 = 2300
100 × 40 = 4000	10 × 0.2 = 2	1000 x 2.3 = 2300
4000 ÷ 40 = 100	2 ÷ 0.2 = 10	2300 ÷ 2.3 = 1000
4000 ÷ 100 = 40	2 ÷ 10 = 0.2	2300 ÷ 1000 = 2.3

These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. 10 × ? = 500 or ? ÷ 10 = 60.

When multiplying by 10, 100 or 1000, remind your child that each digit has become 10, 100 or 1000 times larger, and so moves to a higher column in our place value system. We discourage children from thinking of "adding a 0" as this can cause problems when working with decimals!

When dividing by 10, 100 or 1000, the opposite happens and the digits move to the right on our place value chart.

Your child might find it helpful to draw themselves a place value chart to practice with.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Indigo 3

Know how to check if a number is divisible by 3, 6 or 9

Being able to easily spot if a number can be divided by 3, 6 or 9 can be useful. Your child has already learnt the 3, 6 and 9 x tables and will probably have spotted patterns in the answers to these. Knowing these rules will help them to know if a number is in the 3, 6 or 9 x table even if it is past their knowledge of up to 12x! For these times tables, there are some less commonly known rules which can be used too!

A number is divisible by 3 if the sum of its digits is divisible by 3.

e.g. 375 is divisible by 3 because 3 + 7 + 5 = 15, which is divisible by 3.

A number is divisible by 6 if it is divisible by both 2 and 3.

A number is divisible by 9 if the sum of its digits is divisible by 9.

e.g. 92,745 is divisible by 9 because 9 + 2 + 7 + 4 + 5 = 27 which is divisible by 9.

Practice and challenge your child with lots of different numbers, particularly numbers larger than 100.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Indigo 4

Know all decimal pairs that total 1 or 10 (1 decimal place)

Your child can use their knowledge of the number bonds to 10 and 100 to support them with these facts. These are number bonds (a pair of numbers), each with 1 decimal place, which add to make either 1 or 10.

These facts are revision from Blue 6:

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

At Indigo 4, children are also expected to know facts such as:

1.3 + 8.7 = 10 2.5 + 7.5 = 10 2.8 + 7.2 = 10

6.4 + 3.6 = 10 7.1 + 2.9 = 10 9.3 + 0.7 = 10

This list includes some (not all) examples of facts that children should know. Whilst they are not expected to know all of the possible combinations by heart, they should know the standard number bonds to 10 and be able to use these to answer questions involving decimals quickly, including missing number questions.

Your child may prefer to think of number bonds to 100, then divide each of the numbers involved by 10 to find the decimal number bond to 10, e.g. 26 + 74 = 100 so 2.6 + 7.4 = 10

You can practice these number bonds in various ways, such as writing out each number and asking your child to match up the pairs which make 1.

Regularly practising by giving your child just a few numbers and asking them to decide the other number in the pair to make 10 is a good way of practising this.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

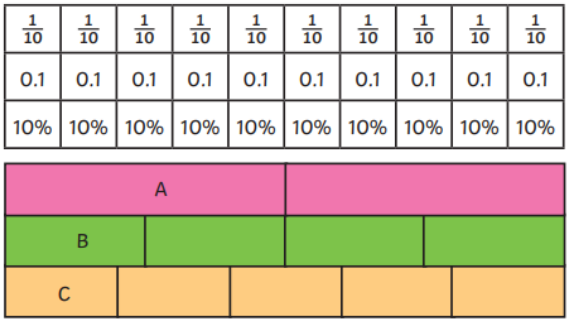
Indigo 5

Know the decimal and percentage equivalents of the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ and $\frac{1}{100}$

Knowing the decimal and percentage equivalents of certain fractions will help your children to understand the link between fractions, decimals and percentages more easily, and help them to solve a range of problems.

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{1}{5}$	0.2	20%
$\frac{1}{10}$	0.1	10%
$\frac{1}{100}$	0.01	1%

Your child may find that drawing the different fractions/ decimals/ percentages helps them to understand and see that these are different ways of describing the same amount, e.g.



They could also colour in squares on a 100 square to show different fractions, with each square representing 0.01 or 1% of the whole.

You could also write out each of these fractions, decimals and percentages and ask your child to match them up.

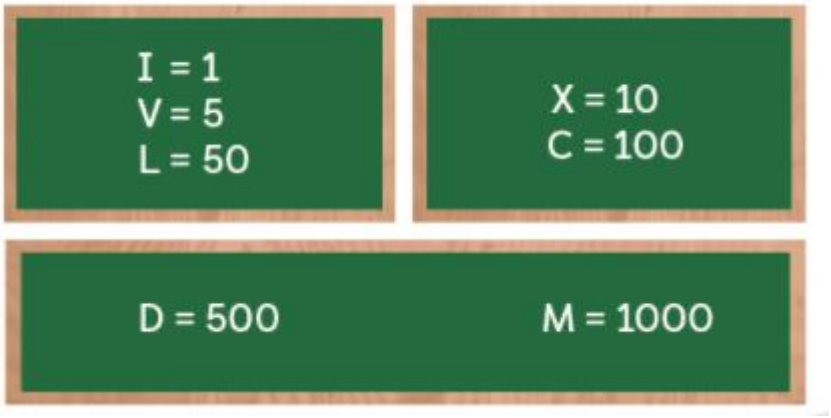
Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Indigo 6

Know Roman Numerals to 1000

For Indigo 6, your child should learn the seven symbols used in Roman numerals:



These can be practised by writing the Roman numerals and the corresponding Arabic numbers on separate pieces of paper, and asking your child to match them.

They can also look out for Roman numerals being used in real life, for example on clock faces and at the end of TV programmes. They could make a note of any they see and work them out later.

Children should also practice using Roman numerals, remembering the rules of adding each number unless a smaller number appears before a larger one, in which case it is subtracted, e.g.

VI = 5 + 1 = 6 IV = 1 taken from 5 = 5 – 1 = 4

You can practice by giving your child different numbers in Roman numerals and Arabic numerals, and asking them to write them in the other language.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Violet 1

Know the prime numbers 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.

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 vocabulary such as: prime, composite, even, odd?

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?

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Violet 2

Know the decimal and percentage equivalents of multiples of the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$ and $\frac{1}{100}$

Knowing the decimal and percentage equivalents of certain fractions will help your children to understand the link between fractions, decimals and percentages more easily, and help them to solve a range of problems. They should already know the equivalents below (Indigo 5):

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
$\frac{1}{5}$	0.2	20%
$\frac{1}{10}$	0.1	10%
$\frac{1}{100}$	0.01	1%

They are now working on also knowing multiples of these amounts, such as $\frac{3}{4}$, $\frac{2}{5}$ or $\frac{57}{100}$. These are just a few examples; your child will need to be able to quickly work out the equivalents of all multiples of the fractions listed in the table above. Your child should notice patterns developing when they look at equivalent decimals or percentages for these multiples.

Your child may find that drawing the different fractions/ decimals/ percentages helps them to understand and see that these are different ways of describing the same amount.

They could also colour in squares on a 100 square to show different fractions, with each square representing 0.01 or 1% of the whole.

You could also write out some different fractions, decimals and percentages and ask your child to match them up. Alternatively, give your child a quick-fire quiz by saying either a fraction, decimal or percentage and asking them to tell you the equivalent.

Round Hill Primary School
Key Instant Recall Facts

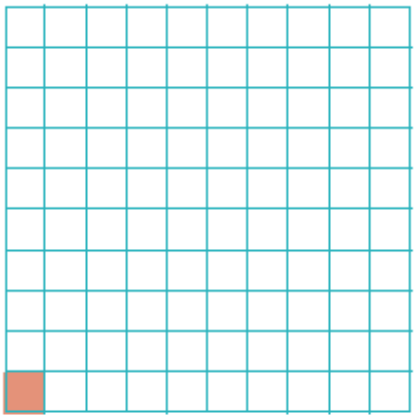
Your child is now working on:

Violet 3

Know all the two decimal place number bonds to 1

One of the best ways to describe decimals, is to show a child a **blank hundred number square or number chart** and explain that this represents 'one'. Children need to know that when we talk about decimals, it is as if we are splitting one whole up into smaller parts. If you coloured in one of the squares in the above diagram, this would be represented as the decimal 0.01 (which is one hundredth or 1/100). By combining this knowledge with number bonds to 100, a child can find the compliment decimal to add to achieve a whole,

e.g. 0.27 + 0.73 = 1 0.33 + 0.67 = 1 0.56 + 0.44 = 1



0.01

Once your child has explored this a little, give them a 2 decimal place number and ask them to work out the other number needed to make 1. As they become more confident, they should be able to do this without looking at a hundred square.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Violet 4

Know how to check if a number is divisible by 4 or 12

Being able to easily spot if a number can be divided by 4 or 12, in addition to knowing if they can be divided by other numbers (Green 2 and Indigo 3) can help your child spot prime numbers past those they have learnt. Knowing these rules will help them to know if a number is in the 4 or 12 x table even if it is past their knowledge of up to 12x!

A number is divisible by 4 if the last two digits form a number that is divisible by 4.

e.g. 40,832 is divisible by 4 because 32 is divisible by 4.

Another way to know if a number is divisible by 4, is:

- if the tens digit is even, the ones digit must be 0, 4 or 8
- if the tens digit is odd, the ones digit must be 2 or 6.

If either of these are the case, then the number is divisible by 4.

A number is divisible by 12 if it is divisible by both 3 and 4.

Allow your child to test these rules out with a range of different numbers. The more they try them, the easier they will find it to remember the rules.

Practice and challenge your child with lots of different numbers, particularly numbers larger than 100.

Round Hill Primary School
Key Instant Recall Facts

Your child is now working on:

Violet 5

Know how to check if a number is divisible by 7, 8 or 11

These are the final divisibility rules your child needs to know. This will again help them to spot prime numbers and also solve problems where they need to work out if a division will give a remainder or what to divide something by.

To find out if a number is divisible by 7, take the last digit and multiply it by 2. Subtract this from the rest of the number. If the answer is a multiple of 7, the original number was divisible by 7.

e.g. 665 is divisible by 7 because 66 – (2 x 5) = 56 which is divisible by 7

If the answer to the subtraction is too large to know if it is a multiple of 7, the process can be repeated multiple times. However, we will not ask in school for your child to check more than a 3-digit number!

A number is divisible by 8 if:

- the hundreds digit is even and the tens and ones digits make a number which is divisible by 8, e.g. 624
- the hundreds digit is odd, add 4 to the number created by the last two digits. If this is divisible by 8, the original number is also. E.g. 352: 52 + 4 = 56 which is divisible by 8

A number is divisible by 11 if you can subtract the last digit from the rest of the number, and the answer be divisible by 11, e.g. 627: 62 – 7 = 55

If the answer to the subtraction is too large to know if it is a multiple of 11, the process can be repeated multiple times. However, we will not ask in school for your child to check more than a 3-digit number!

Round Hill Primary School
Key Instant Recall Facts

You are now working on:

Violet 6

Congratulations!

You have completed all of the Round Hill Primary School KIRFs!

Violet 6 is a chance for you to practice everything you have learnt and get ready to show your new secondary school that you are a fantastic mathematician!