EYFS/KS1 Phonics and Maths workshop

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Why phonics?

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- Before phonics, sight reading was used to teach children to read.
- Phonics allows children to read complex and unfamiliar words by breaking each word down into individual sounds
- Research has shown that phonics is much more effective than sight reading because sight reading relies on memorising each word individually whereas phonics gives children the tools to decode most words.
- From 2007, the government mandates that every school uses an approved synthetic phonics scheme.

quacking

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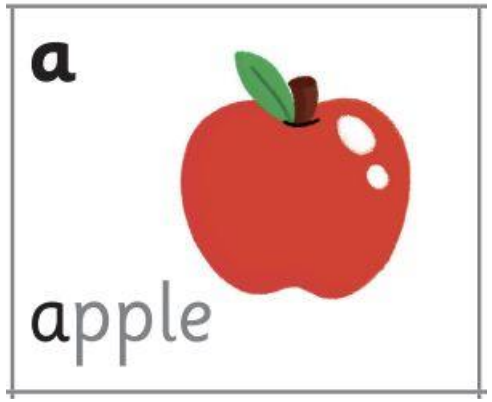

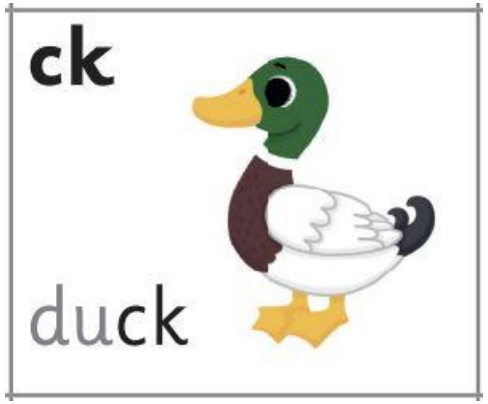

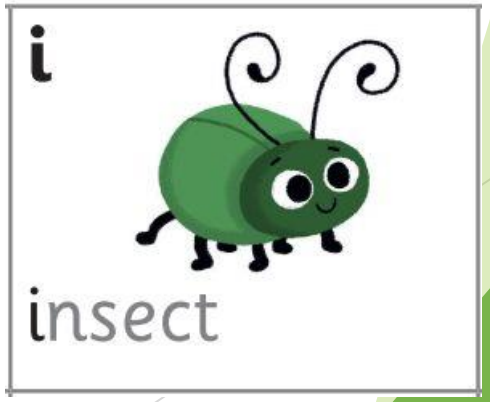

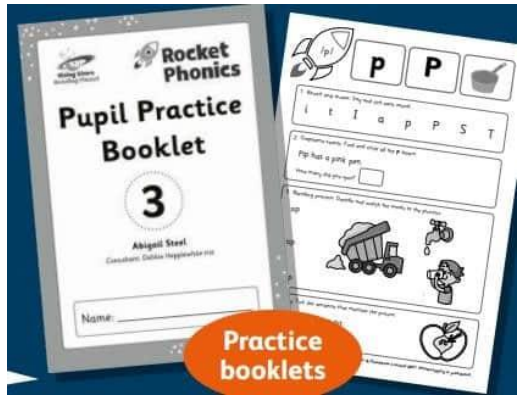

Rocket Phonics

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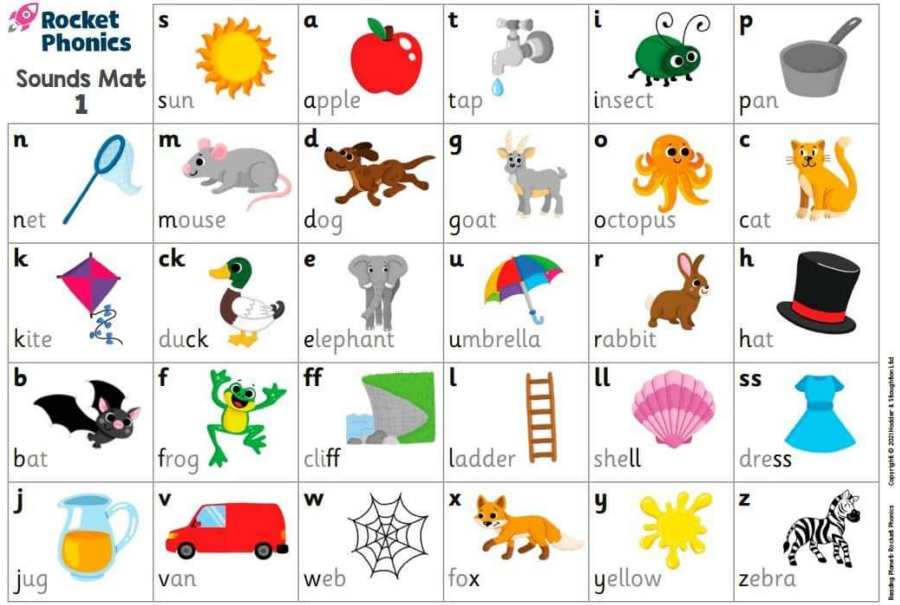
- Rocket Phonics is a government approved phonics scheme.
- Sounds are taught in a specific order (not alphabetically) to help children begin to build words as early as possible
- We use Rocket Phonics flashcards, sound mats, interactive online Big Books and reading books for home to ensure consistency of resources used

Reception Phonic Sounds

60 sounds in Reception



- Each week we teach the children two new sounds e.g. s, a
- Be careful not to add an ‘uh’ at the end of each sound. For example for mitten you cannot say muh - itten.
- When you see one individual sound, we call this a phoneme.

https://www.youtube.com/watch?v=zX7dmuB4fNg&list=PLkCyTyvoxZztJbDs1Sp3-9MoywMKBhhwp

Reception Phonic Sounds

- We then move on to teach:

Digraphs – two letters than come together to form one sound e.g. ee

Trigraphs – three letters that come together to form one sound e.g. igh

Split digraphs – a digraph which is split by a consonant e.g. scheme (e-e).

Oral Blending

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As we teach more sounds in Phonics, we then begin to teach the children to blend the sounds together.

First, the children need to be able to orally blend. For example, when an adult says c – a – t . They can hear those sounds making the word cat.

Play from 5.28. https://youtu.be/PlWK6Q9_cXQ

Blending for Reading

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Once the children can orally blend, they can apply this skill to blend together sounds they have learnt and read simple words.

For example:

Dots for individual sounds

sat

Dashes for digraphs / trigraphs.

sigh

soap

We place sound buttons under words to help them see the sounds.

Play from 8.40 https://youtu.be/PlWK6Q9_cXQ

Segmenting for Writing

Segmenting for writing is essentially sounding a word out.

e.g cat – what sounds can we hear in cat?
c– a - t

We use the left hand to support the children with writing so that when they turn their hand toward them – the letters are facing the same way as when we write them.

The children have sound mats in front of them to support them.

In Reception we teach the children to form their letters with a lead out so that in year 1 they have the foundations to join their letters together.

https://www.youtube.com/watch?v=owKk8SEE_KM&list=PLkCyTyvoxZzuVAMhhujteytc2nVCPm6nX&index=10 Play from 6.40

ar

1. Revisit and review: Say and tick each sound.

ch sh th ng ai ee igh oa

2. Grapheme search: Find and circle all the **ar** letters.

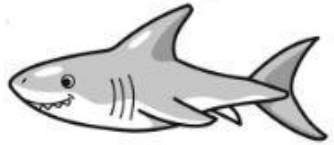
Mark was at the park until it got dark.

How many did you spot? ☐

3. Blending practice: Decode and match the words to the pictures.

jar

shark



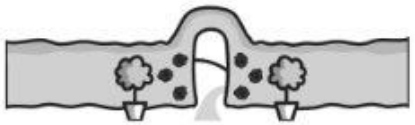
card

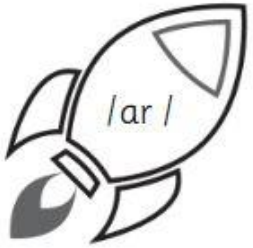
car

4. Apply: Tick the sentence that matches the picture.

This garden has an arch.

This garden has a shark.





ar

1. Revisit and review: Listen to the sounds and point to the letters.

oo j w y qu ch th ai

2. Grapheme write: Copy the letters and say the sound as you write.

ar ar ar _____ ar _____

ar ar ar _____ ar _____

3. Segmenting practice: Look and write the words.

___ ___ ___

ar sh ar

___ ___ ___

ar d t

4. Apply: Let's write a sentence.

_____

_____

Year 1 Phonics

- In Year 1 children learn 70 sounds
- The sounds include alternative pronunciations

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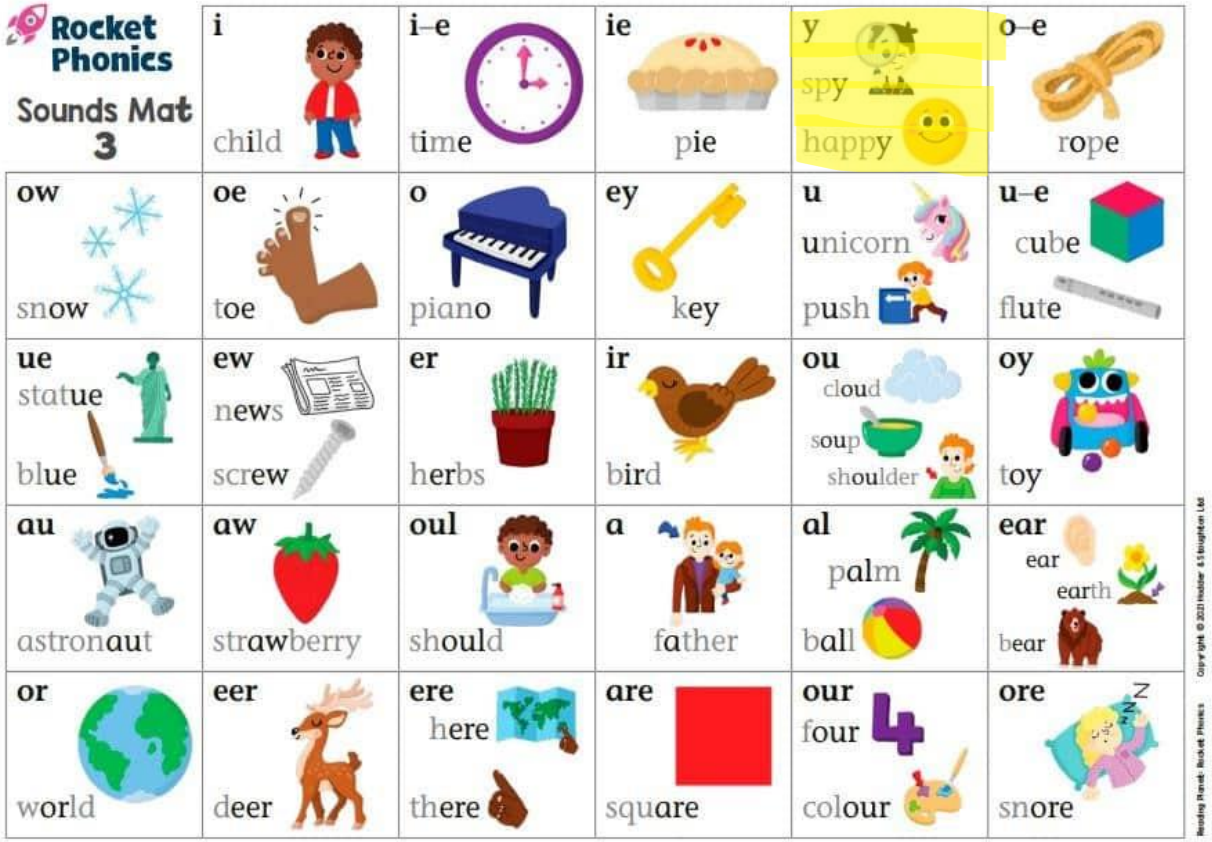
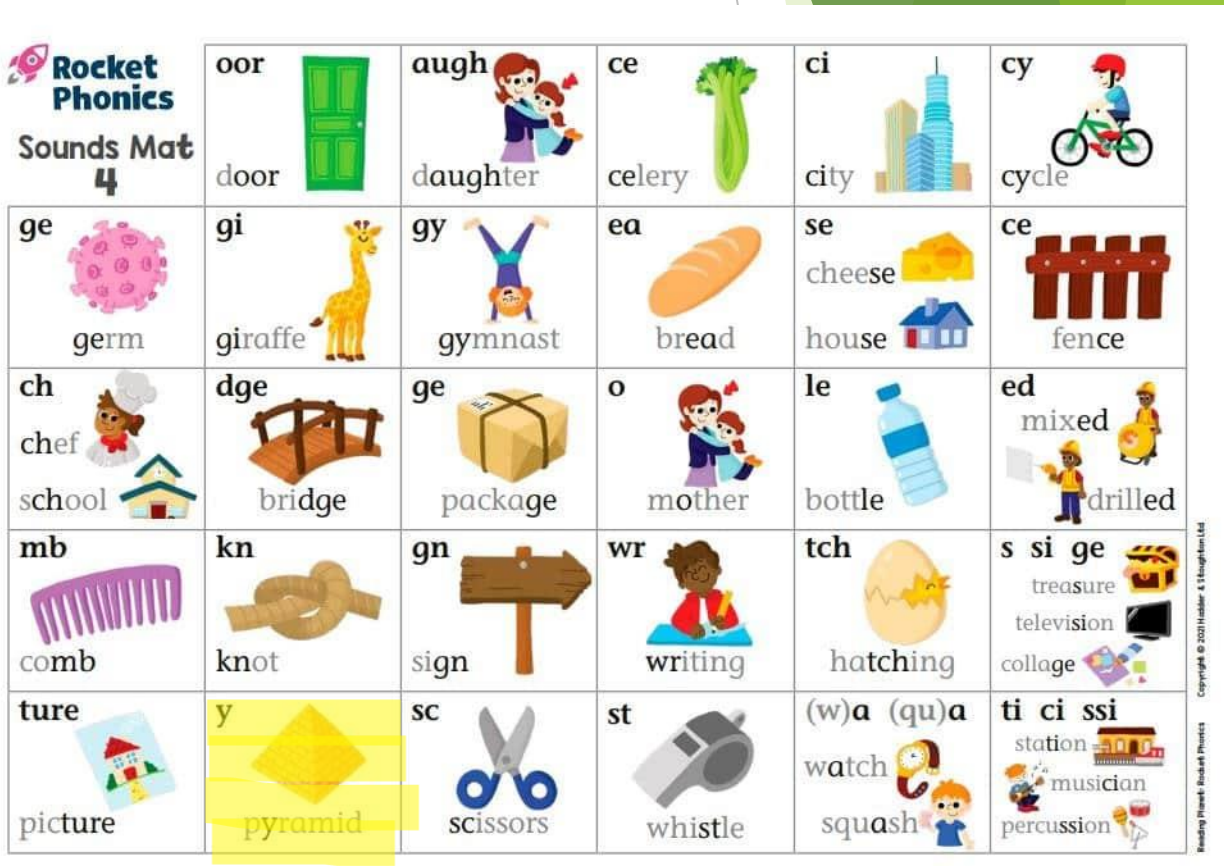
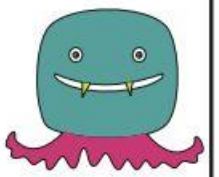




https://www.youtube.com/watch?v=vuPUrPNrhOg&list=PLkCyTyvoxZztJbDs1Sp3-9MoywMKBhhwp&index=6

slimp 	elbow
craint 	tailor
splet 	sequins
strave 	whirling

Phonics screening check

- In June children in Year One sit the Phonics Screening Check.
- 20 real words and 20 alien words
- This is a compulsory national assessment.

Phonics screening

- The pass mark is usually 32/40.
- If children fail the phonics screening, they will have phonic interventions and will retake the test in June of Year 2.
- You will find out what mark your child got on their end of year report in July.

It’s a low stake assessment and the children are so used to showing off their phonic sounds that they see it as no different to any other normal classroom practice. We do not put any pressure on them.

y

1. Revisit and review: Say and tick each sound.

igh i ie ar oi er ph e–e

2. Blending practice: Decode and tick each word.

sky	sly	try
why	dry	by

3. Grapheme search: Find and circle all the **/igh/** as **y** graphemes.

Clara's big sister was a spy. Clara asked,
"What do you need to do to be a spy?"
Clara's sister said, "You need to try to be sly.
Do you see how my green coat helps me blend
into this long, dry grass?"

How many did you find? ☐

4. Apply: Re-read the passage above and answer the question.

Why did Clara's sister want to blend into the grass?

_____

y

1. Revisit and review: Listen to the sounds and point to the graphemes.

x qu ch ai oo ow ure wh

2. Segmenting practice: Listen and write the words

_____ _____ _____

3. Find and write the **/igh/** as **y** words from the text on page 8.

_____

_____

_____

_____

_____

4. Apply: Let's write.

_____

_____

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Tricky Words/Common exception words

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Words that must be explicitly taught as they cannot be blended or sounded out. 2 or 3 a week are covered in class and sent home from week 4 of reception.

I	the	go	to
no	into	he	she
we	me	be	was
my	you	her	they
all	are	some	one
said	come	do	so
were	when	have	there
out	like	little	what

Reception

Year 1

some	one	said	come
do	so	were	when
have	there	out	like
little	what	oh	their
people	Mr Mrs	looked	called
asked	could	water	where
who	again	thought	through
many	laughed	because	any
eyes	friends	once	please

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Find them in books

As you read stories, point out the tricky words then progress to pausing and having your child read them.

Look for them in junk mail or magazines

Decorate your house with them

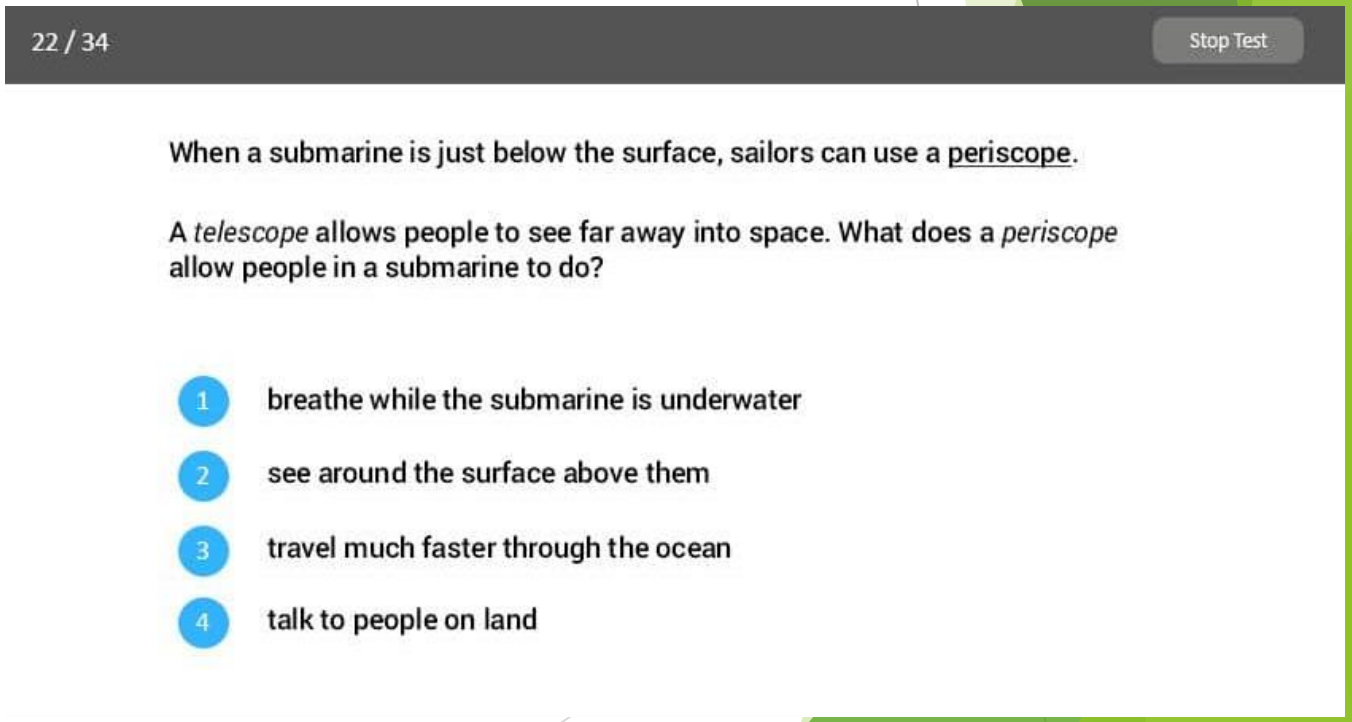
A teacher friend of mine sticks them all around the house so she can quiz her little boy throughout the

Year 2 Reading

- Phonics is still ongoing, children have Phonics lessons in the Autumn term to consolidate their learning from Reception and Year 1.
- The focus moves heavily onto **comprehension** as children should be able to decode and read fluently.
- From September, children who are reading at the expected level get put onto accelerated reader, taking regular “star reader tests” to ensure they are reading books of the appropriate level.

- Years 2-6 use accelerated reader.

Accelerated Reader®



Year 2 Reading

- Phonics is still ongoing, children have Phonics lessons in the Autumn term to consolidate their learning from Reception and Year 1.
- The focus moves heavily onto **comprehension** as children should be able to decode and read fluently.
- The focus is “reading deeper” rather than reading more and more complex books.

Who…?
What…?
Where…?
When…?
Why…?
How…?
Find and copy a word that means…

When we finished, our painting was really bright and colourful. Then JJ said, "Hold these brushes very carefully. I will get something to clean them."

I wanted to see the top of our picture so I climbed the steps. They wobbled!

I dropped the brushes!

5 Why did Jasmine climb the steps?

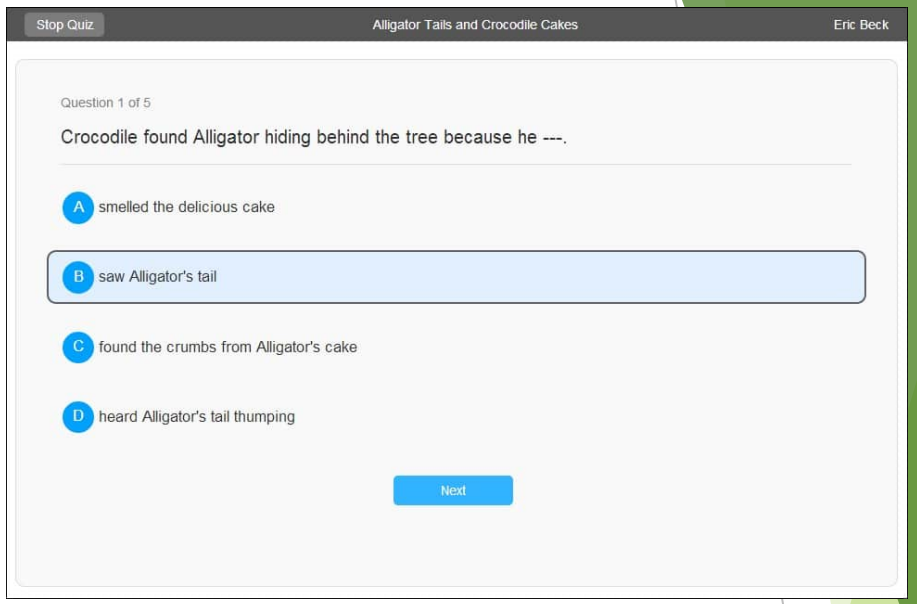
She climbed the steps because she wanted to see the top of the picture.

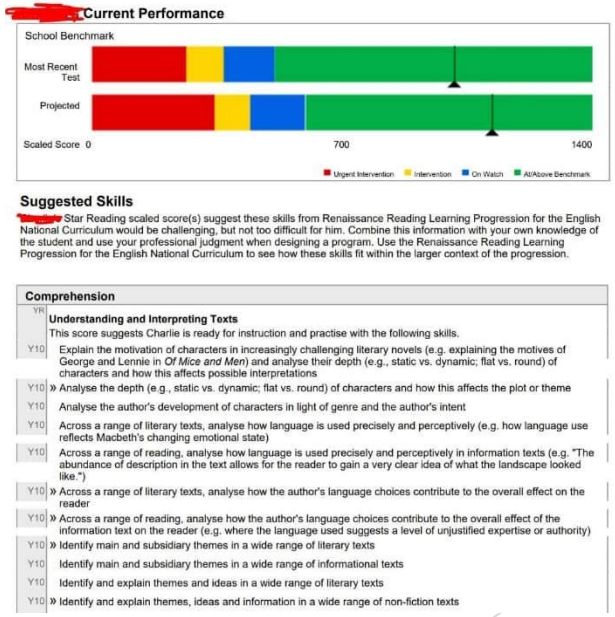
1 mark

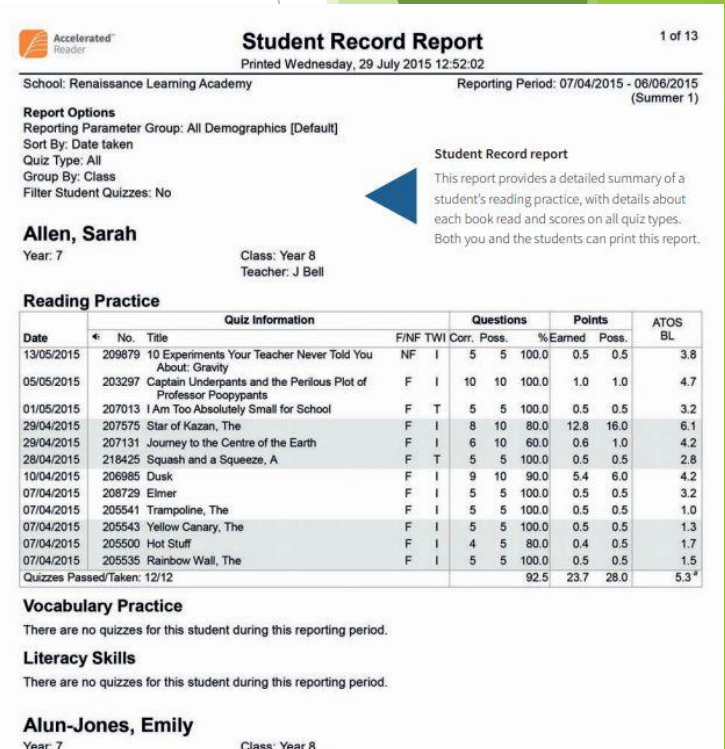
1. Read the text
2. Read the question
3. Highlight the key words in the question.
4. Find the key words in the text
5. Find and write the answer.

Year 2 Reading

- Your child will take home an AR book with a decimal number on the side. Accelerated reader quizzes are 5 questions and must be completed at home, independently before being swapped.
- Children can have the book with them whilst they are completing the quiz but must do it **independently.**
- Teachers get a weekly data summary from accelerated reader that helps them monitor children's reading attainment and gives suggestions for targets.

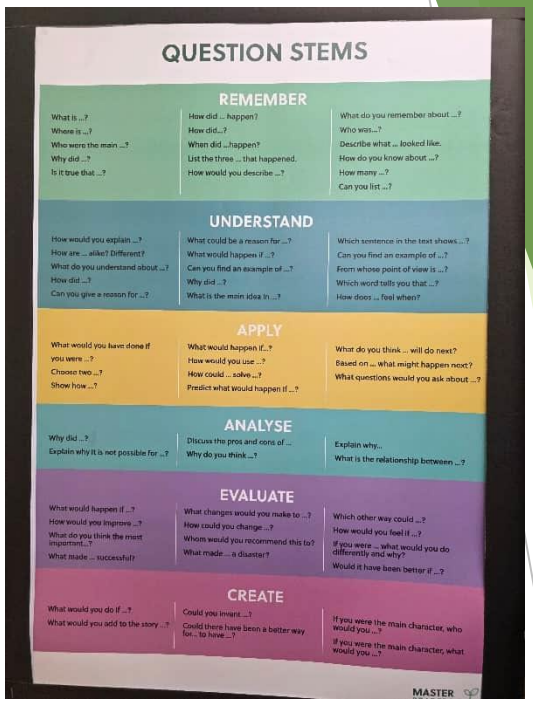






Year 2 Reading

- From the spring term of Year 2 through to Year 6, children partake in a 30 minute daily reading lesson. We follow the **“Master Readers”** scheme.
- Master Readers focuses on a mastery approach to reading comprehension, focusing on key skills such as predicting, retrieving and inferring from texts.



	Question Types	Number of questions per lesson
Year 2	Week A Retrieve, Inference, Explanation (Vocabulary) Week B Retrieve, Predict, Authors Choice	3 questions

MONDAY	TUESDAY	WEDNESDAY & THURSDAY	FRIDAY
Whole class shared reading of chosen text	Book Club	Visual Starter Comprehension Questions	Review

End of KS1 working towards the expected standard

9:00 – 10:00

End of KS1 working at the expected standard

3:30 – 4:30

End of KS1 working at greater depth

4:20 – 5:25

Supporting your Child's Reading

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Read as regularly as you can at home

- Children who read outside of school every day are five times as likely to read above the expected level compared to those who don't.
- Read to your child as well as listening to your child read

Build reading into your daily routine

- Create a consistent reading routine at home so that the children know the expectations that they will be reading every evening.

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Do

- Give them a chance to sound out the word in their head
- Encourage your child to sound the word out aloud
- Ask them to read the word again it they read it wrong
- Give lots of support, praise and encouragement to boost their confidence
- Ask your child questions about what is happening in the story: predict, describe characters, explain the plot and order the events

Don’t

- Immediately correct them if they read a word incorrectly
- Read the words for them

S

Simple phonics glossary

The phonics glossary below includes the main key terms that are useful to know when supporting your child to read using phonics.

blending	The process of using phonics for reading. Children identify and blend the individual sounds together to hear and say the whole word.
cvc, ccvc, cvcc	These represent how words are structured. The 'c' = consonant and the 'v' = vowel. E.g. cat = cvc drip = ccvc milk = cvcc
common exception word (CEW)	Sometimes called a tricky word, these words have an unusual or tricky spelling, e.g. said, one, their. They are not spelt as they sound.
grapheme	A letter or group of letters representing one sound. A grapheme is what the sound looks like when written down; the letter shape.
phoneme	The sound that a letter or group of letters makes. This may also be referred to as a letter-sound.
segmenting	Using phonics skills to support spelling and writing. Children listen to the whole word and break it up into the letter-sounds. E.g. 'lunch' can be segmented as l-u-n-ch.
sound out	Encouraging children to say each individual sound in a word before saying the whole word aloud.

EYFS Maths

Early Learning Goals

Communication and Language

Listening, Attention and Understanding

- Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.
- Make comments about what they have heard and ask questions to clarify their understanding.
- Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.

Speaking

- Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.
- Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate.
- Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.

Understanding the World

Past and Present

- Talk about the lives of the people around them and their roles in society.
- Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class.
- Understand the past through settings, characters and events encountered in books read in class and storytelling.

People, Culture and Communities

- Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps.
- Know some similarities and differences between different religious and cultural communities in this country, drawing on their experiences and what has been read in class.
- Explain some similarities and differences between life in this country and life in other countries, drawing on knowledge from stories, non-fiction texts and (when appropriate) maps.

The Natural World

- Explore the natural world around them, making observations and drawing pictures of animals and plants.
- Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Personal, Social and Emotional Development

Self-Regulation

- Show an understanding of their own feelings and those of others, and begin to regulate their behaviour accordingly.
- Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate.
- Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.

Managing Self

- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.
- Explain the reasons for rules, know right from wrong and try to behave accordingly.
- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.

Building Relationships

- Work and play cooperatively and take turns with others.
- Form positive attachments to adults and friendships with peers.
- Show sensitivity to their own and to others' needs.

Expressive Arts and Design

Creating with Materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.
- Make use of props and materials when role playing characters in narratives and stories.

Being Imaginative and Expressive

- Invent, adapt and recount narratives and stories with peers and their teacher.
- Sing a range of well-known nursery rhymes and songs.
- Perform songs, rhymes, poems and stories with others, and (when appropriate) try to move in time with music.

Mathematics

Number

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Physical Development

Gross Motor Skills

- Negotiate space and obstacles safely, with consideration for themselves and others.
- Demonstrate strength, balance and coordination when playing.
- Move energetically, such as running, jumping, dancing, hopping, skipping and climbing.

Fine Motor Skills

- Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases.
- Use a range of small tools, including scissors, paintbrushes and cutlery.
- Begin to show accuracy and care when drawing.

Literacy

Comprehension

- Demonstrate understanding of what has been read to them by retelling stories and narratives using their own words and recently introduced vocabulary.
- Anticipate (where appropriate) key events in stories.
- Use and understand recently introduced vocabulary during discussions about stories, non-fiction, rhymes and poems and during role play.

Word Reading

- Say a sound for each letter in the alphabet and at least 10 digraphs.
- Read words consistent with their phonic knowledge by sound-blending.
- Read aloud simple sentences and books that are consistent with their phonic knowledge, including some common exception words.

Writing

- Write recognisable letters, most of which are correctly formed.
- Spell words by identifying sounds in them and representing the sounds with a letter or letters.
- Write simple phrases and sentences that can be read by others.

Power Maths Reception, yearly overview

Autumn term

Strand	Unit		Week	Week title	Early Learning Goal
Number – number and place value	Unit 1	Numbers to 5	1	Counting to 1, 2 and 3	Have a deep understanding of number to 10, including the composition of each number.
			2	Counting to 4	Subitise (recognise quantities without counting) up to 5.
			3	Counting to 5	Recognise the pattern of the counting system.
Number – number and place value	Unit 2	Comparing groups within 5	4	Comparing quantities of identical objects	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Subitise (recognise quantities without counting) up to 5.
			5	Comparing quantities of non-identical objects	
Geometry – properties of shape	Unit 3	Shape	6	3D shapes	*There is no specific ELG related to this unit. This unit supports the Development Matters statement Select, rotate and manipulate shapes in order to develop spatial reasoning.*
			7	2D shapes	
Number – addition and subtraction	Unit 4	Change within 5	8	One more	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
			9	One less	
Number – addition and subtraction	Unit 5	Number bonds within 5	10	Introducing the part-whole model	Have a deep understanding of number to 10, including the composition of each number. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 and some number bonds to 10, including double facts.
Geometry – properties of shape	Unit 6	Space	11	Spatial awareness	*There is no specific ELG related to this unit. This unit supports the Development Matters statement Select, rotate and manipulate shapes in order to develop spatial reasoning skills.*

Spring term

Strand	Unit		Week	Week title	Early Learning Goal
Number – number and place value	Unit 7	Numbers to 10	1	Counting to 6, 7 and 8	Have a deep understanding of number to 10, including the composition of each number.
			2	Counting to 9 and 10	Subitise (recognise quantities without counting) up to 5. Verbally count, (recognising the pattern of the counting system).
Number – number and place value	Unit 8	Comparing numbers within 10	3	Comparing groups up to 10	Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Compare quantities up to 10 in different contexts, (recognising when one quantity is greater than, less than or the same as the other quantity).
Number – addition and subtraction	Unit 9	Addition to 10	4	Combining 2 groups to find the whole	Have a deep understanding of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

Spring term continued

Strand	Unit		Week	Week title	Early Learning Goal
Number – number and place value	Unit 10	Measure	5	Length, height and distance	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
			6	Weight	
Number – addition and subtraction	Unit 11	Number bonds to 10	7	Using a ten frame	Have a deep understanding,of number to 10, including the composition of each number. Subitise (recognise quantities without counting) up to 5. Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
			8	The part-whole model to 10	
Number – addition and subtraction	Unit 12	Subtraction	9	Subtraction	Have a deep understanding of number to 10, including the composition of each number.
Geometry – properties of shape	Unit 13	Exploring patterns	10	Making simple patterns	*There is no specific ELG related to this unit. This unit supports the Development Matters statement Continue, copy and create repeating patterns.*
			11	Exploring more complex patterns	

Summer term

Strand	Unit		Week	Week title	Early Learning Goal
Number – addition and subtraction	Unit 14	Counting on and counting back	1	Adding by counting on	Have a deep understanding of number to 10, including the composition of each number.
			2	Taking away by counting back	
Number – number and place value	Unit 15	Numbers to 20	3	Counting to and from 20	Verbally count beyond 20, recognising the pattern of the counting system.
Number – multiplication and division	Unit 16	Numerical patterns	4	Doubling	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.
			5	Halving and sharing	
			6	Odds and evens	
Geometry – properties of shape	Unit 17	Shape	7	Composing and decomposing shapes	*There is no specific ELG related to this unit. This unit supports the Development Matters statement Select, rotate and manipulate shapes in order to develop spatial reasoning.*
Number – number and place value	Unit 18	Measure	8	Volume and capacity	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
Number – addition and subtraction	Unit 19 (Optional)	Sorting	9	Sorting into 2 groups	*This unit is optional because sorting is not covered in the EYFS Framework or Development Matters guidance for Reception. It does provide an introduction to the concept of sorting, which will be useful in Year 1.*
Measurement	Unit 20 (Optional)	Time	10	My day	*This unit is optional because time is not covered in the EYFS Framework or Development Matters guidance for Reception. It does provide a useful introduction to time, which will be covered in Year 1.*

Lesson Example – Starter:

Unit 8 Comparing numbers within 10

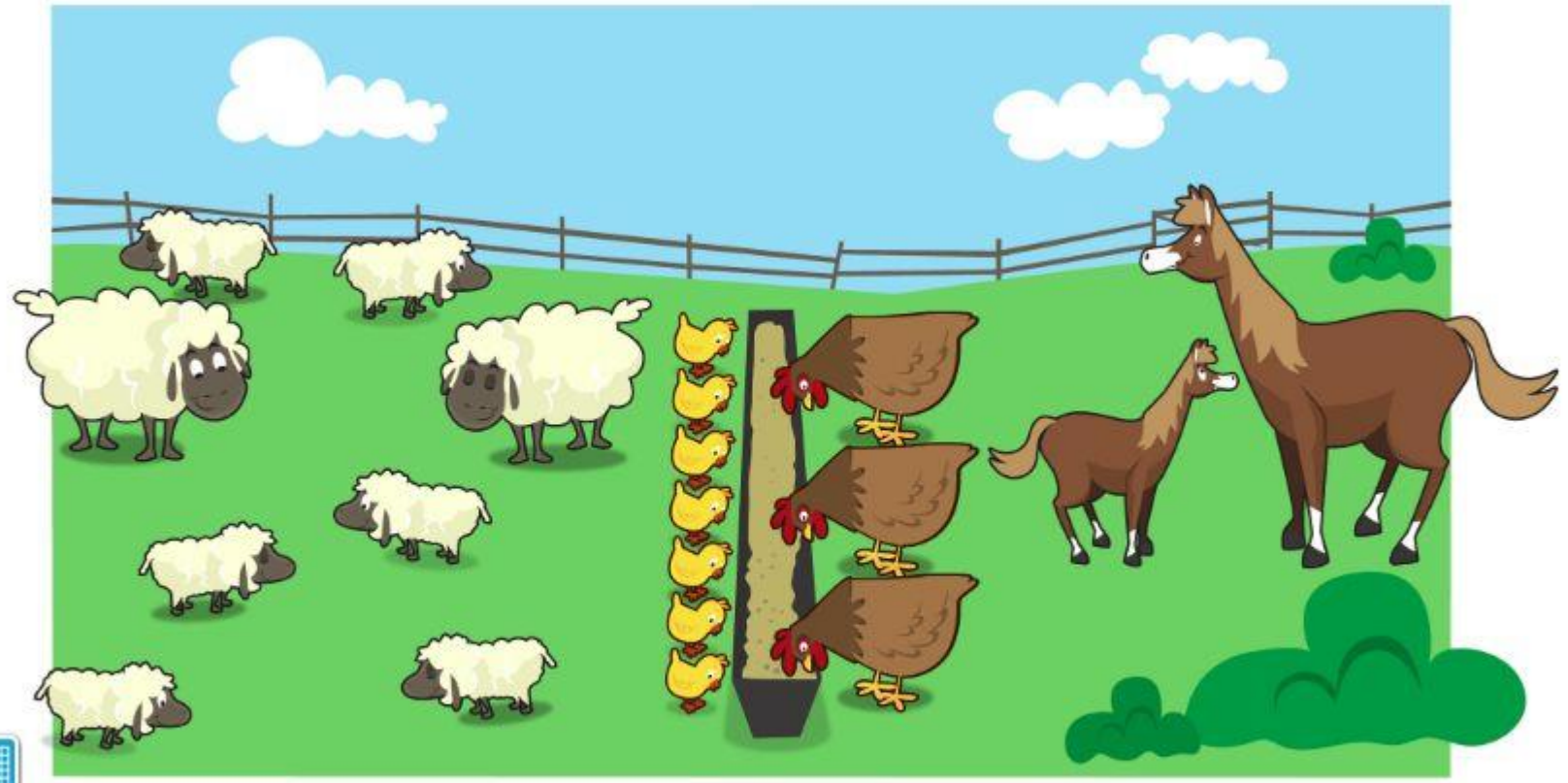
Comparing groups up to 10

How many balloons?

Let's look.

Lesson Example: Discover

Discover



Are there more  or more  ?

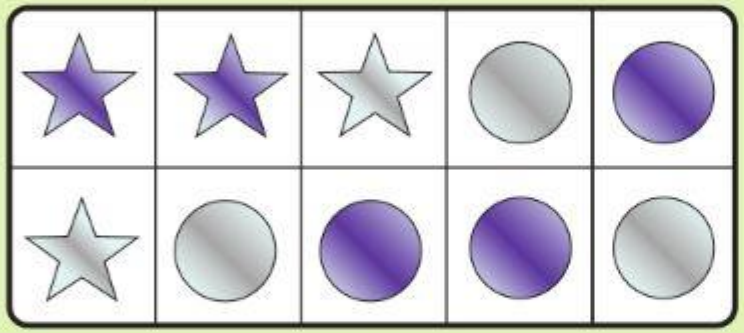
Lesson Examples: Think Together

Lesson Examples:

CHALLENGE

How many more ◯ than ☆?

Sticker chart

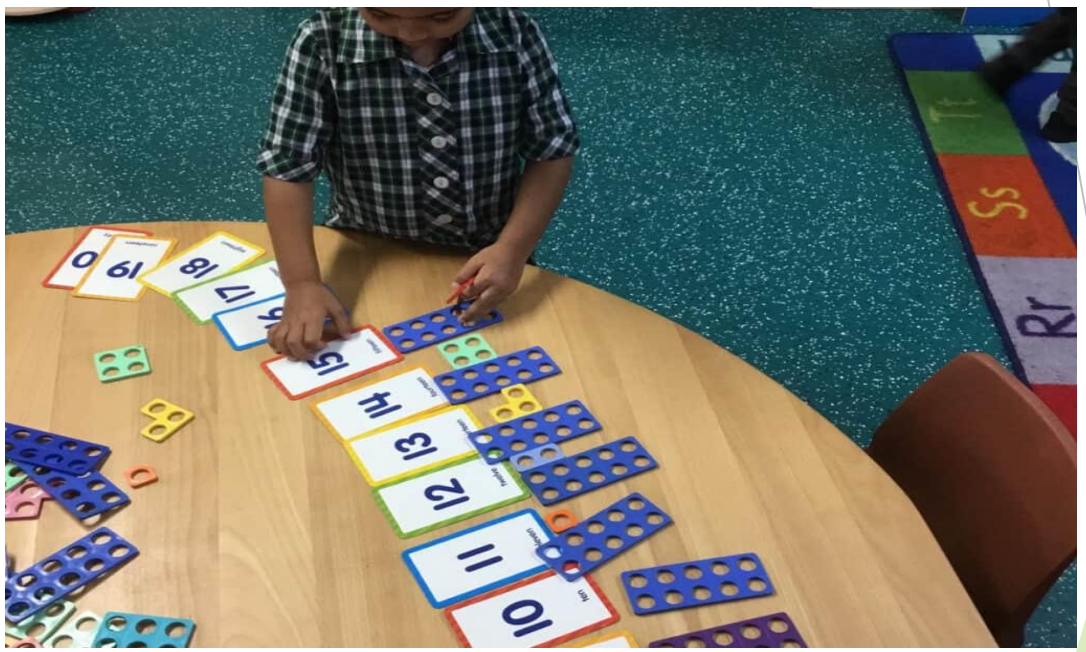


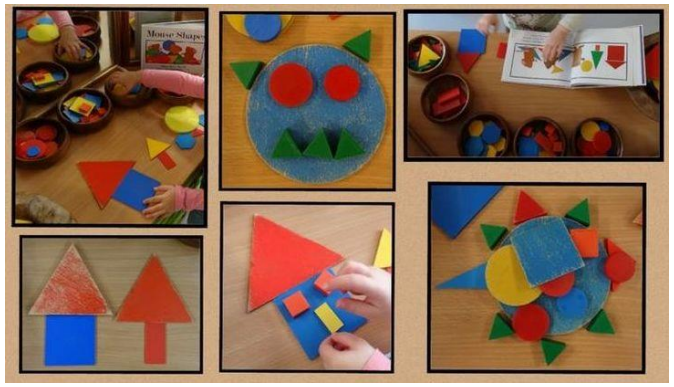
I made the groups using ◯ .

Does it matter that the stickers are different colours?

Maths in the Provision:

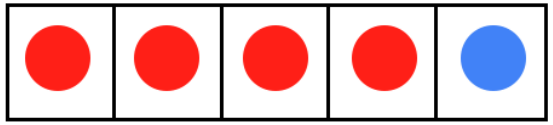
- Children can 'choose' their learning and access this whenever they wish.
- Maths in the provision helps the children to consolidate, explore and challenge themselves with what they have learnt during the whole class input.



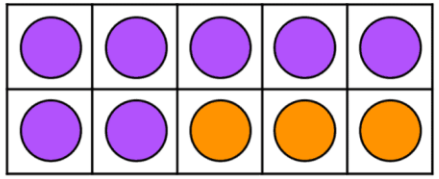


Methods of teaching:

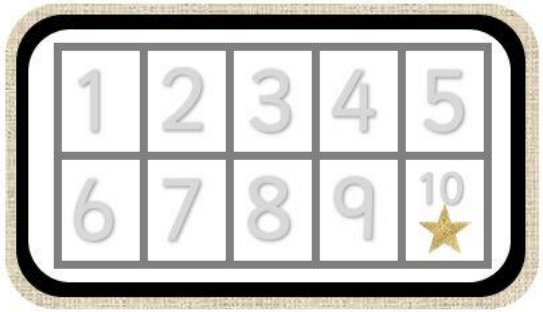
Fives Frame:



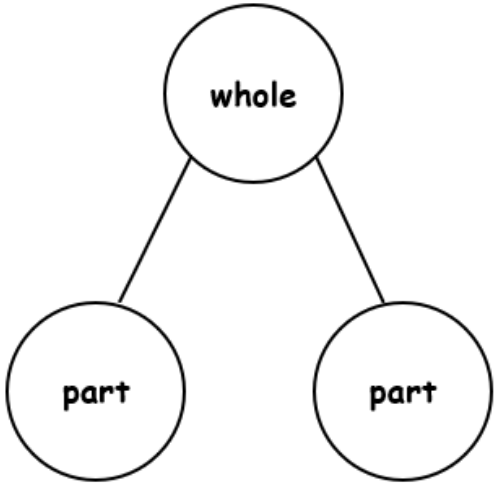
Tens Frame:



Sticker Charts:



The part-whole model

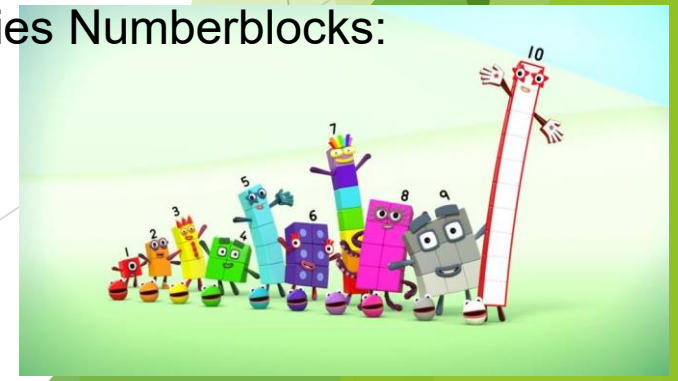


Number Line:

Numicon:

Cubes:

Cbeebies Numberblocks:



Songs and Nursery Rhymes:

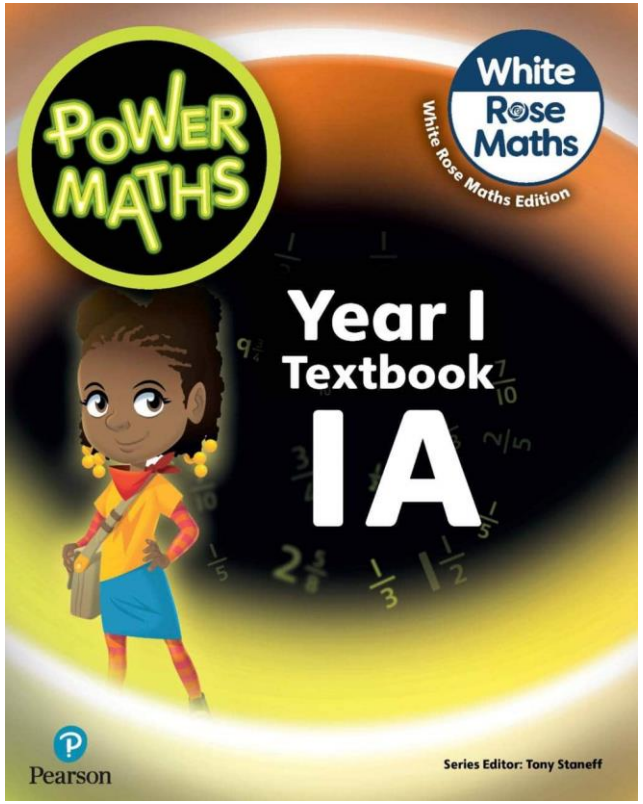
- **“One, Two, Buckle My Shoe”** – Counting from 1 to 10.
- **“Five Little Ducks”** – Counting down from 5.
- **“Ten in the Bed”** – Counting down from 10.
- **“Five Little Monkeys”** – Counting down from 5.
- **“This Old Man”** – Counting up with actions.

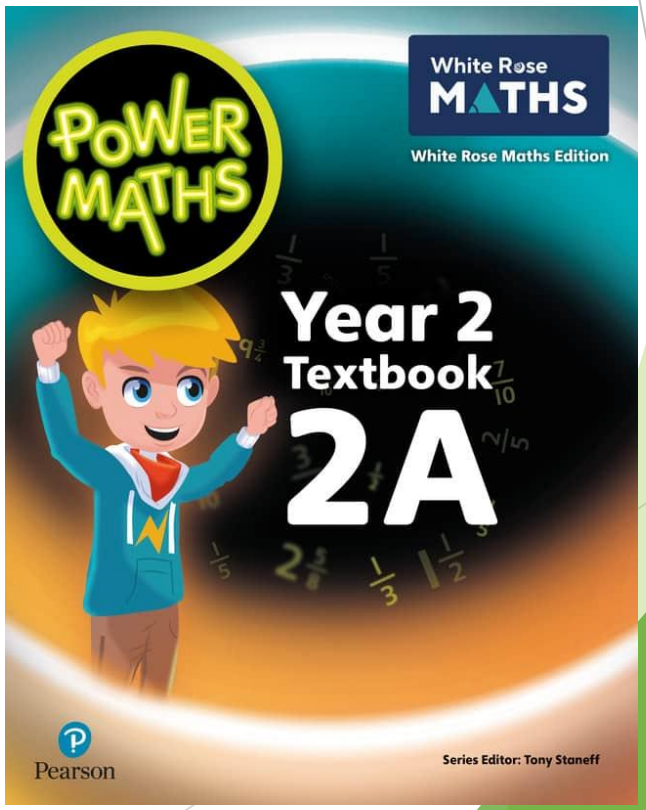
Number song 1-20 for children | Counting numbers | The Singing Walrus

KS1 Maths

KS1 Maths

- Maths is taught daily across Y1-Y6.
- We follow the Power Maths (White Rose Edition) scheme which is written around the National Curriculum.
- We make adaptations to the scheme using our professional judgement i.e. supplementing it with resources elsewhere.





Year 1 overview

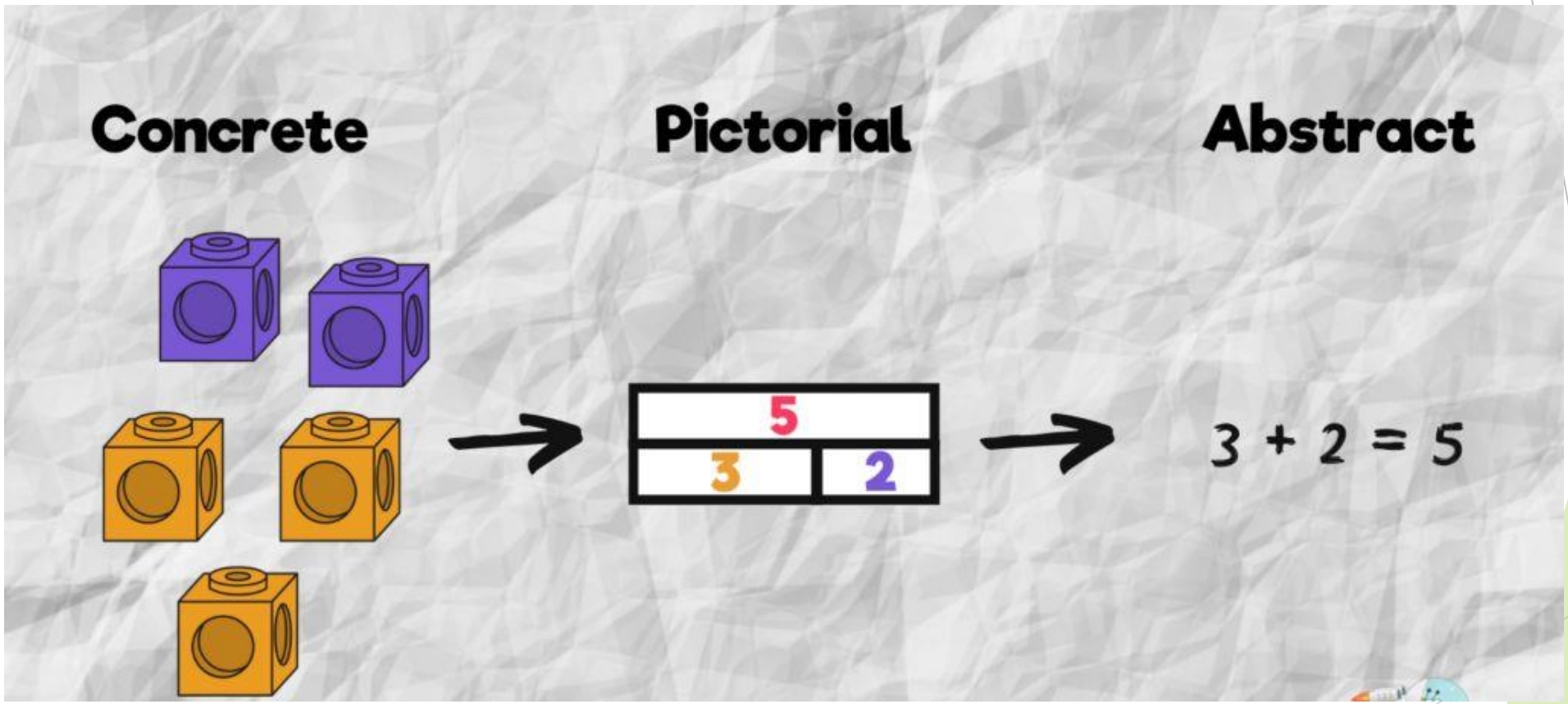
	Textbook A	Textbook B	Textbook C
Week 1	Unit 1: Numbers to 10 14 Lessons / 14 Days	Unit 6: Numbers to 20 12 Lessons / 12 Days	Unit 11: Multiplication and division 9 Lessons / 9 Days
Week 2			
Week 3		Unit 7: Addition and subtraction within 20 11 Lessons / 11 Days	Unit 12: Fractions 4 Lessons / 4 Days
Week 4	Unit 2: Part-whole within 10 7 Lessons / 7 Days		Unit 13: Position and direction 5 Lessons / 5 Days
Week 5	Unit 3: Addition within 10 4 Lessons / 4 Days		Unit 14: Numbers to 100 6 Lessons / 6 Days
Week 6	Unit 4: Subtraction within 10 8 Lessons / 8 Days	Unit 8: Numbers to 50 7 Lessons / 7 Days	Unit 15: Money 3 Lessons / 3 Days
Week 7		Unit 9: Introducing length and height 4 Lessons / 4 Days	Unit 16: Time 5 Lessons / 5 Days
Week 8	Unit 5: 2D and 3D shapes 5 Lessons / 5 Days	Unit 10: Introducing mass and capacity 7 Lessons / 7 Days	
Week 9			

Year 2 overview

Week 1	Unit 1: Numbers to 100 17 Lessons / 17 Days	Week 1	Unit 5: Money 10 Lessons / 10 Days	Week 1	Unit 10: Fractions 12 Lessons / 12 Days
Week 2		Week 2		Week 2	
Week 3		Week 3	Unit 6: Multiplication and division (1) 8 Lessons / 8 Days	Week 3	Unit 11: Time 5 Lessons / 5 Days
Week 4	Unit 2: Addition and subtraction (1) 13 Lessons / 13 Days	Week 4	Unit 7: Multiplication and division (2) 10 Lessons / 10 Days	Week 4	Unit 12: Problem solving and efficient methods 11 Lessons / 11 Days
Week 5		Week 5		Week 5	
Week 6		Week 6		Week 6	
Week 7	Unit 3: Addition and subtraction (2) 12 Lessons / 12 Days	Week 7	Unit 8: Length and height 5 Lessons / 5 Days	Week 7	Unit 13: Position and direction 5 Lessons / 5 Days
Week 8		Week 8	Unit 9: Mass, capacity and temperature 8 Lessons / 8 Days	Week 8	Unit 14: Statistics 7 Lessons / 7 Days
Week 9		Week 9		Week 9	
Week 10	Unit 4: Properties of shapes 12 Lessons / 12 Days	Week 10		Week 10	

Progression

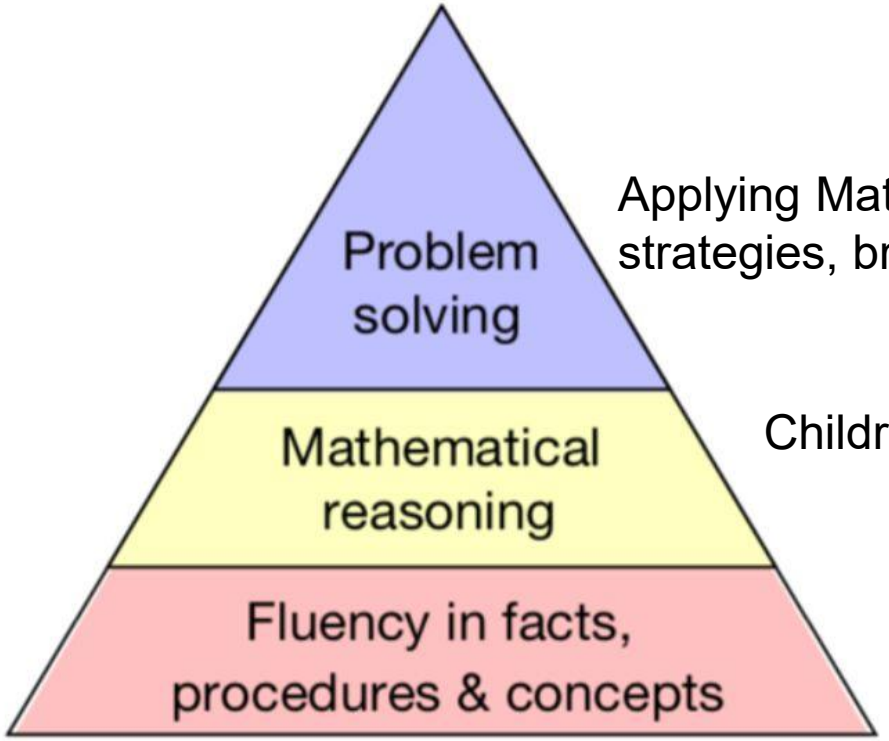
- Power Maths follows a CPA approach (concrete, pictorial, abstract).



The “doing” phase

The “seeing” phase

The “symbolic” phase

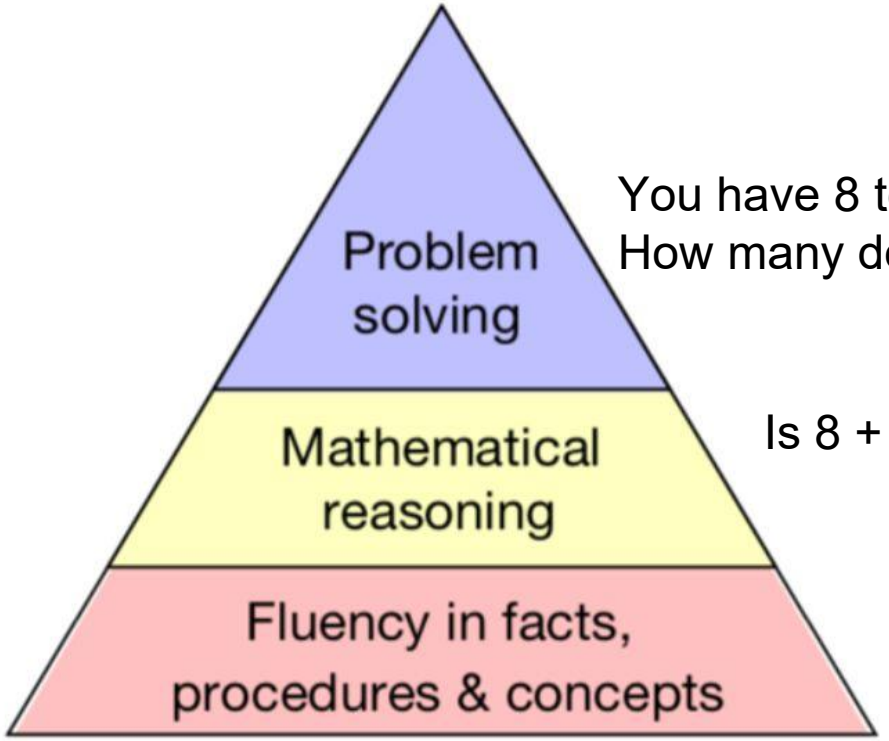


Colin Foster's Pyramid

Applying Maths to a new situation, choosing strategies, breaking a problem into solvable steps.

Children explaining and justifying their thinking

Children becoming confident and efficient with number facts and methods



Colin Foster's Pyramid

You have 8 toys. You get 7 more for your birthday. How many do you have altogether?

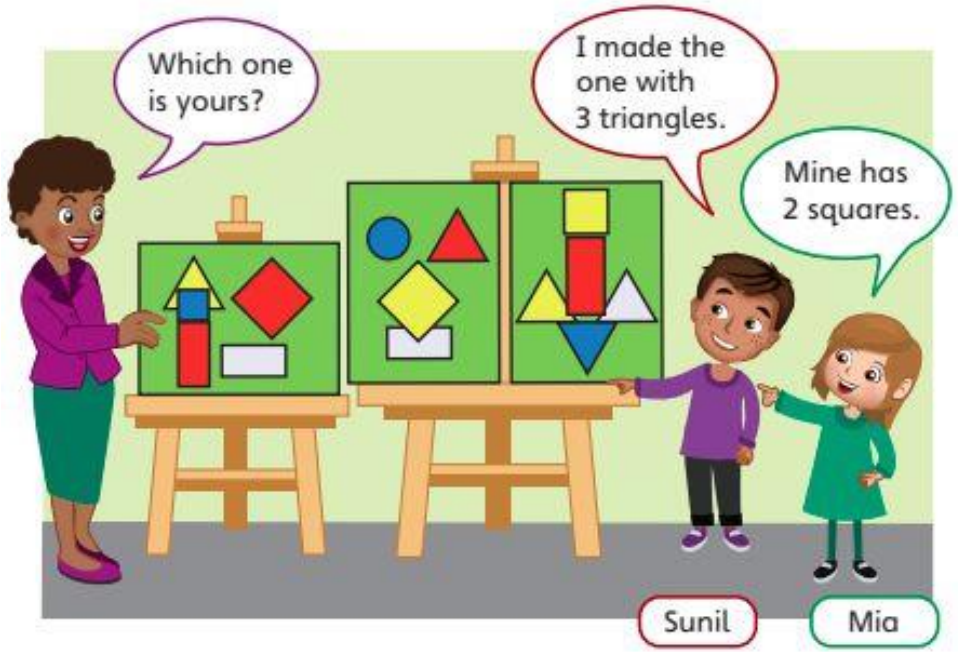
Is 8 + 7 the same as 7+8? How do you know?

8 + 7 = 15

Lesson Example

Recognise 2D and 3D shapes

Discover

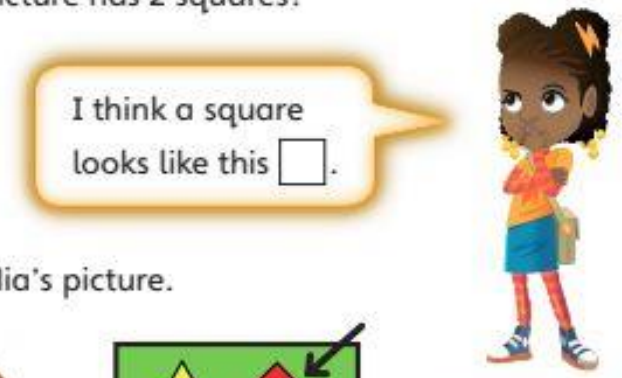


1 a) Which picture did Mia make?

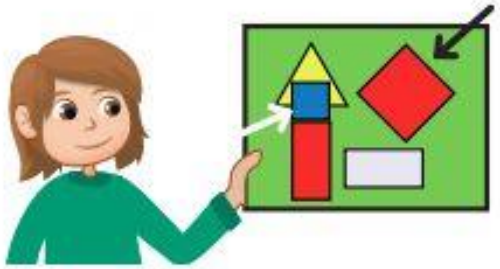
b) Which picture did Sunil make?

Share

a) Mia's picture has 2 squares.
Which picture has 2 squares?

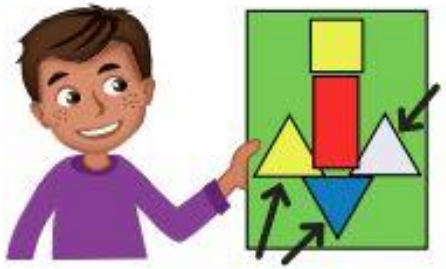


This is Mia's picture.



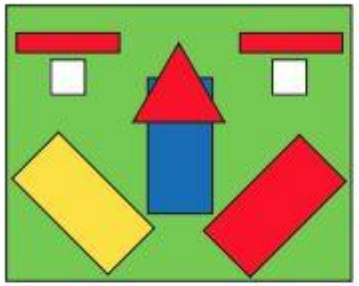
Rectangles and squares are **quadrilaterals** because they have 4 **sides**.

b) This is Sunil's picture.

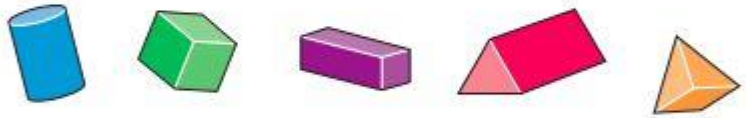


Think together

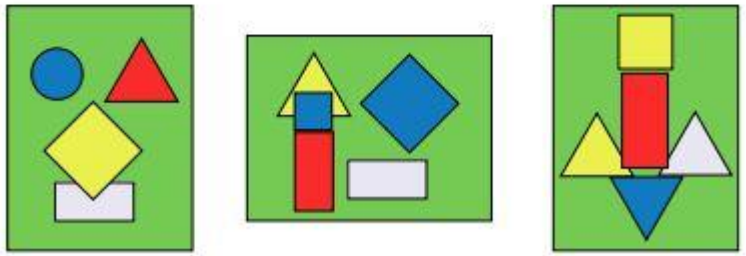
1 How many rectangles are there in this picture?



2 Name the 3D shapes.



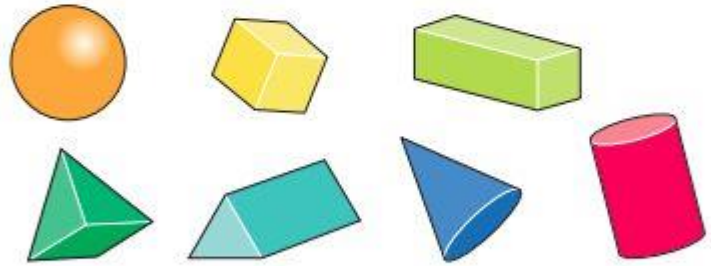
Which 3D shapes could you use to print the 2D shapes in the pictures?



3 Ben draws around the base of a cuboid to make a rectangle.

CHALLENGE

Which 2D shapes can you draw using these 3D shapes?



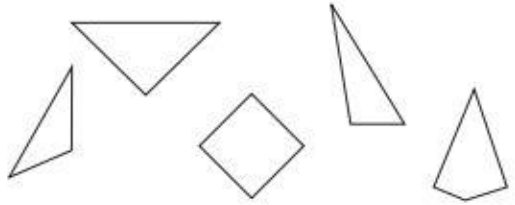
→ Practice book 2A p138

Date: _____

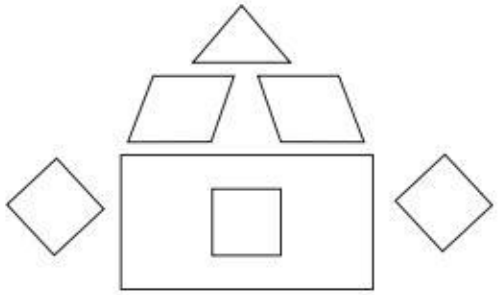
→ Textbook 2A p133

Recognise 2D and 3D shapes

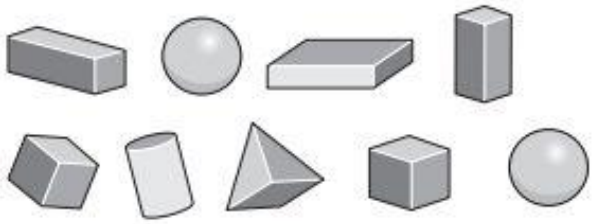
1 **a)** Colour in all the triangles.



b) Colour in all the squares.



2 Here are some 3D shapes.

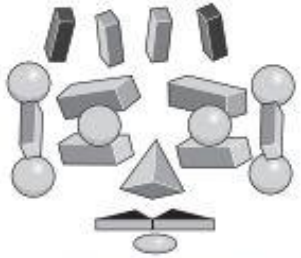


a) Circle the pyramid.

b) Colour the cubes.

c) Tick the spheres.

3 How many cuboids, pyramids and spheres are there in this picture?



There are

☐ cuboids.

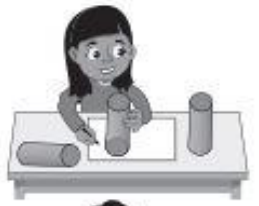
☐ pyramids.

☐ spheres.

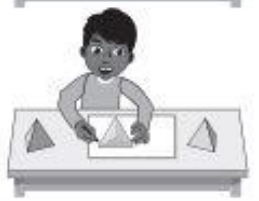
4 Sara and Mo are drawing around 3D shapes.

CHALLENGE

Write the name of the 2D shape each child will draw.



Sara will draw a _____.



Mo will draw a _____.

Reflect

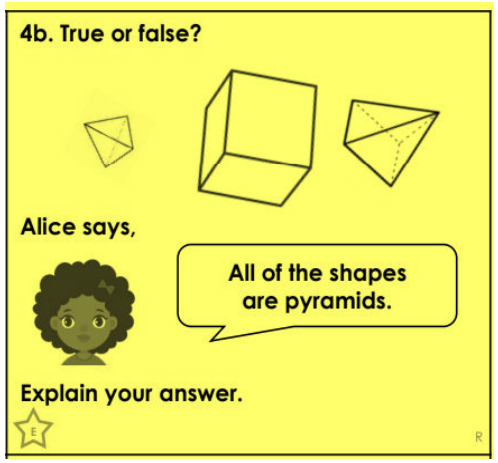
Name three 2D shapes and three 3D shapes.

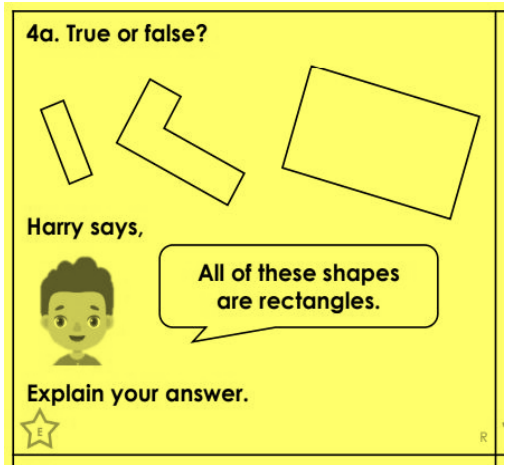
Point to them in the classroom or on the page.

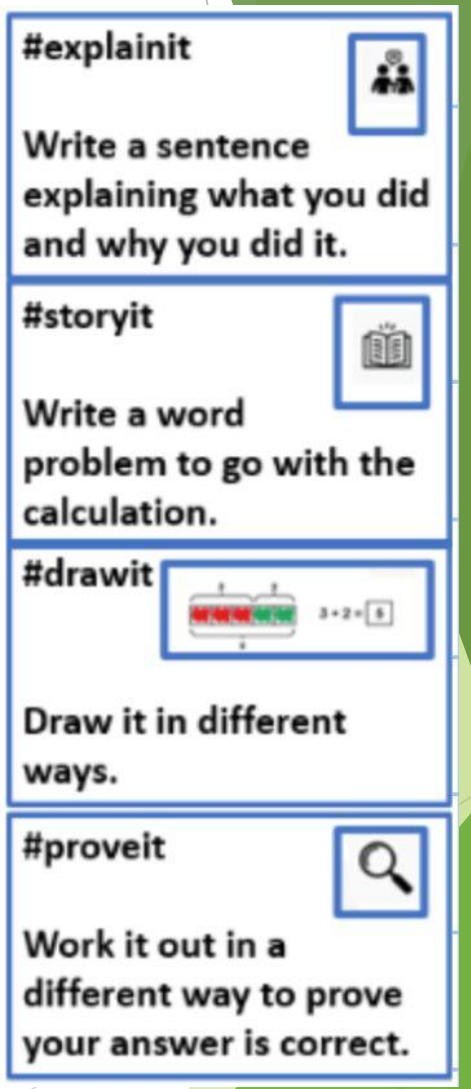
- We use our professional experience and judgement to make changes to the scheme to best help the children.
- Children also have a green Maths book where their additional learning activities are stuck into.
-

Challenge

- Yellow challenges are available in every lesson from Year 1 Spring term until Year 6 for children who grasp the key knowledge easily.
- We use hashtags where children have to “go deeper” into an answer, using their reasoning and problem solving skills.







Year 1

Number – number and place value

Statutory requirements

Pupils should be taught to:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.

Year 2

Number – number and place value

Statutory requirements

Pupils should be taught to:

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100; use <, > and = signs
- read and write numbers to at least 100 in numerals and in words
- use place value and number facts to solve problems.

Year 1

umber – addition and subtraction

atutory requirements

pils should be taught to:

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ☐ – 9.

Year 2

Number – addition and subtraction

Statutory requirements

Pupils should be taught to:

- solve problems with addition and subtraction:
  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
  - applying their increasing knowledge of mental and written methods
- recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  - a two-digit number and ones
  - a two-digit number and tens
  - two two-digit numbers
  - adding three one-digit numbers
- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Year 1

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Year 2

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Children learn to count in 2s, 5s and 10s in Year 1.
They don't recall facts (2x5 =__, 5 x 3 = __) off by heart until Year 2.

Year 1

Number – fractions

Statutory requirements

Pupils should be taught to:

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Year 2

Number – fractions

Statutory requirements

Pupils should be taught to:

- recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity
- write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Year 1

Measurement

Statutory requirements

Pupils should be taught to:

- compare, describe and solve practical problems for:
  - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
  - mass/weight [for example, heavy/light, heavier than, lighter than]
  - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
  - time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
  - lengths and heights
  - mass/weight
  - capacity and volume
  - time (hours, minutes, seconds)
- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- recognise and use language relating to dates, including days of the week, weeks, months and years
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Year 2

Measurement

Statutory requirements

Pupils should be taught to:

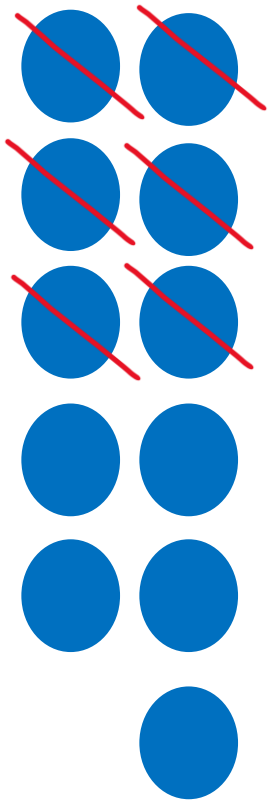
- choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
- compare and order lengths, mass, volume/capacity and record the results using >, < and =
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
- compare and sequence intervals of time
- tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times
- know the number of minutes in an hour and the number of hours in a day.

Year 1 addition method

4 + 7 = 11

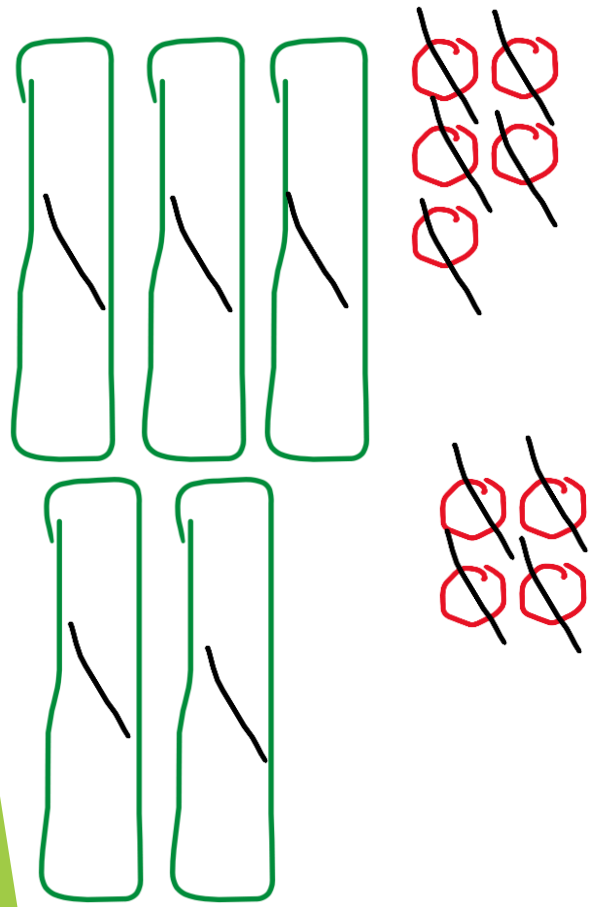
Year 1 subtraction method

11 – 6 = 5



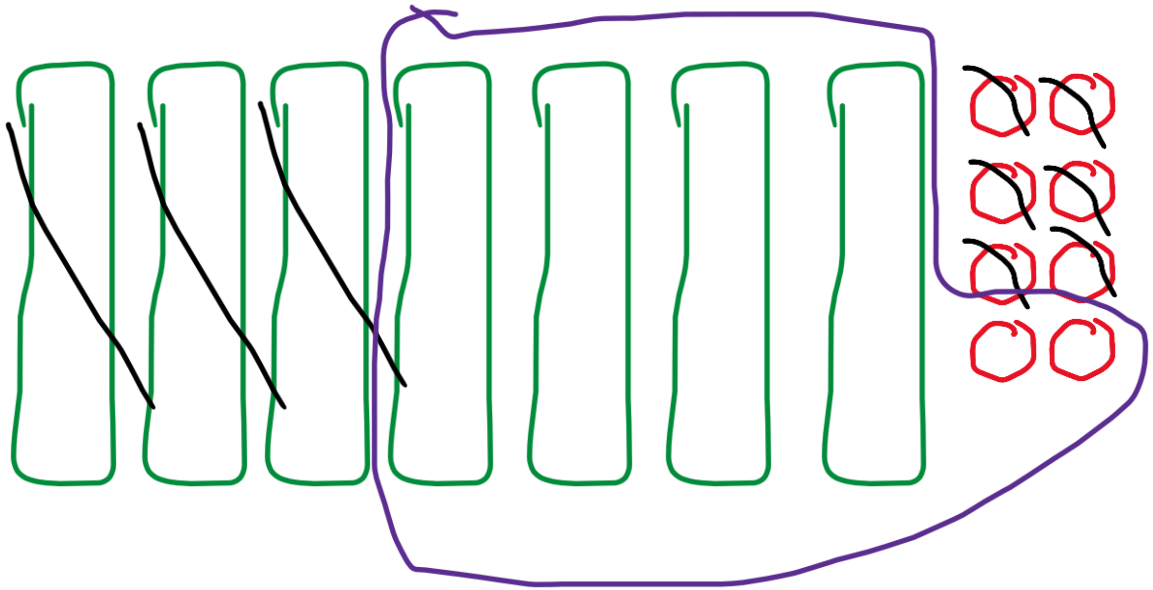
Year 2 autumn term addition

35 + 24 = 59



Year 2 autumn term subtraction

78 - 36 = 42

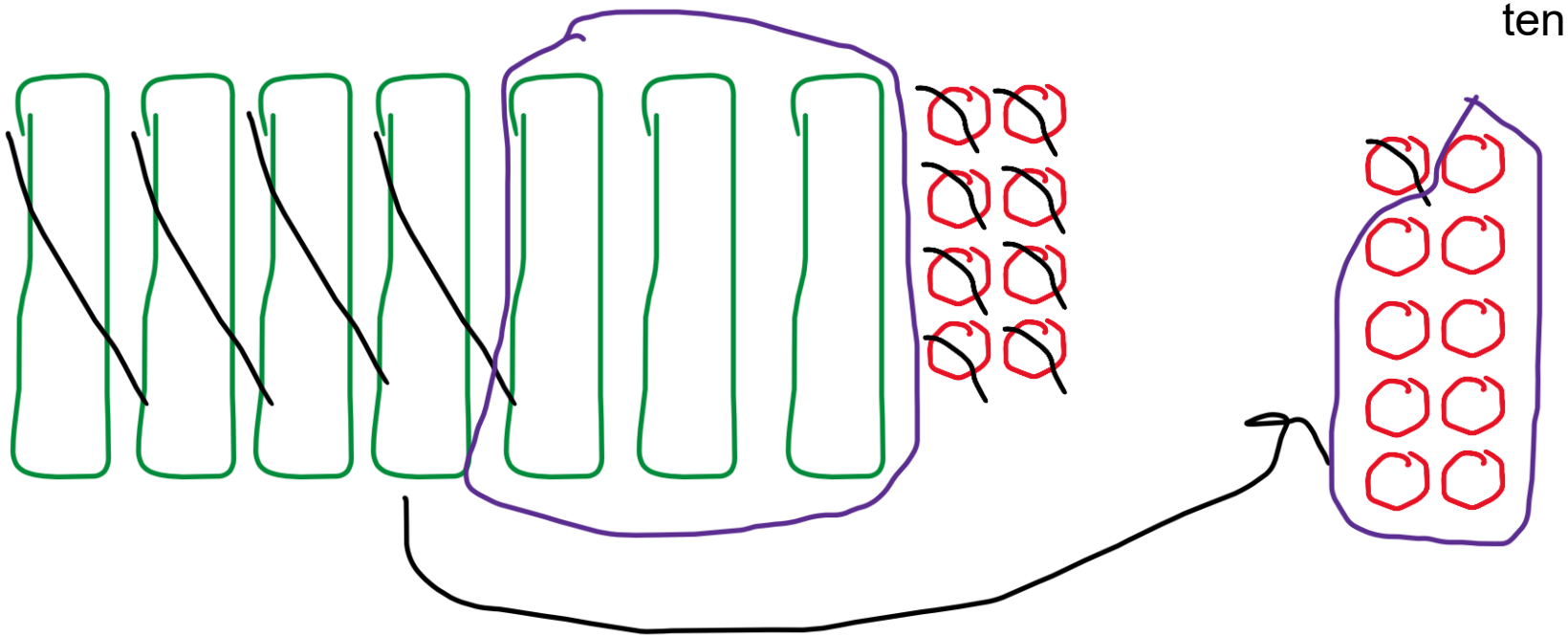


Year 2 autumn term subtraction

78 - 39 =

We only have 8 ones in 78, but we need to subtract 9 ones from the number 39.

So, we need to **exchange** one ten into **ten ones.**



Year 2 Summer and KS2 addition – column method

	T	O
	7	5
+	2	2
	9	7

Year 2 Summer and KS2 addition

	T	O
	4	5
+	1	8
	6	3
	1	

Sometimes, the ones digit bridges 10.

5 + 3 = 13. The 1 digit in 13 represents 10 so goes in the tens column.

4 tens + 1 ten + 1 ten = 6 tens.

Year 2 Summer and KS2 subtraction – column method

	T	O
	6	8
-	3	4
	3	4

Start with the ones.

8 ones – 4 ones = 4 ones.

The move onto the tens.

6 tens – 3 tens = 3 tens

Year 2 Summer and KS2 subtraction

	T	O
	6	8
-	3	4
	3	4

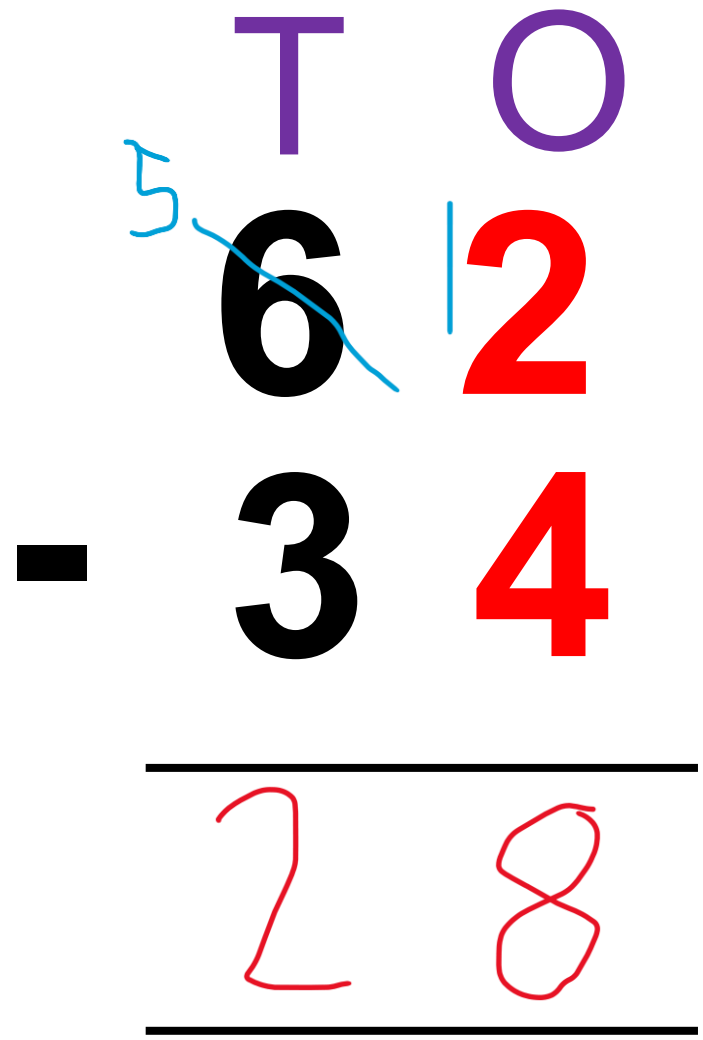
Start with the ones.

8 ones – 4 ones = 4 ones.

The move onto the tens.

6 tens – 3 tens = 3 tens

Year 2 Summer and KS2 subtraction



This time, we have 2 ones – 4 ones which we can't do.

We have to move into the tens column to exchange **one** ten for ten ones.

We have moved one ten into the ones column. So we are left with 5 ones.

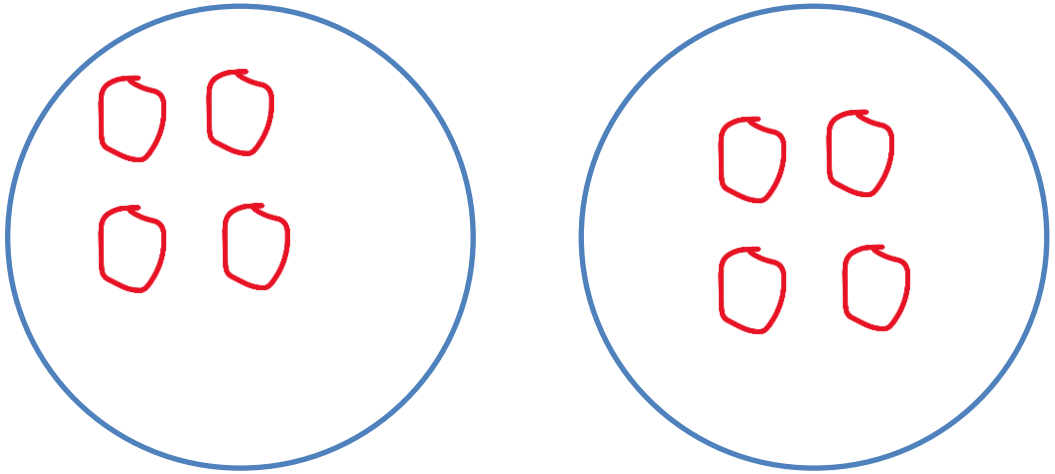
2 ones + the 10 we got from the tens column = 12.

12 – 4 = 8

5 tens – 3 tens = 2 tens.

Year 1/2 multiplication method

2 x 4 = 8

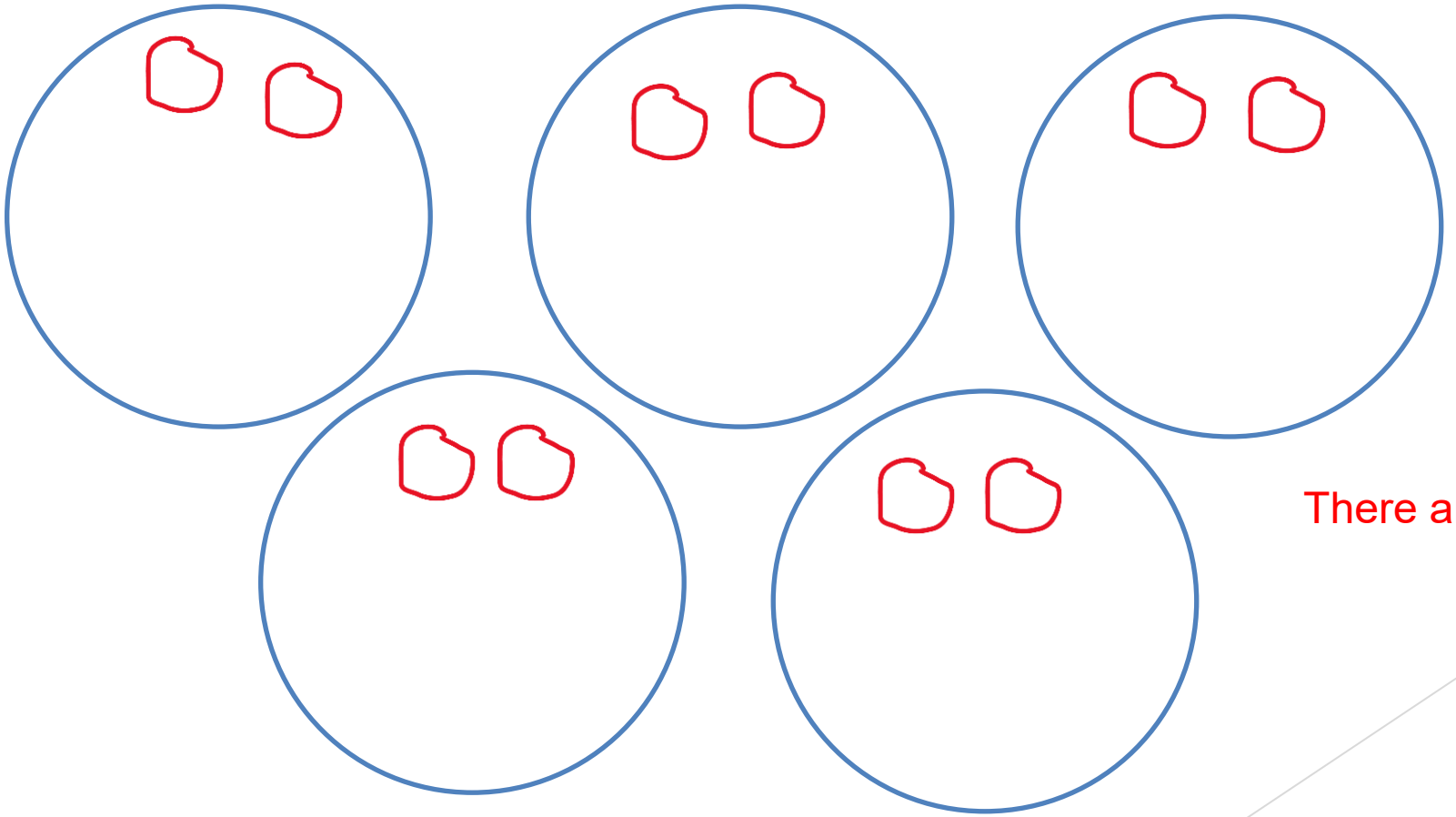


We use the term “groups of” in Year 1. In Year 2, we introduce the word “multiply” and “times”.

Year 1 division method

10 ÷ 5 = 2

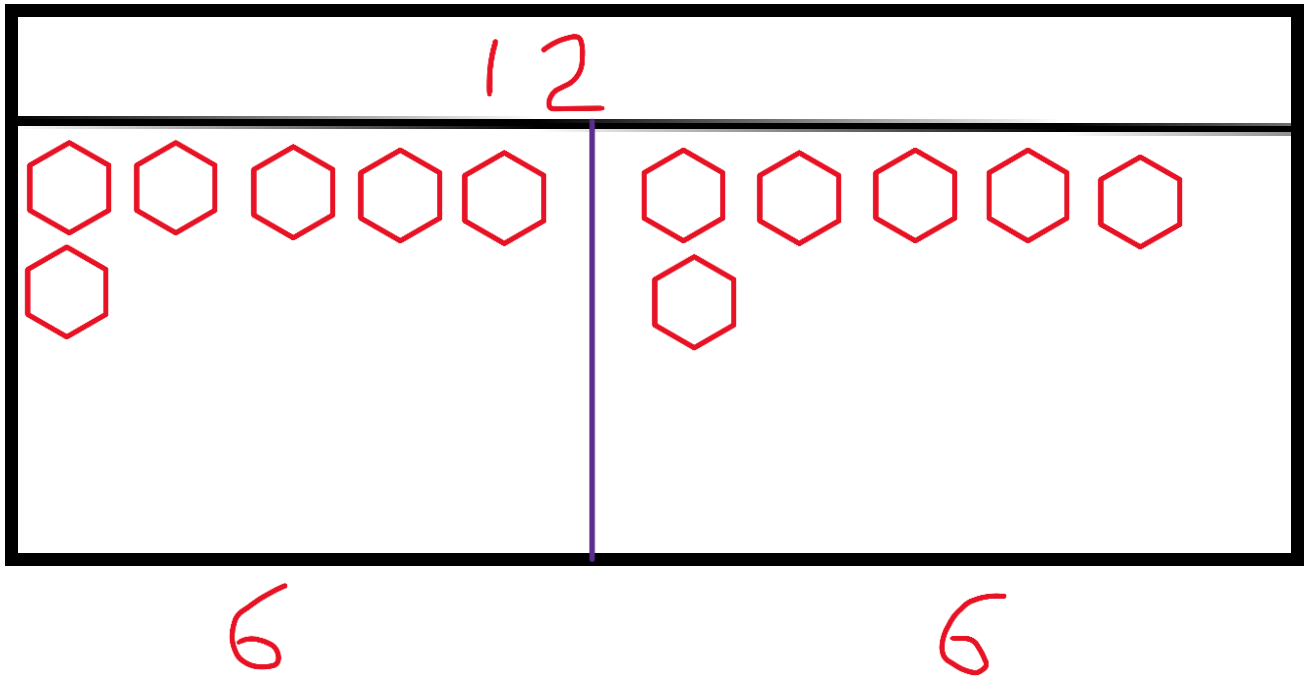
We use the term “shared into groups” in Year 1. In Year 2, we introduce the word “divide”.



There are 2 in each group.

Year 2 division method (bar model)

12 ÷ 2 = 6



Key terminology:

Subitise	To look at a quantity and know the amount without needing to count e.g. on a dice.
More than / greater than	E.g. 3 is **more than** 2.
Less than / fewer than	E.g. 4 is **less than** 5.
Number bonds	Two numbers that add together to make 5/10. E.g. 5+5=10, 8+2=10 etc.
Odd and Even Numbers	• Odd numbers cannot be shared equally. • Even numbers can be shared equally.
Doubling Facts	Double 4 = 8 Double 3 = 6 etc.
Sharing	"Can you share the cubes equally between me and you?"
Multiplying	Having “groups of” objects Repeated addition – 3 x 4 = 4+4+4
Dividing	Sharing into groups

How to Support my Child at Home:

- Go on number hunts around the house or outside, spotting numerals on doors, buses, clocks, and packaging.
- Read numbers together on recipes, timers, and digital devices
- Spot shapes in everyday objects such as road signs, windows, plates, and furniture.
- Sort household items by shape, like round plates versus rectangular trays.
- Count stairs, steps, or pieces of fruit during daily routines.
- Play board games that involve counting spaces or dice numbers.
- Sing counting songs and rhymes to make learning fun.
- Practise counting in 2s, 5s, and 10s during car journeys or while folding laundry.
- Group socks in pairs or coins in tens for skip-counting practice.
- Involve children in cooking: “We need 12 cupcakes, and the tray holds 6—how many trays?”
- Share snacks: “I have 8 grapes and 2 friends—how many grapes each?”
- Plan shopping: “We need 20 oranges and they come in bags of 5—how many bags?”
- Set up a pretend shop at home with coins and price tags for role play.
- Ask them to calculate totals or estimate change during real shopping trips.

Apps and Resources