The background of the slide is a light gray gradient, decorated with numerous realistic water droplets of various sizes. Some droplets are large and prominent, while others are small and subtle, scattered across the top and bottom edges of the text area.

KS2 MATHS, ENGLISH & SCIENCE SUPPORT WORKSHOP

KS2 SCIENCE SUPPORT AT HOME



WHAT ARE THE MAIN AREAS OF SCIENCE YOU NEED TO PAY ATTENTION TO?

Scientific knowledge

- Science vocabulary (Photosynthesis, inheritance)
- Processes (the water cycle)



Working Scientifically

- Planning an investigation
- Setting up an investigation
- Observe and record data
- Evaluating investigation



HOW CAN YOU HELP AT HOME?

- Ask questions – what does your child want to know?

Child: Why do bears hibernate?

Parent/Carer: What is hibernation? How could we find out?

- Ask them what they have found out – explaining their findings to you is another step of learning

Parent/Carer: So why does it rain sometimes and not other times?

- Observe changes – what is the same? What is different?

Parent/Carer: Can plastic be soft and hard?

Parent/Carer: If something is bumpy can it be hard?



HOW CAN YOU HELP AT HOME?

- RECORD – THROUGH PICTURES, WORDS, VIDEOS ETC. ➡
- USE SCIENCE LANGUAGE – START FROM A YOUNG AGE AND EXPLAIN WHAT THE WORDS MEAN.

CHILD: THIS IS THE HIP BONE

PARENT: IS THAT IT'S SCIENTIFIC NAME

CHILD: NO IT'S THE PELVIS

- EVIDENCE – IF THEY HAVE A THEORY, DO THEY HAVE EVIDENCE THAT PROVES IT TO BE TRUE?

CHILD: IT'S COLD OUTSIDE

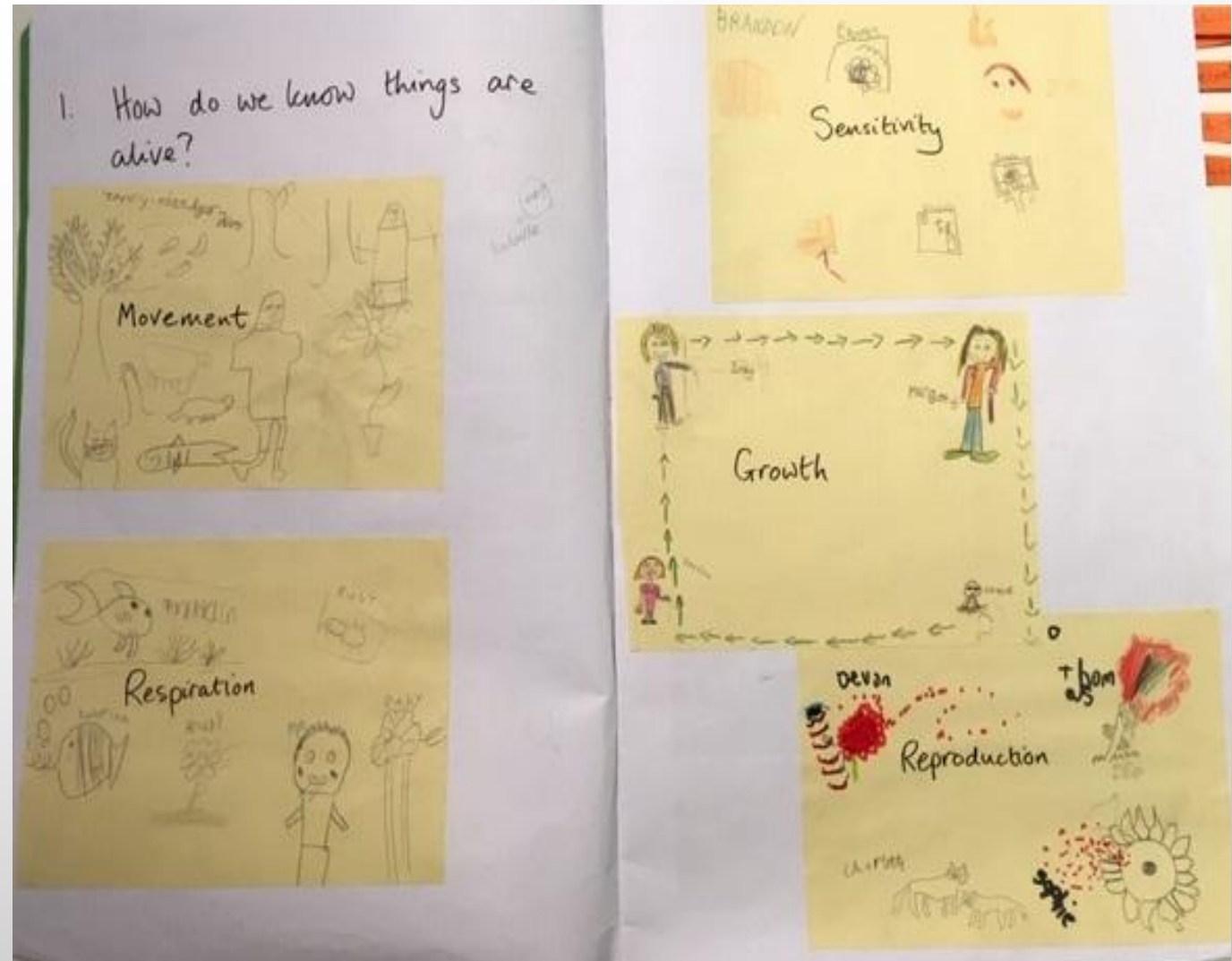
PARENT/CARER: HOW DO YOU KNOW? CAN YOU PROVE IT?

- CONCLUSIONS – WHAT DID THEIR INVESTIGATIONS SHOW THEM? WHAT DID THEY LEARN? CAN THEY PROVE A THEORY?

PARENT: I CAN SEE DIFFERENT SIZE PENCILS FLOAT ON WATER, WHAT ELSE COULD YOU TEST ABOUT FLOATING?

CHILD: MAYBE I COULD TRY DIFFERENT MATERIALS TO SEE IF THAT MAKES A DIFFERENCE?

PARENT: WHAT DIFFERENCE DO YOU THINK IT WOULD MAKE AND WHY?



HELPFUL WEBSITES

INVESTIGATIONS TO DO AT HOME:

- [HTTPS://WWW.WOODLANDTRUST.ORG.UK/BLOG/2020/03/KIDS-NATURE-ACTIVITIES-SELF-ISOLATION/](https://www.woodlandtrust.org.uk/blog/2020/03/kids-nature-activities-self-isolation/)
- [HTTPS://WWW.SCIENCEFUN.ORG/KIDSZONE/EXPERIMENTS/](https://www.sciencefun.org/kidszone/experiments/) OR EXPLORE YOUTUBE.

PRIMARY SCIENCE HOME LEARNING GUIDE FOR PARENTS

- [HTTPS://WWW.THESCHOOLRUN.COM/ACCESS-THESE-FANTASTIC-SCIENCE-RESOURCES-TODAY](https://www.theschoolrun.com/access-these-fantastic-science-resources-today)

ONLINE SCIENCE LESSONS AND SUPPORT FOR HOME LEARNING FOR KS2

- [HTTPS://WWW.BBC.CO.UK/BITESIZE/SUBJECTS/Z2PFB9Q](https://www.bbc.co.uk/bitesize/subjects/z2pfb9q)

PRIMARY SCIENCE INTERACTIVE ACTIVITIES AND GAMES

- [HTTPS://WOWSCIENCE.CO.UK/?SFID=27&SFM_RESOURCE_TYPE=GAMES](https://wowscience.co.uk/?SFID=27&SFM_RESOURCE_TYPE=GAMES)
- [HTTPS://PBSKIDS.ORG/GAMES/SCIENCE](https://pbskids.org/games/science)
- [HTTPS://MRNUSSBAUM.COM/GAMES/SCIENCE-GAMES](https://mrnuussbaum.com/games/science-games)

REMEMBER SCIENCE IS ALL AROUND US

How do you cook an egg?

Do some exercise, measure
your heart rate

When I listen to loud
music sometimes
the floor shakes



Why is there water
dripping down the
window?

How long is mummy
pregnant for?

Why is there water
dripping down the
window?

Why does my shadow
look so long?

How do you catch corona virus?

I got an electric shock
when I touched the
computer screen

Look after a plant



SUPPORTING YOUR CHILD WITH MATHS AT HOME



WHAT YOU SAY REALLY MATTERS.

Don't worry. I wasn't very good at maths at school either.

We didn't do it like this when I was at school.

You'll have to ask someone else. I'm terrible at fractions.

Oh no – time for the dreaded maths homework.



TALKING POSITIVELY ABOUT MATHS IS PROVEN TO REDUCE MATHS ANXIETY.

Let's try this
together.

What can we use to
help us?



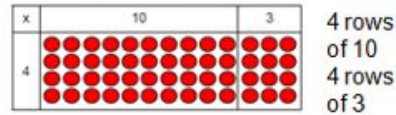
Don't give up.
You're doing really
well and will get
there.

The best bit about
maths is finally
working something
out.

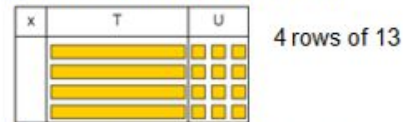
YOUR CHILD WILL EXPERIENCE MATHS THROUGH CONCRETE MATERIALS, PICTURES AND WRITTEN CALCULATIONS.

Grid Method

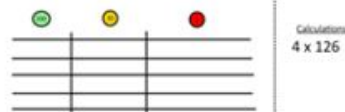
Show the link with arrays to first introduce the grid method.



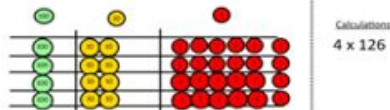
Move on to using Base 10 to move towards a more compact method.



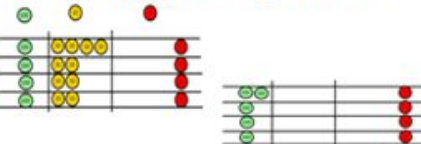
Move on to place value counters to show how we are finding groups of a number. We are multiplying by 4 so we need 4 rows.



Fill each row with 126.



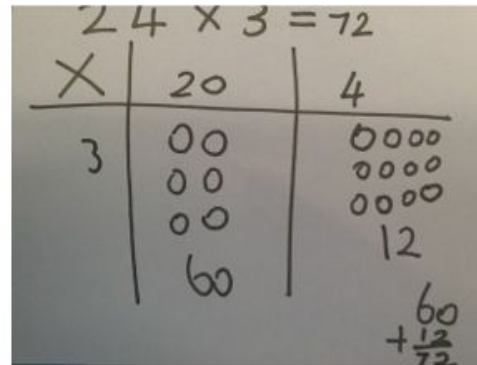
Add up each column, starting with the ones making any exchanges needed.



Then you have your answer.

Children can represent the work they have done with place value counters in a way that they understand.

They can draw the counters, using colours to show different amounts or just use circles in the different columns to show their thinking as shown below.



Start with multiplying by one digit numbers and showing the clear addition alongside the grid.

x	30	5
7	210	35

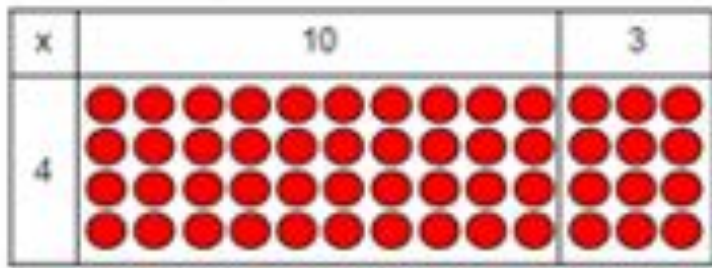
$$210 + 35 = 245$$

Moving forward, multiply by a 2 digit number showing the different rows within the grid method.

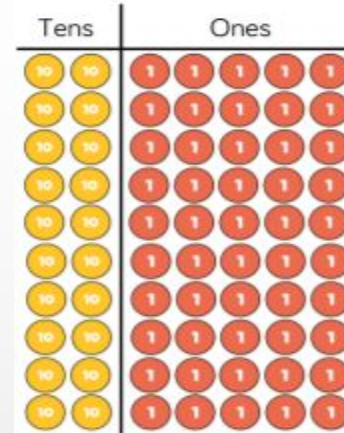
	10	8
10	100	80
3	30	24

x	1000	300	40	2
10	10000	3000	400	20
8	8000	2400	320	16

THIS IS OFTEN THE THING THAT PARENTS FIND
DIFFICULT TO INTERPRET.



4 rows
of 10
4 rows
of 3



Write the calculation shown by the place value counters.

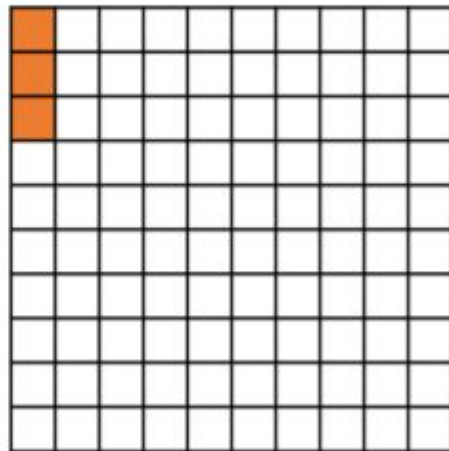
Each row has ____ tens and ____ ones.

Each row has a value of ____.

There are ____ rows.

The calculation is $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$.

What fraction is shown in both representations?
Can you convert this in to a decimal?

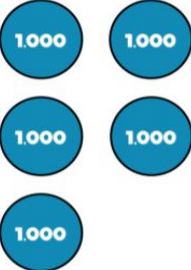


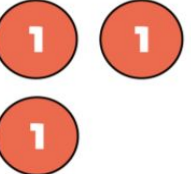



Remember the pictures are there to support the learning. Ask your child what they notice about the picture first. Count how many the picture represents then go from there.

THEY WILL ALSO LEARN TO USE REASONING TO SOLVE PROBLEMS. ASKING YOUR CHILD TO EXPLAIN HOW THEY KNOW SOMETHING IS RIGHT OR WRONG REALLY HELPS WITH THIS.

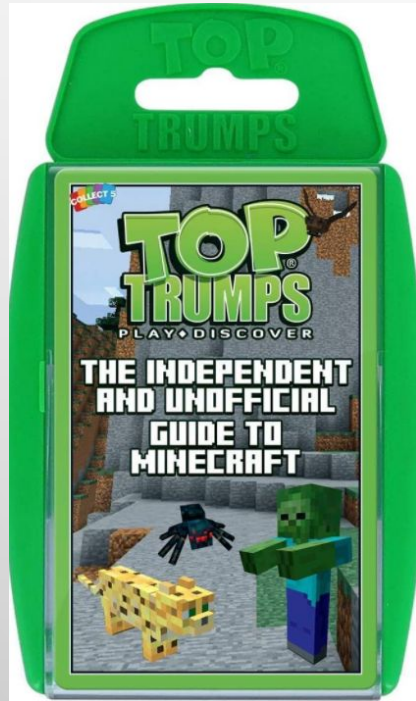
True or False? 1,000s, 100s, 10s and 1s

If a hundreds counter is added to the place value grid, it would represent the number 5,543

1,000s	100s	10s	1s
			



USING EVERYDAY OPPORTUNITIES REALLY HELPS.

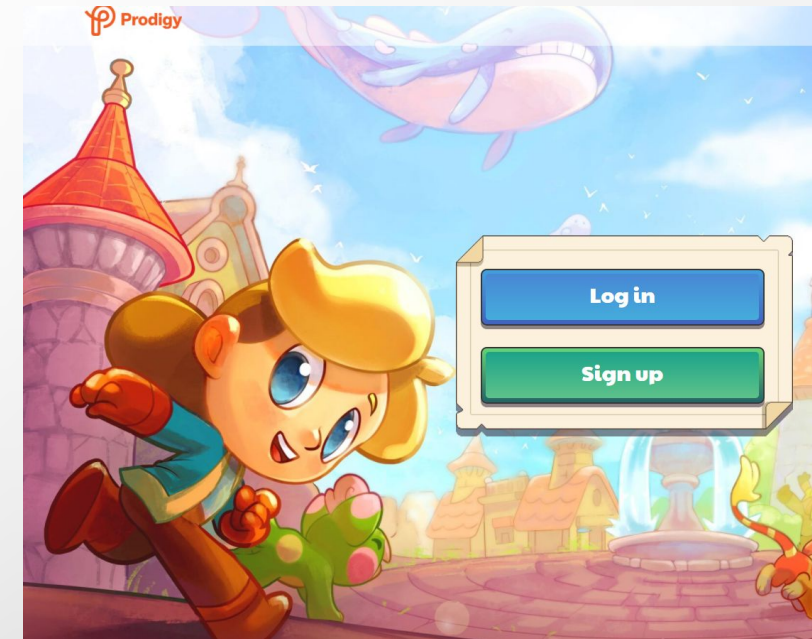


TIMES TABLES ARE A KEY TO MANY AREAS OF MATHS.

12 X 12 Multiplication Table													
X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

WEBSITES TO SUPPORT LEARNING.

WWW.PRODIGYGAME.COM



WEBSITES TO SUPPORT LEARNING.

These are websites which the school subscribes to. Your child has a login and password for each of them.

TT Rockstars – this is a fun way to learn times tables.

<https://ttrockstars.com/>

Numbots – this game provides children with different maths problems to solve as they move around it.

<https://play.numbots.com/#/account/school-login-type>

Purple Mash – there are lots of games and activities to support all areas of maths.

<https://www.purplemash.com/login/>

These websites are free and fun to use.

<https://www.prodigygame.com/main-en/>

<https://www.topmarks.co.uk/>

<https://www.timestables.co.uk/>

Please play games

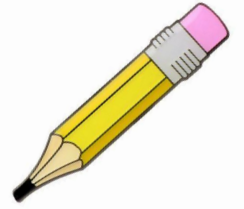
- ▶ **Snakes and ladders** – as it is, vary dice numbers
- ▶ **Guess Who?** – systematic working, exploring possibilities
- ▶ **Junior Monopoly** – money
- ▶ **Cluedo** – strategy
- ▶ **Battleships** – coordinates and strategy
- ▶ **Noughts and crosses** – strategy
- ▶ **Connect 4** – strategy
- ▶ **Bingo/beetle drive**

AND FINALLY.....



**KEEP
CALM
AND
ENJOY
IT**

SUPPORTING YOUR CHILD WITH WRITING



TOP TIPS:

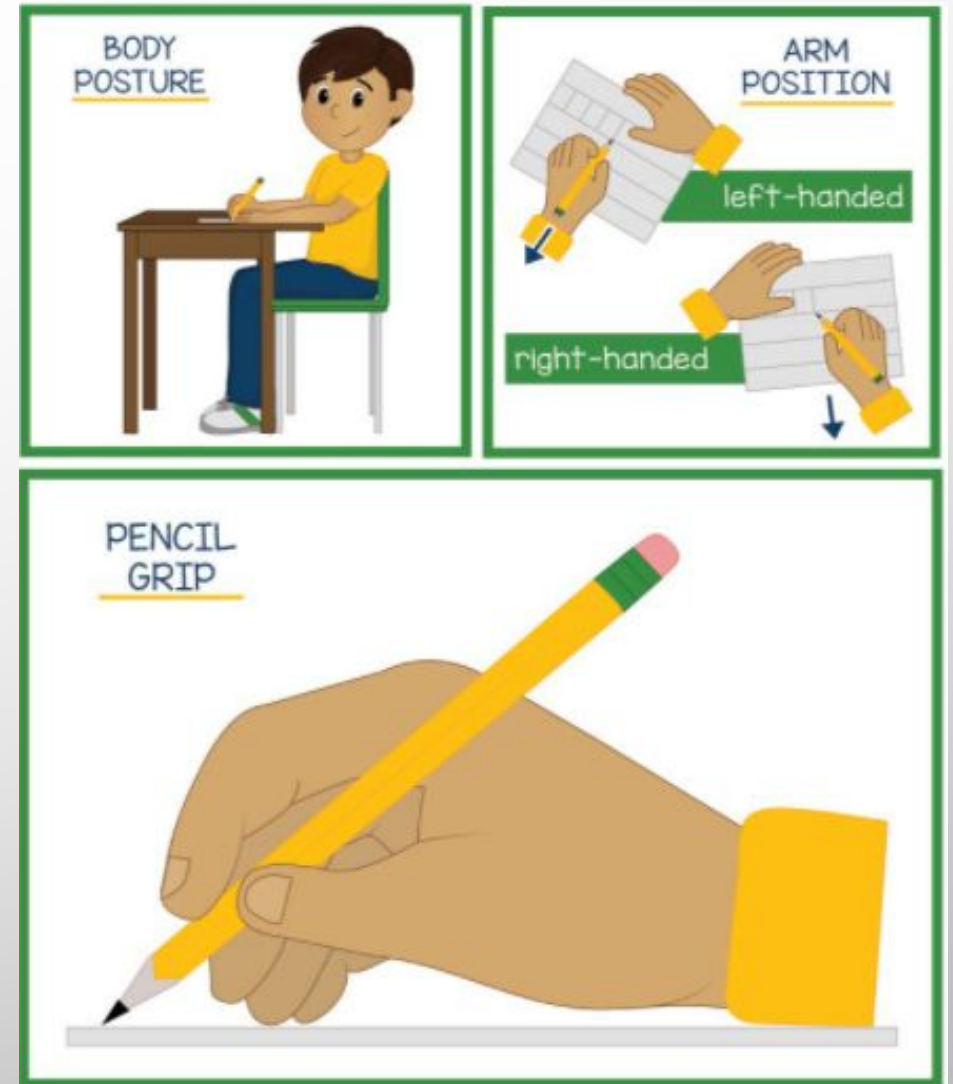
- ENCOURAGE YOUR CHILD TO WATCH THE TEACHER'S VIDEO FIRST, BEFORE BEGINNING THE TASK.
- MAKE SURE YOUR CHILD REALLY UNDERSTANDS THE TASK BEFORE THEY BEGIN.
- REMIND YOUR CHILD TO ALWAYS INCLUDE KEY GRAMMATICAL FEATURES IN THEIR WRITING TO MAINTAIN HIGH EXPECTATIONS IN WRITING. FOR EXAMPLE:
 - CAPITAL LETTERS
 - FULL-STOPPS
 - PARAGRAPHS
 - CORRECT USE OF APOSTROPHES
 - COMMAS
- ALWAYS ENCOURAGE YOUR CHILD TO RE-READ THEIR WRITING BEFORE THEY FINISH.

SUPPORTING YOUR CHILD WITH HANDWRITING

WHENEVER YOUR CHILD IS WRITING BY HAND,
ENCOURAGE THEM TO THINK ABOUT THEIR
HANDWRITING.

TRY TO SUPPORT YOUR CHILD BY...

- ENCOURAGING THEM TO SIT CORRECTLY
 - GRIP THEIR PENCIL CORRECTLY
- HELPING THEM WITH THE SIZE OF THEIR LETTERS
- ENCOURAGING THEM TO THINK ABOUT WHERE EACH LETTER SITS ON THE LINE
- ENCOURAGING THEM TO JOIN THEIR LETTERS



HELPFUL WEBSITES FOR WRITING



BBC bitesize KS2:

<https://www.bbc.co.uk/bitesize/subjects/zv48q6f>

Topmarks KS2:

<https://www.topmarks.co.uk/english-games/7-11-years/spelling-and-grammar>

Crickweb KS2:

<http://www.crickweb.co.uk/ks2literacy.html>

Writing ideas through animated film

<https://www.literacyshed.com/the-ks1-shed.html>

SUPPORTING YOUR CHILD WITH READING



TOP TIPS:

- ENCOURAGE YOUR CHILD TO FIND A CALM, QUIET ENVIRONMENT TO READ.
- WALK THROUGH THE BOOK/ TEXT WITH YOUR CHILD FIRST, BEFORE THEY BEGIN TO READ:
 - READ THE TITLE OF THE BOOK/TEXT AND LOOK AT THE FRONT COVER
 - DISCUSS WHAT THE BOOK/TEXT MIGHT BE ABOUT
 - LOOK AT THE BLURB TOGETHER
 - LOOK AT ANY PICTURES TOGETHER
 - IDENTIFY ANY KEY WORDS TOGETHER
- ENCOURAGE YOUR CHILD TO USE A RANGE OF STRATEGIES WHEN THEY FIND A WORD TRICKY.
- FOCUS ON A RANGE OF READING SKILLS WITH YOUR CHILD E.G. RETRIEVAL, INFERENCE AND SUMMARISING SKILLS WHEN ASKING THEM QUESTIONS ABOUT THE BOOK/TEXT THEY'VE READ.
- ENCOURAGE YOUR CHILD TO ALWAYS GIVE EVIDENCE FOR THEIR ANSWERS TO READING QUESTIONS.

READING DIFFICULT WORDS



IF YOUR CHILD GETS STUCK ON A WORD, YOU COULD...

1. Ask them to use their sounds (phonics).

Consonant sounds															
f	l	m	n	r	s	v	z	sh	th	ng					
ff	ll	mm	nn	rr	ss	ve	zz	ti							
ph	le	mb	kn	wr	se	c	se	ci							
b	c	d	g	h	j	p	qu	t	w	x	y	ch			
bb	k	dd	gg		g	pp		tt	wh						
	ck				ge										
ch					dge										
Vowel sounds															
a	e	i	o	u	ay	ee	igh	ow							
	ea				a-e	y	i-e	o-e							
					ai	ea	ie	oa							
					e	e	i	o							
							y								
oo	oo	ar	or	air	ir	ou	oy	ire	ear	ure					
u-e			oor	are	ur	ow	oi								
ue			ore		er										
ew			aw	au											

2. Ask them to miss out the word, read the rest of the sentence and see if they can work out what it means.

3. Use picture clues to help them

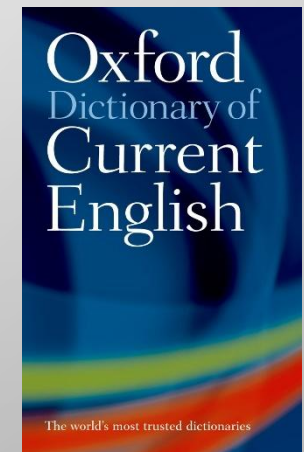


Revisit the word at the end of the reading session. Can your child remember what the word was?

4. Ask them to use their knowledge of prefixes and suffixes to help them break down the word.



5. Encourage them to use a dictionary to find the meaning of the word.



HELPFUL WEBSITES FOR READING



Bug Club:

<https://www.activelearnprimary.co.uk/login?c=0>

Free online books/audio stories:

<https://library.thenational.academy/>

<https://stories.audible.com/discovery>

<https://literacytrust.org.uk/family-zone/9-12/book-hopes/>

Additional reading websites:

<https://www.bbc.co.uk/bitesize/subjects/zv48q6f>

Some classes are using the website Epic! too. This requires a school log-in to give free access.