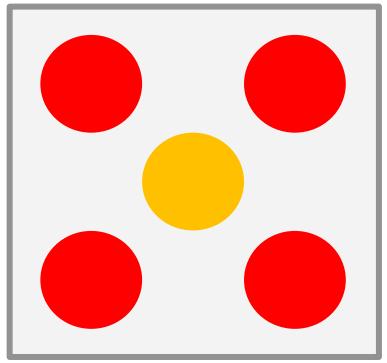
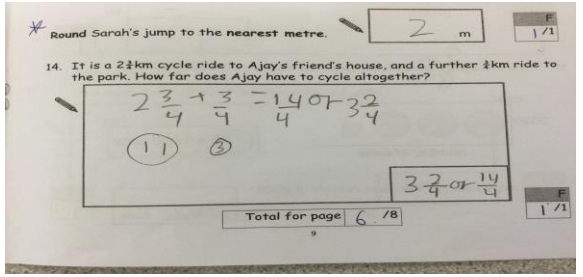
# Mastering Number at Home

## Year 2





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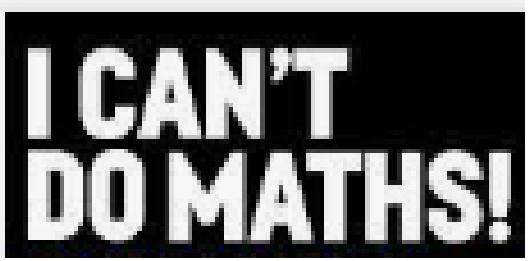
# Aims of the session

- Introduce Us!
- Share with you some of the things your child will be learning in school
- Improve your confidence in helping your child with maths
- Share with you the home learning activities

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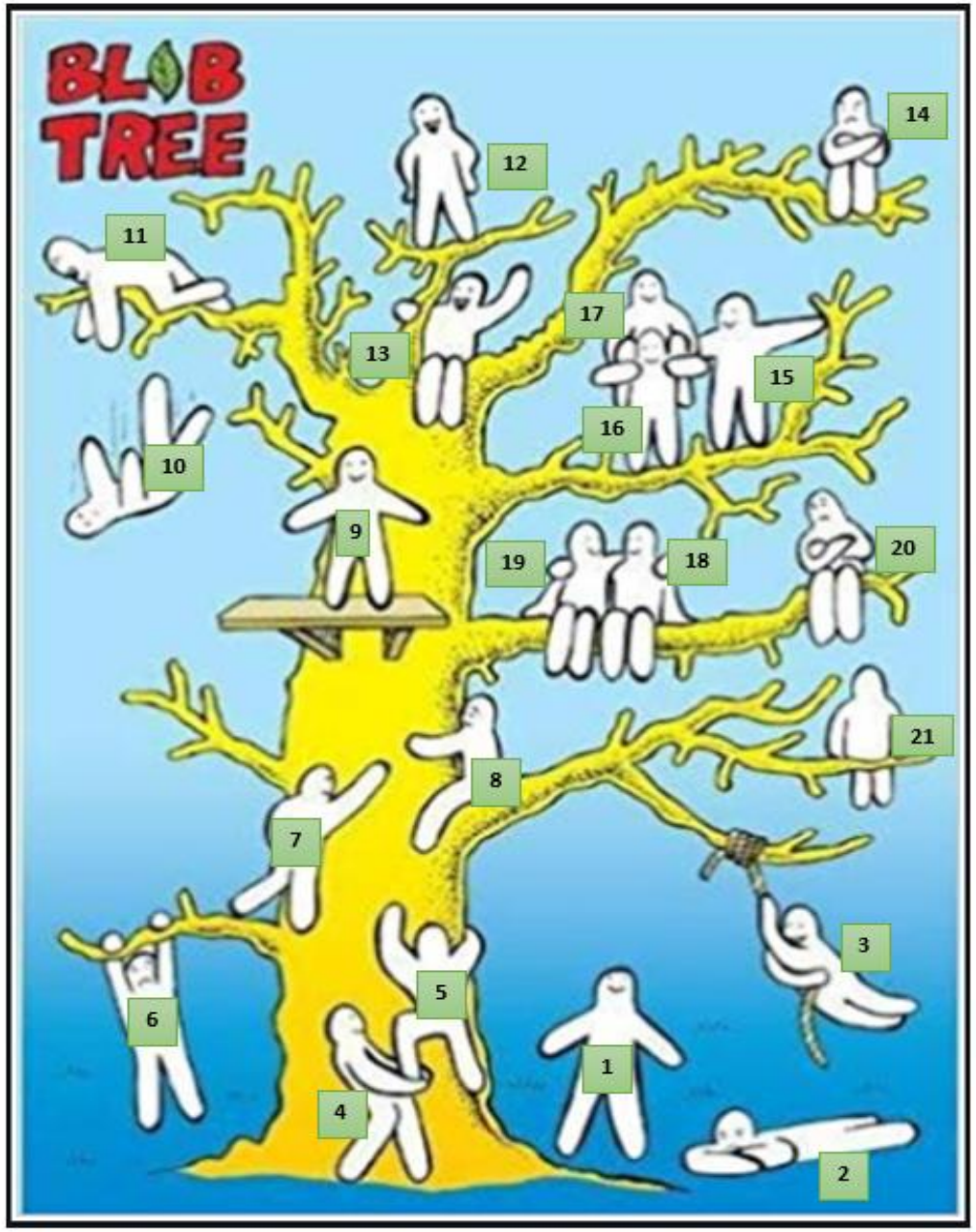
# Where are you in terms of supporting maths at home?

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# Why engage you in your child's learning?

**High quality teaching** is the key to raising attainment in school. But…research evidence suggests that when parents are engaged in their children's learning, outcomes for children can also be improved.

The research also highlights the fact that parents feel they need more support to understand the current curriculum content and how they can support their child with their learning at home.

Desforges, C. and Abouchaar, A. (2003); Goodall, J. and Vorhaus, J. (2011); The Education Endowment Foundation (2019); Sarjeant, S. (2021)

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BBC News Report 2006

69% of parents do not help children with their homework because…

> *Everything has changed since they were at school and they are not confident in the new methods.*

Despite initiatives like Inspire Workshops, Keeping up with Children , the situation got worse BBC News Report 2010

82% of parents feel unable to help pupils with their homework.

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# The ‘problem’ with maths

“My dad thinks that the way **he** does maths is easier and better than **my** way but he doesn’t understand my way and his way confuses me.”

*Pupil – Catford High School: Impact in Learning Maths Programme*

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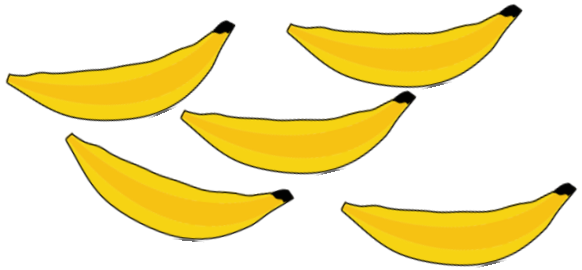
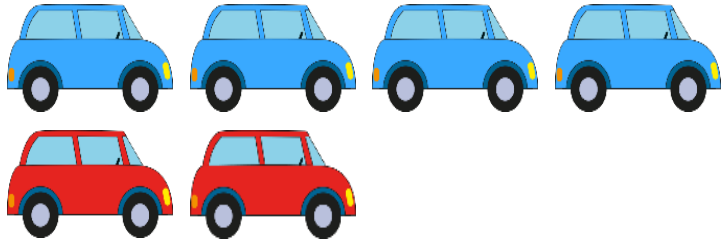
# How does Mastering Number help us to teach maths in school?

The National  Mastering Number Programme in Year 2 will help your child to develop good *number sense*.

Some of the things they are learning include:



Recognising small numbers of objects without having to count them



Know different ways to ‘make’ (compose) a number

**Why are the numbers so small?** Use of small numbers because  developing deep understanding= good number sense= firm foundations to build on?

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# How does this fit in with the rest of school and DfE?

Underachievement in Maths is a National issue

Mastery Approach across Springdale School:

Small learning steps with lots of repetition through variation to ensure learning is embedded.

Use of concrete and pictorial representations to develop understanding.

*STEM sentences: Reasoned repetition to embed understanding

So children are able to make conceptual links.

Develop reasoning skills through explanation.

Firm number foundations ARE ESSENTIAL to enable this learning development.

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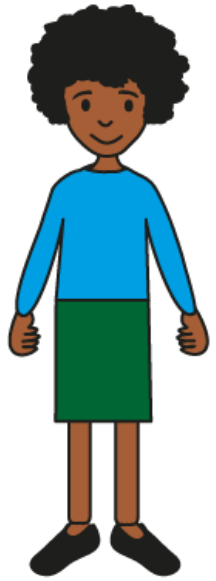
# How does knowing how numbers are ‘made’ help children?

I know that 8 is made of 5 and 3 so I will also know...

$5 + 3 = 8$

$8 - 3 = 5$

$80 - 30 = 50$



$50 + 30 = 80$

$500 + 300 = 800$

$0.5 + 0.3 = 0.8$

$0.8 - 0.3 = 0.5$

Children who develop good number sense in Early Years and Key Stage one are much more confident and capable in maths later on.

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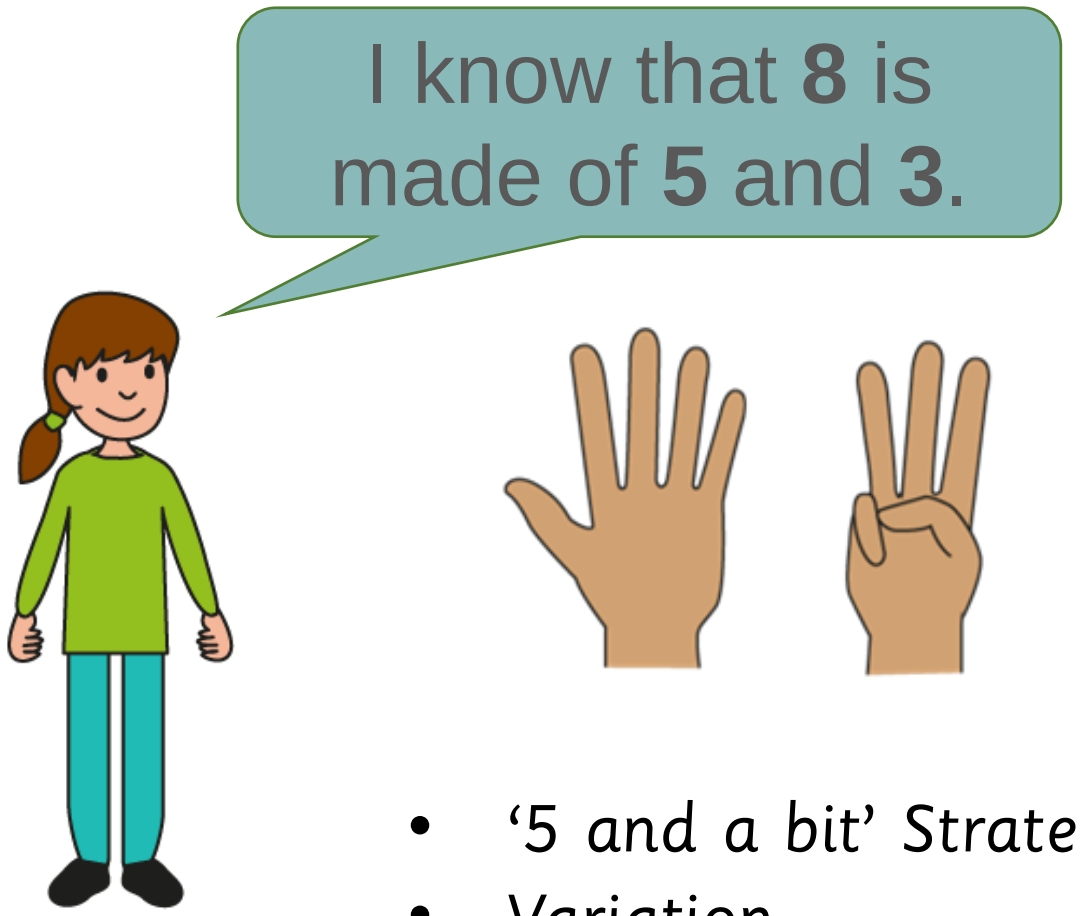
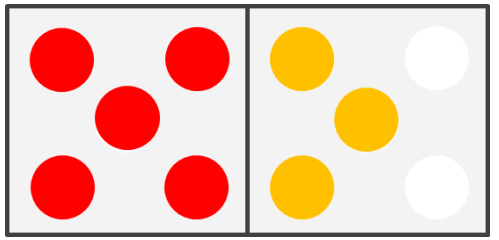
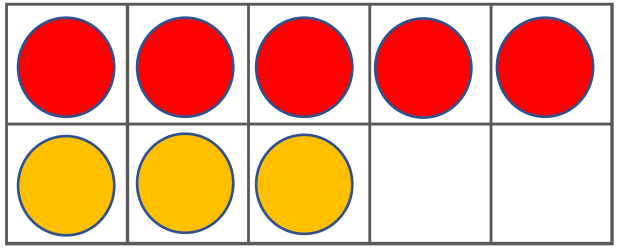
# Looking at the numbers 6, 7, 8 and 9

Children will learn that these numbers all have 5 ‘inside them’, as well as seeing all the ways they can be made.





- *‘5 and a bit’ Strategy*
- *Variation*

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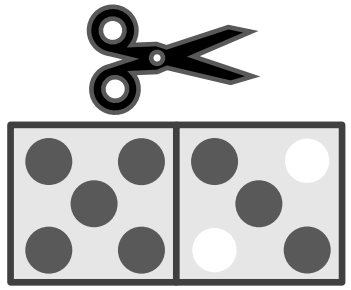
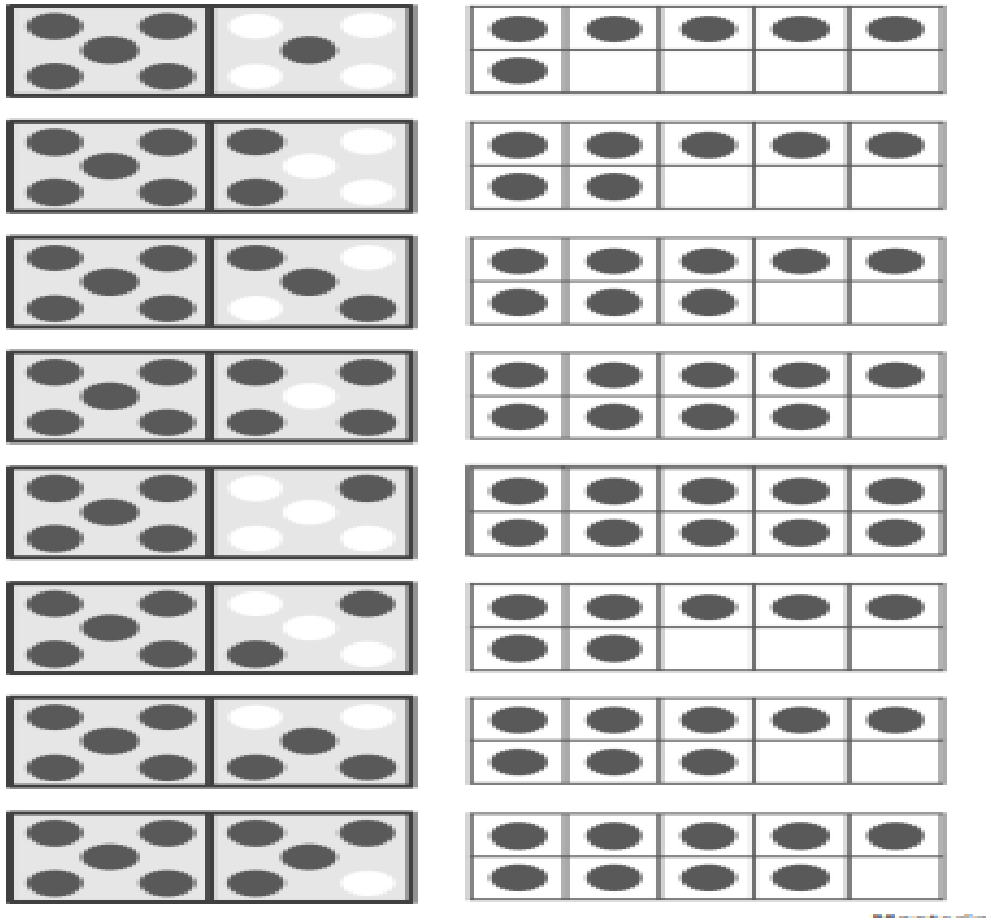
Please cut out these cards for a matching activity whilst the children are collected.
All resources SHOULD be on table- if not please ask!



Year 2, Week 1 – 5-and-a-bit cards

Cut out these cards to make a pack.



We will now take you through some of the home learning activities that you can work through with your child over the next 5 weeks.

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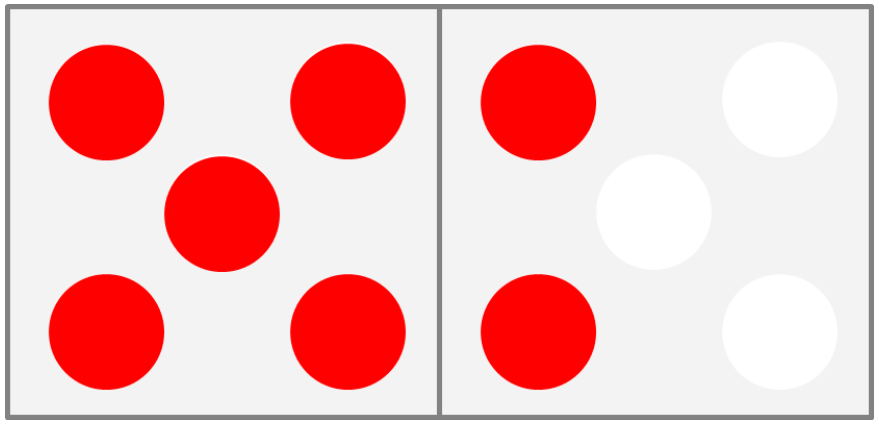
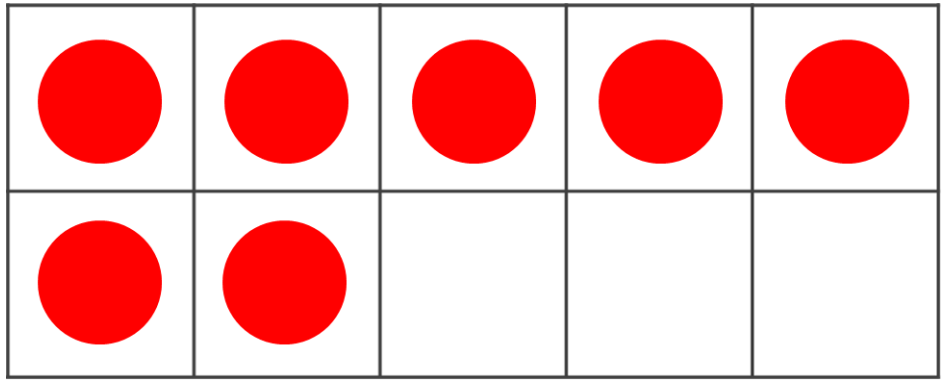
# WEEK 1 Play ‘Copy my number’

Grown-ups: place 7 counters on the dice frame as shown.
Children: can you make the same number on the 10 frame showing it as ‘5 and a bit’?  What’s the same/different? Can you show it in a different way?



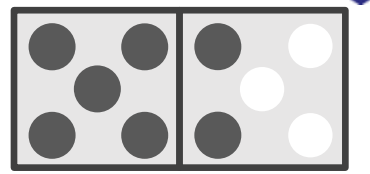


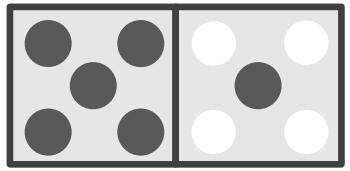
_____ is made of 5 and _____.
5 and ____ make _____.

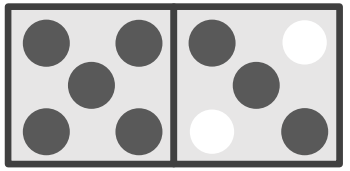
# WEEK 1: Play ‘Shows 7 / Does not show 7’

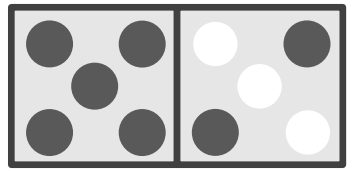
Sort the cards:

| Shows 7 | Does NOT show 7 |
| --- | --- |
| | |









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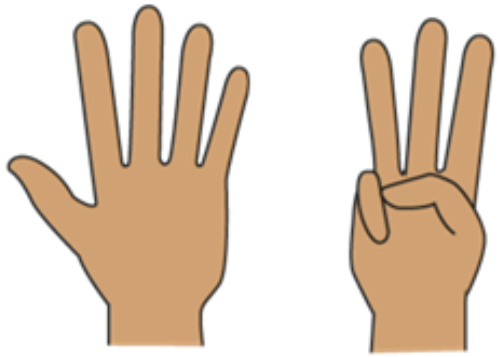
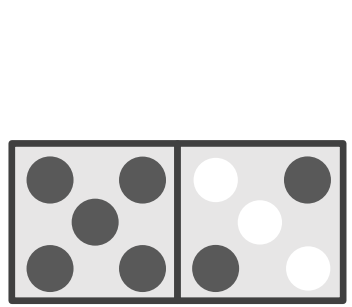
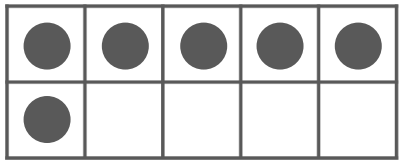
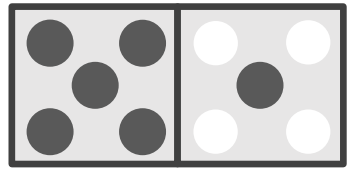
# WEEK 1: Play ‘Match my fingers’

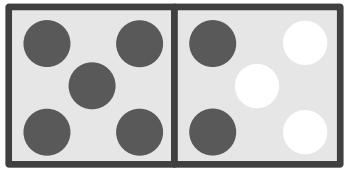
Grown-ups: use your fingers to show a number between 5 and 9.
Children: How many cards can you find that show the same number?

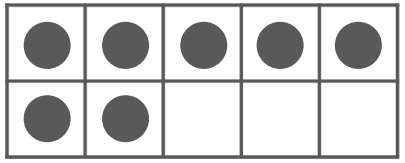


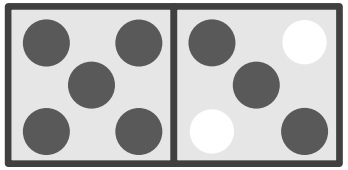


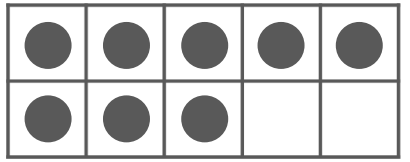


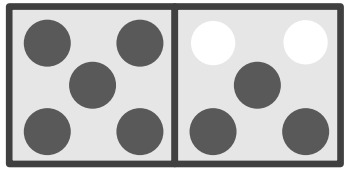












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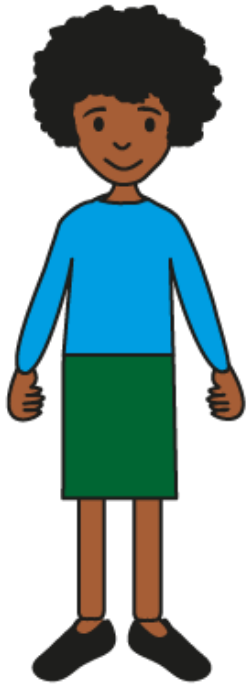
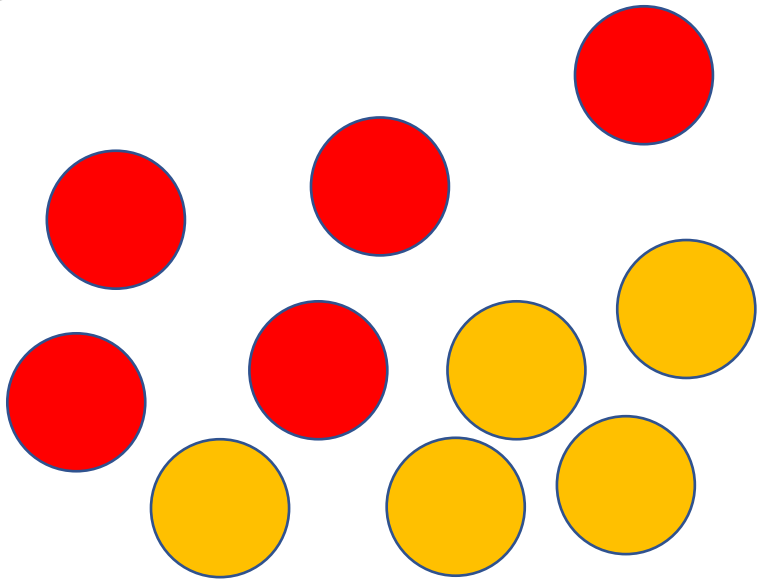
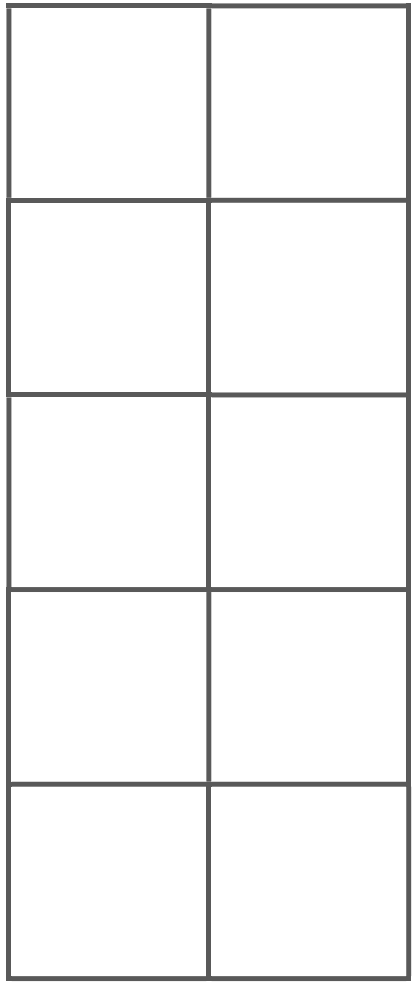
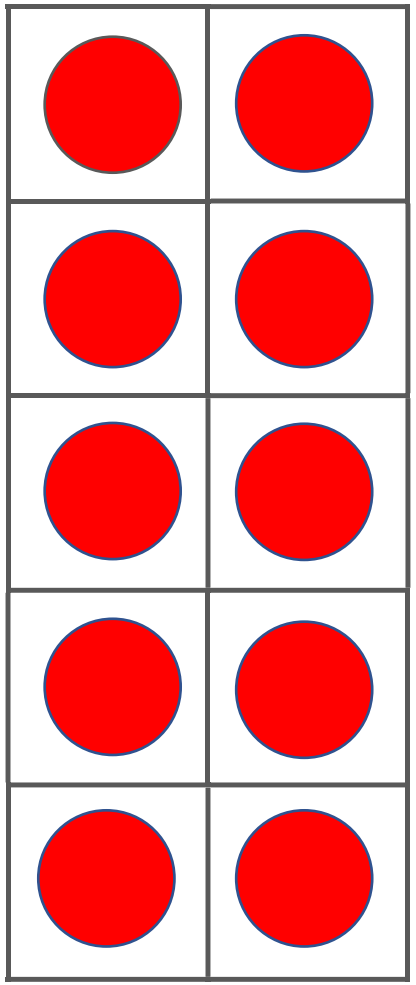
# WEEK 2: Play ‘Ways to make 10’

You will need your 10 frame and 10 counters.

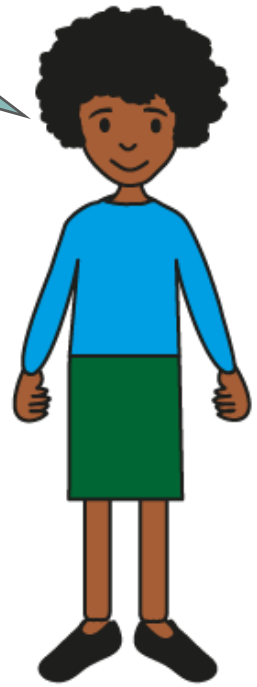






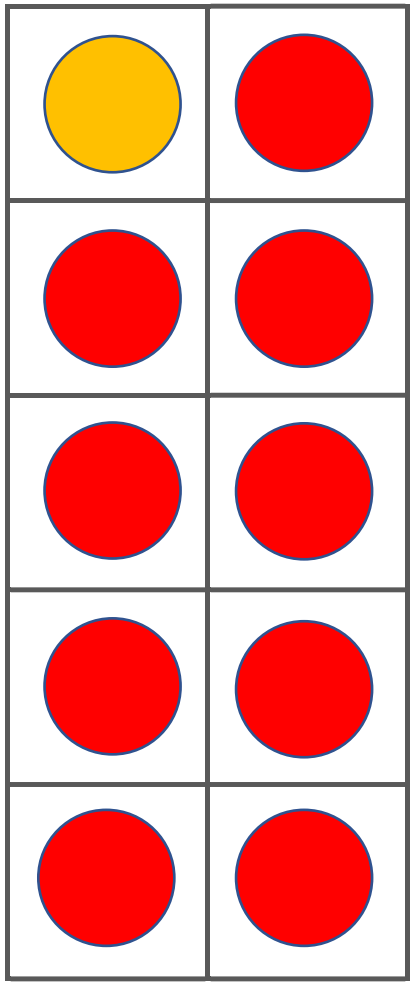


Start at the bottom and place two at a time.

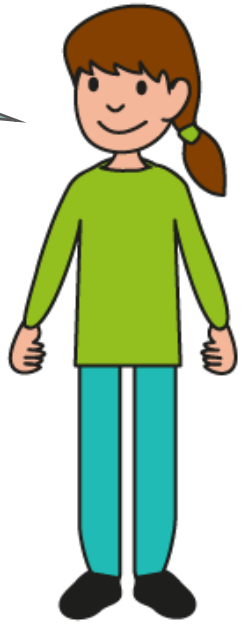


Children: Place the counters on the 10-frame so they are all red.

Grown-ups: turn one counter over at a time.



Say the stem sentence together.



10 is made of ____ and ____.
____ and ____ make 10.

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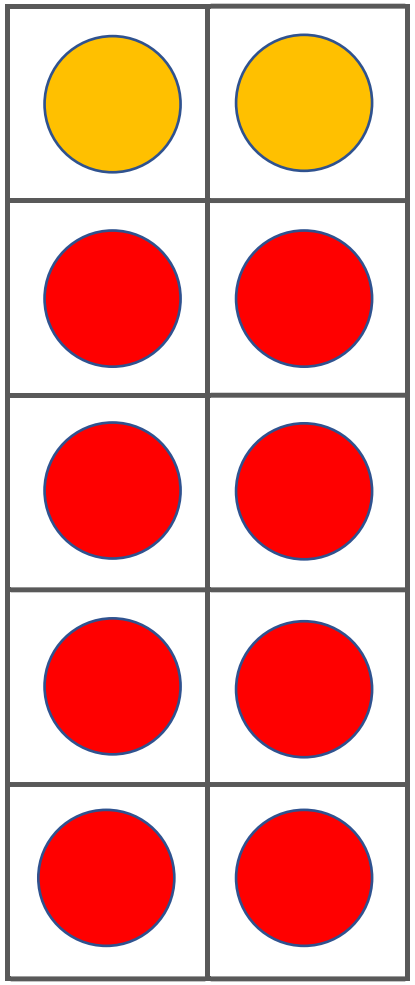
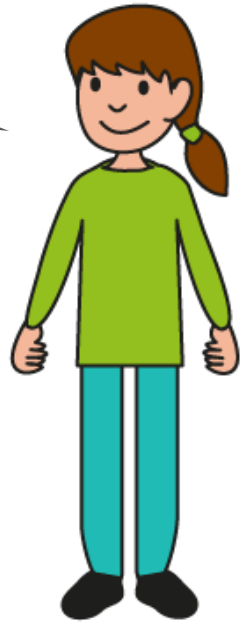


Keep saying the stem sentence together.



10 is made of ____ and ____.
____ and ____ make 10.

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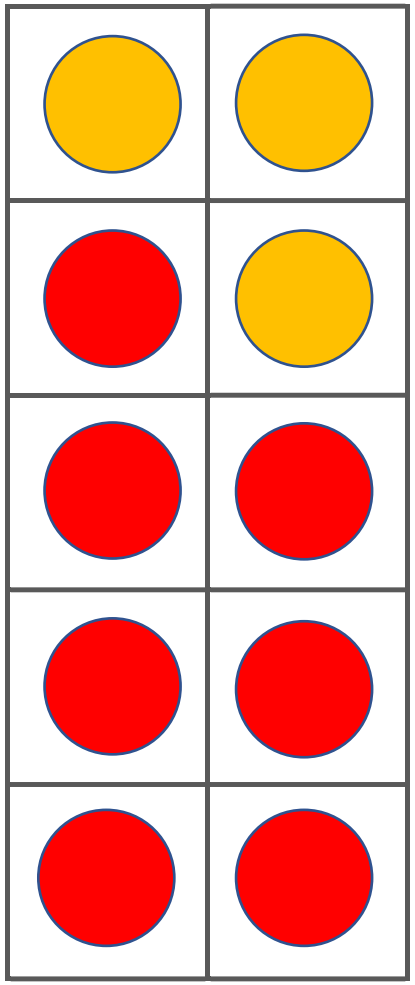
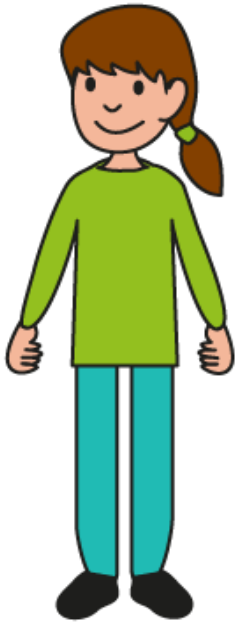


Continue doing this until all the counters are yellow.



10 is made of ____ and ____.
____ and ____ make 10.

*Working in a systematic way like this helps children to see the relationship between the numbers and to explore all the possible ways to make 10.*

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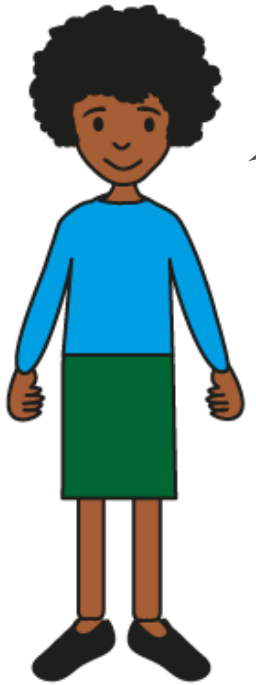
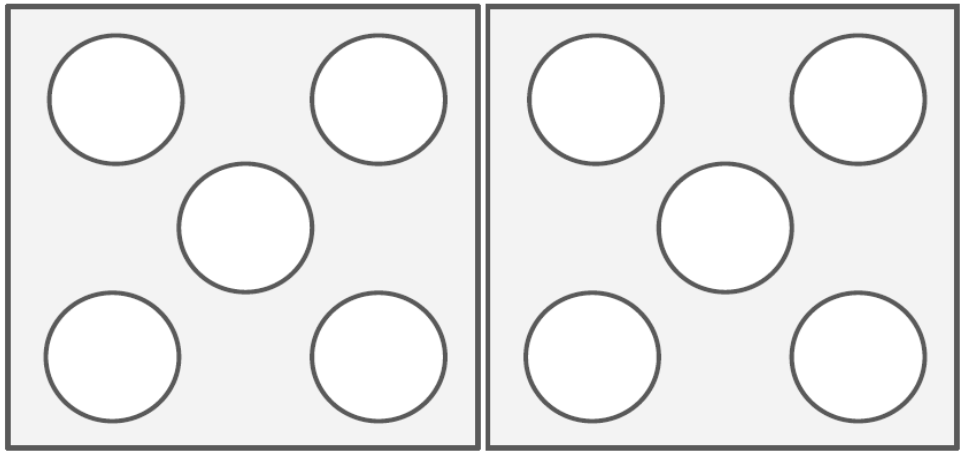
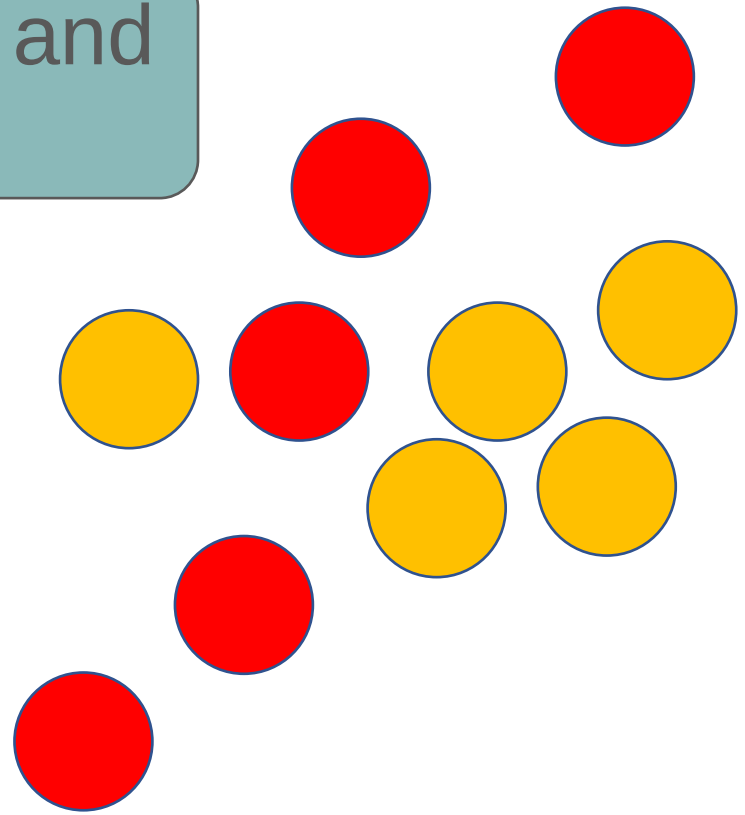
# WEEK 2: Play ‘How many more to make 10?’

Now you will need your dice frame and 10 counters.

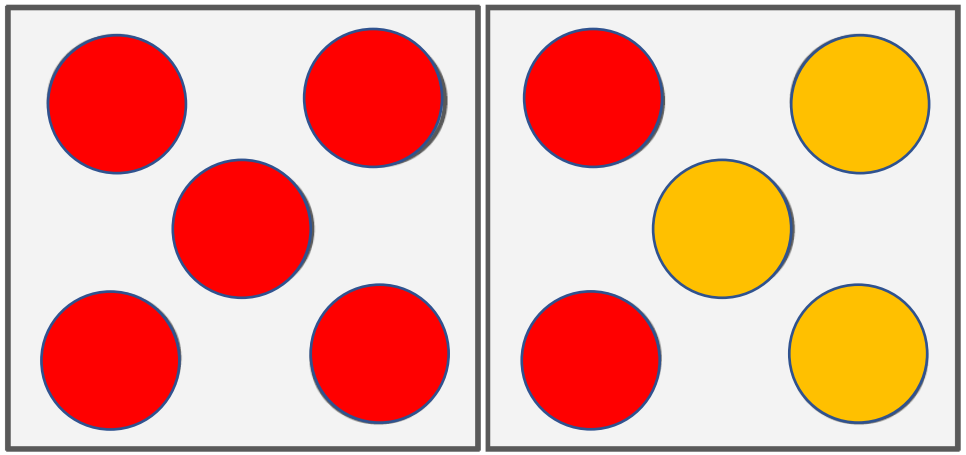






**WEEK 2**:Grown-ups: Place 7 red counters onto the dice frame, using the '5 and a bit' pattern.

Children: Fill the spaces with yellow counters and use the stem sentence.



10 is made of _____ and _____.
_____ and _____ make 10.

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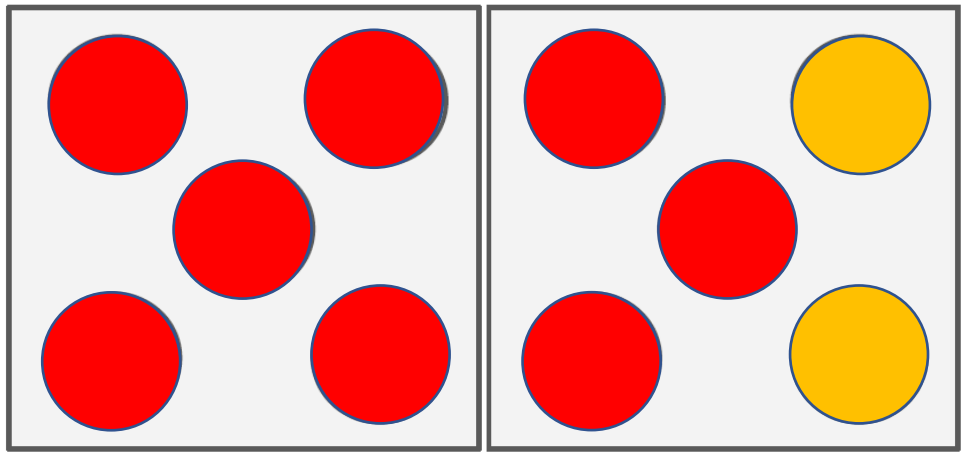
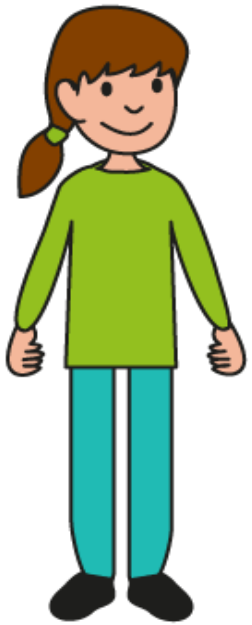
**WEEK 2**: Grown-ups: Repeat using a different ‘5 and a bit’ number (e.g. 6, 8 or 9).

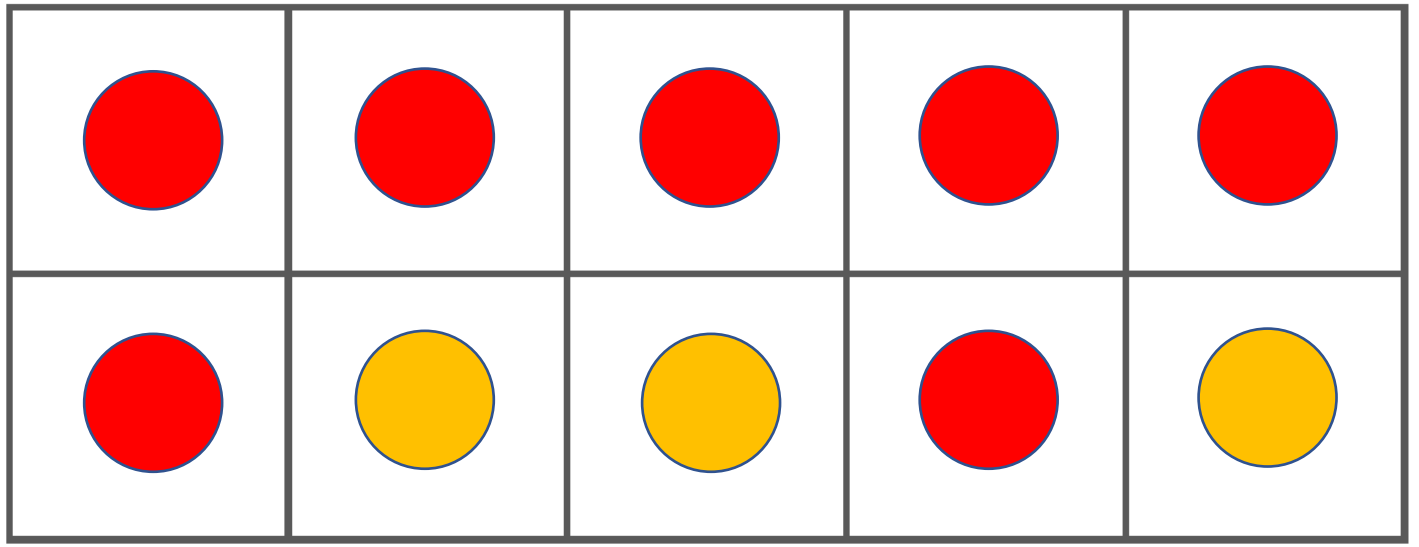


10 is made of _____ and _____.
_____ and _____ make 10.

In Week 3, children will be asked to say how many are needed to make 10 without filling the spaces.

You could play the same game using the 10-frame – this might be more tricky!





10 is made of _____ and _____.
_____ and _____ make 10.

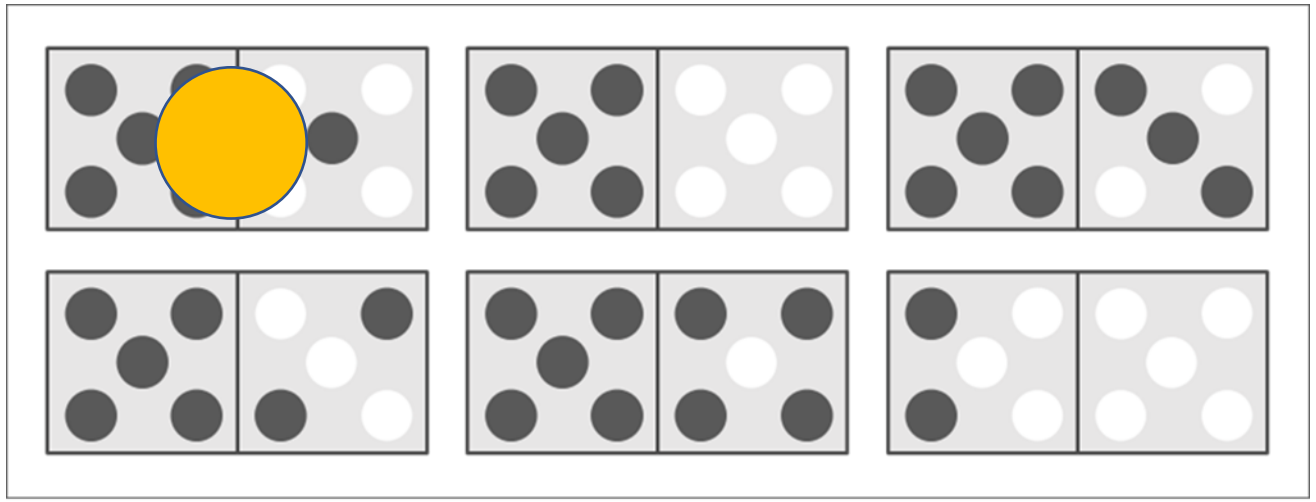


The home learning for this in Week 2 suggests that children should use the 10-frame for this activity. If parents feel that the dice frame is easier, they can use this instead.

# WEEK 3: Introducing ‘Make it 10 Bingo’

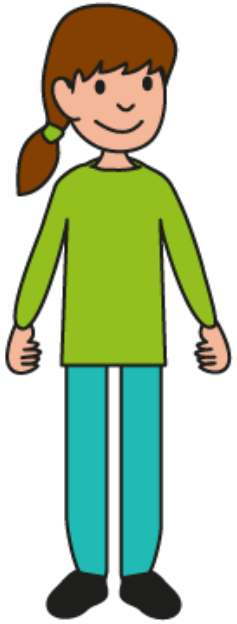
Player 1: pick a caller card and read it out
Player 2: find the number that makes 10 and cover it with a counter.

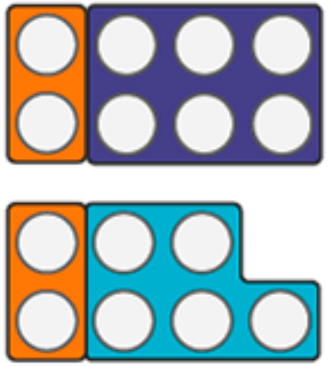
What does 4 need to make 10?

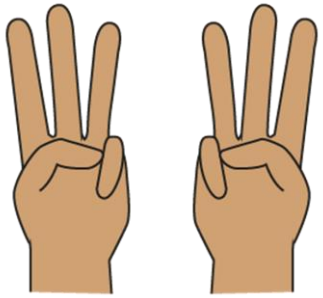


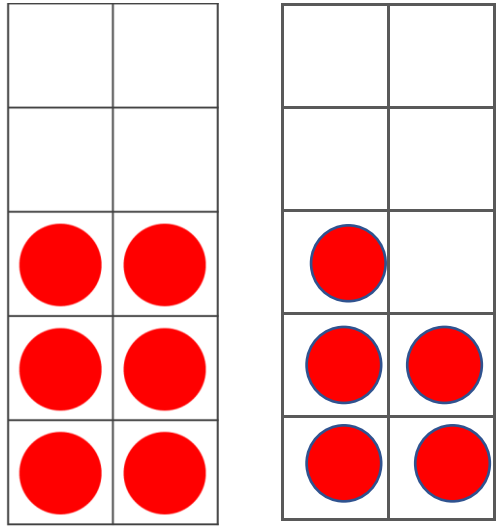
# WEEK 4: Odd and even numbers ‘inside’ other numbers

Let’s think about the odd and even *parts* of numbers.





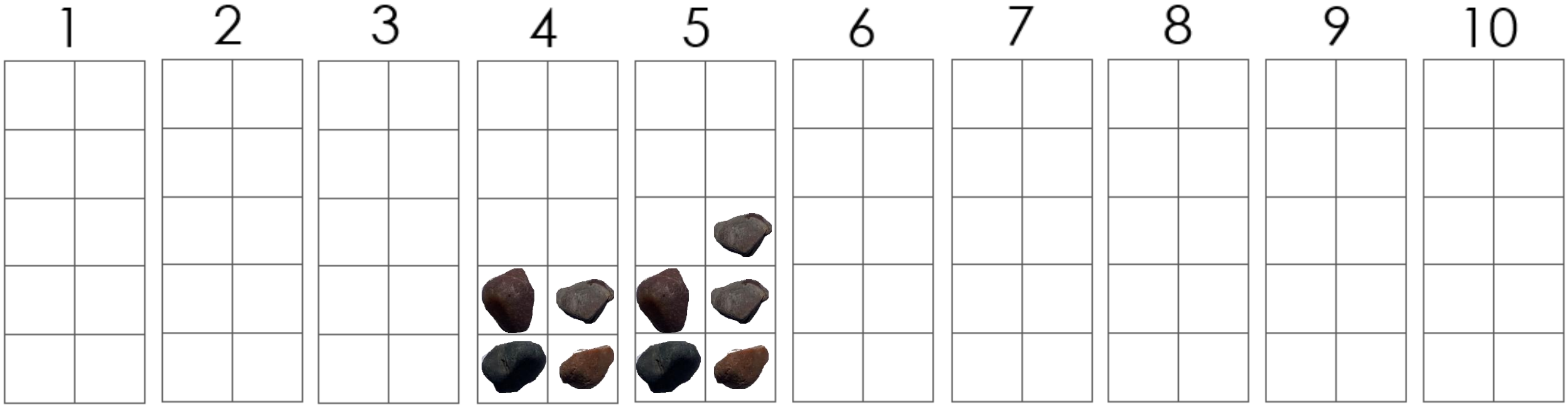




Even numbers can be made of 2s, and can be made with 2 equal parts, i.e. doubles.
Even numbers can be composed from 2 odd parts or 2 even parts.
Knowing this will help them reason about calculations involving odd and even numbers.
These are some of the images that we use in class at home, you will use 10-frames to make odd and even patterns.

WEEK 4: Use your objects to show the numbers on the 10-frames.
Place them in the order shown.

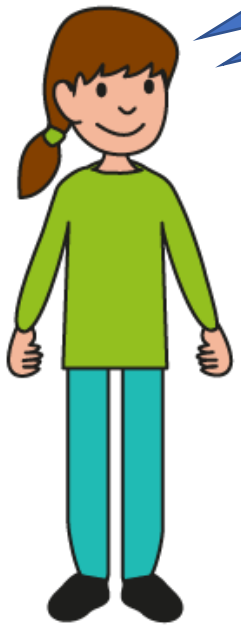
What do you notice about the pattern that is being made by 4 or 5 objects?

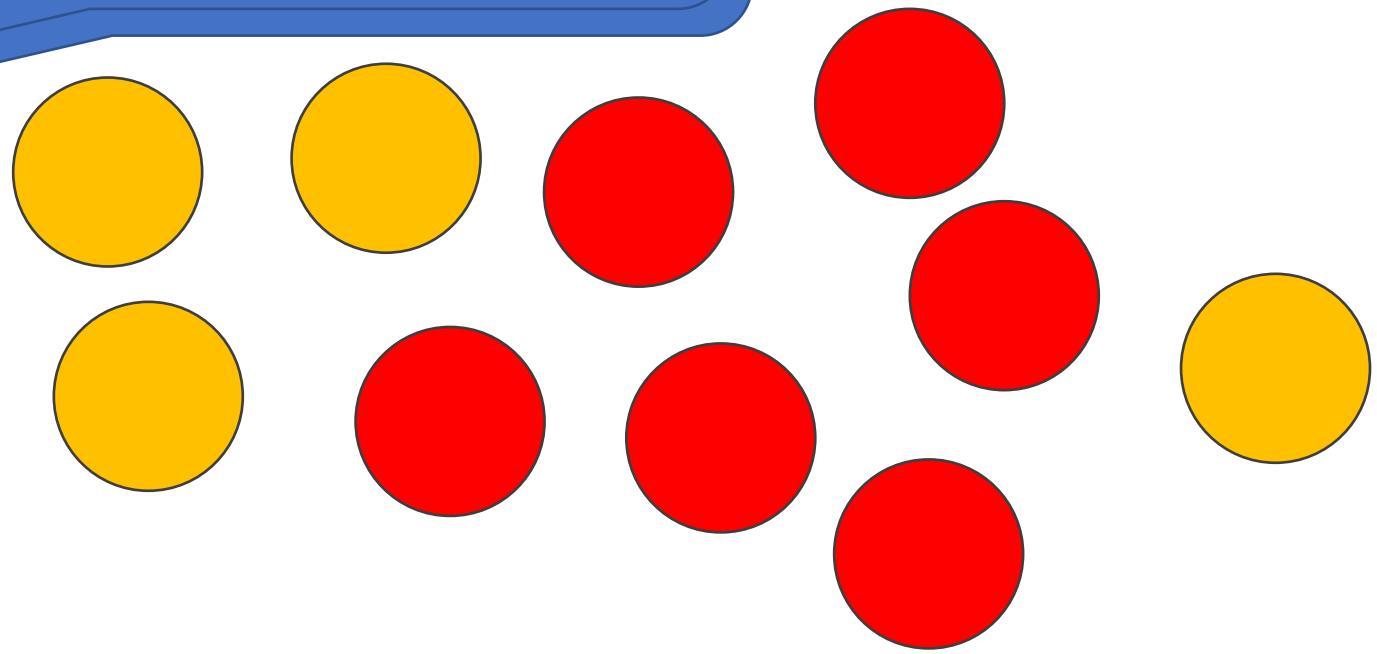



Week 4 Place the objects ( 55 needed!) on in 2s from the bottom so they can reason that if there is 1 left over/ alone then we call this an odd number- link to odd socks. Can you predict? CHANT together 1 is ODD, 2 is EVEN

# WEEK 4: Play ‘Drop 10 counters’ Do they all have partners?

How many of each colour?
Are the parts odd or even?

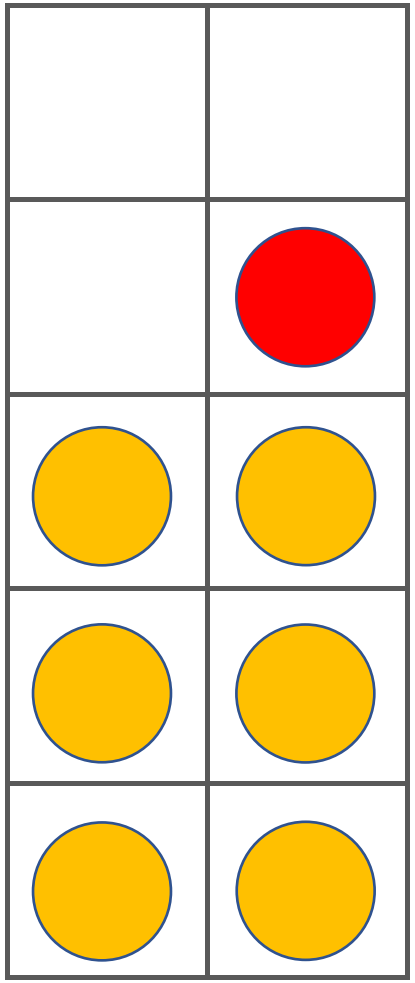




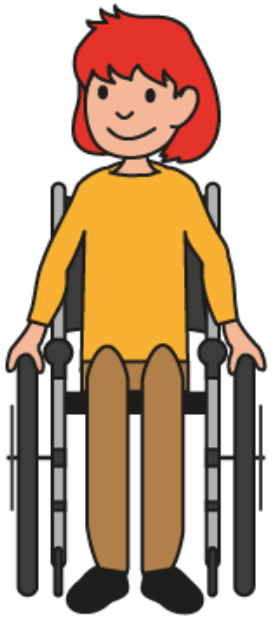
*Week 4 Try to subitise but might need to check by counting. This activity practises subitising, numbers to 10 and odds/evens.*

# WEEK 5: Play ‘Ways of making 7 and 8’- identify commutative relationship

| |
|---|
| 6 + 1 |
| 5 + 2 |
| 4 + 3 |
| 3 + 4 |
| 2 + 5 |
| 1 + 6 |

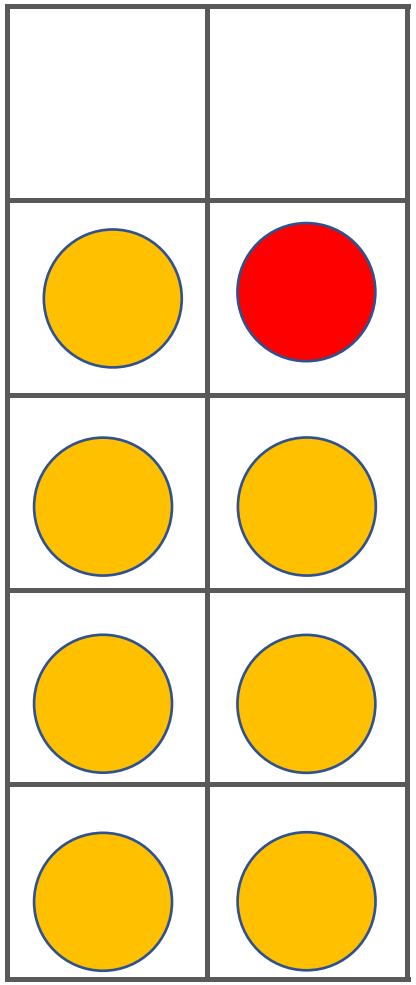


Can you see if 7 can be made of odd or even parts?

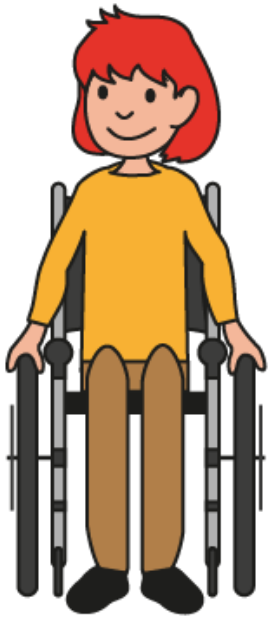


Week 5: Why does 4+4 only appear once? Why can't the parts be odd and even? Repeat this task for 9 and 10 at home.

7 + 1



Can you see if 8 can be made of odd or even parts?



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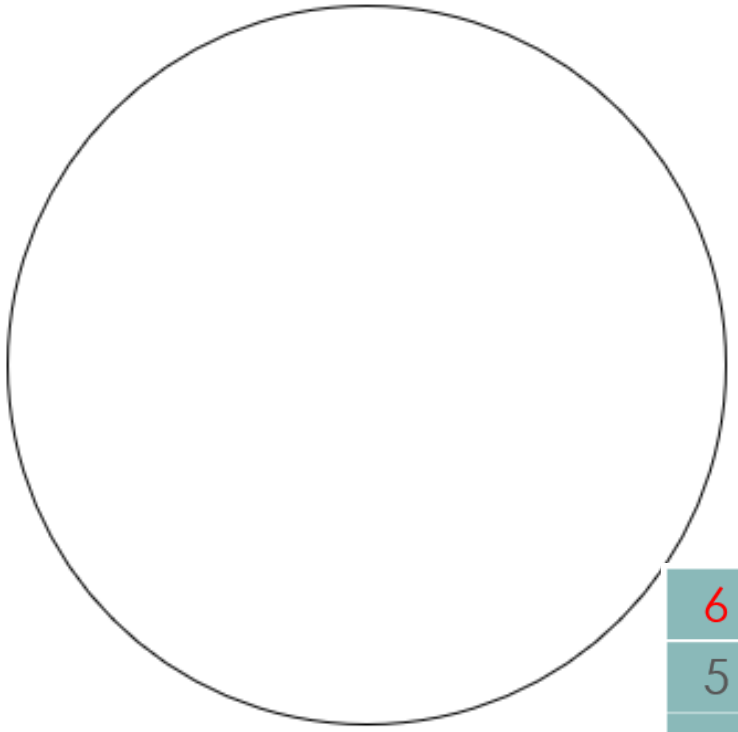
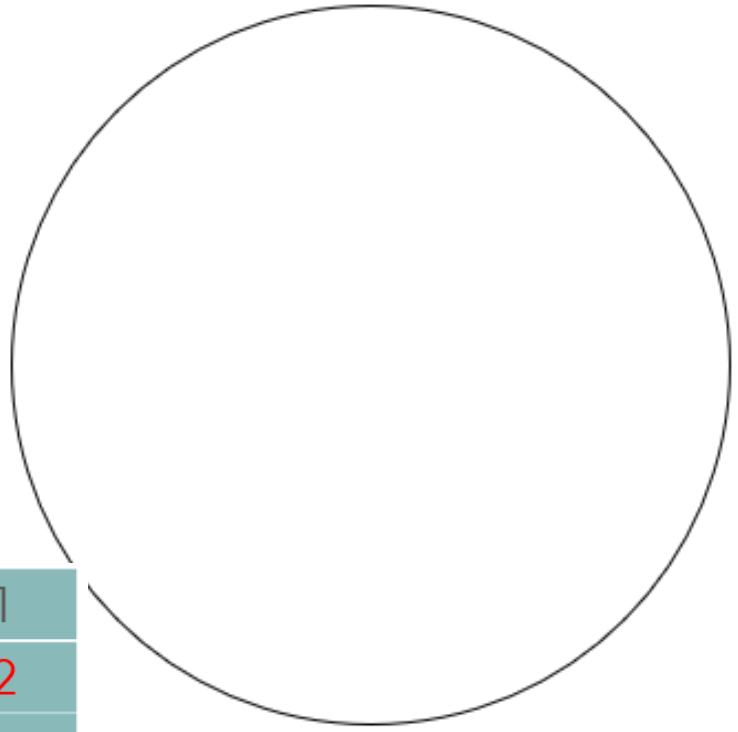
# WEEK 5: Introducing ‘Sorting expressions’

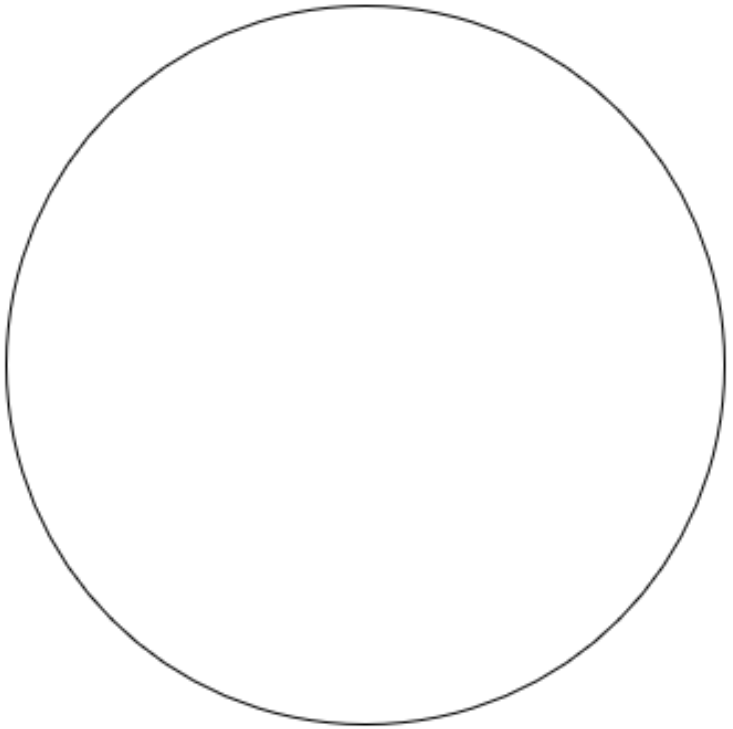
odd + odd

odd + even

even + even







| |
|---|
| 6 + 1 |
| 5 + 2 |
| 4 + 3 |
| 3 + 4 |
| 2 + 5 |
| 1 + 6 |



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# Home Learning

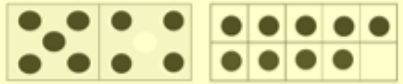
You are going to take all the games we made today home with you to practise.

The home learning for this week is set out on a sheet with instructions. You will receive a new sheet and some new activities each week.

# Mastering Number at Home

## Year 2 – Week 1

### Copy my number

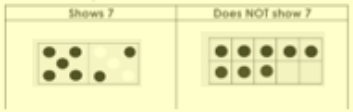


(Monday, Wednesday and Friday)

How to play

- For this game you will need the worksheet **'Double dice frame and 10-frame'** and 20 counters.
- Place some counters on the double dice frame to make a number larger than 5 (note that you should fill the left-hand side of the frame before adding counters to the right-hand side).
- Ask your child to make the same number on the 10-frame, ensuring they start with 5 counters on the top row each time.
- Repeat this activity several times. [If your child finds this easy, you may wish to cover the double dice frame with a cloth and reveal the number of counters only briefly.]

### 7 or NOT 7?




(Tuesday and Thursday)

How to play

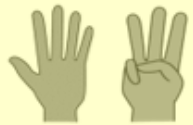
- For this game you will need the worksheets **'5-and-a-bit cards'** and **'Sorting table'**.
- Place the cards face-down on a flat surface.
- Take it in turns to pick up 1 card.
- If the arrangement on the card shows 7, place it in the 'Shows 7' column of the sorting table. If it does not, place it in the 'Does NOT show 7' column.
- Ask your child to tell you how they know if the card is in the correct column. For example, *"7 is made of 5 and 2 and this is 5 and 3"*.

### Other things to try at home

Match my fingers

For this game you will need the cards you cut from the worksheet **'5-and-a-bit cards'**. Spread out the cards face-up on a flat surface.

Use the fingers of both hands to show your child a number that is more than 5. Make sure you show 5 fingers on one hand and the remaining fingers on the other hand.



Ask your child to find ALL the cards that show the number represented by your fingers.

## Mastering Number at Home

**My Diary** – Year 2 Week 1.

Please complete your diary with your grown-up every day.

| Name: |
|---|

| Day | Activities completed (please tick) | ✓ | Grown-ups – comment about your child's learning |
|---|---|---|---|
| Mon | We played 'Copy my number.' | √ | **Joe was able to copy all the numbers I showed.** |
| Tues | We played, 'Shows7/ does NOT show 7.' | | |
| Wed | We played 'Copy my number.' | | |
| Thurs | We played, 'Shows7/ does NOT show 7.' | | |
| Fri | We played 'Copy my number.' | | |

Grown-ups – please indicate how you and your child found the work this week.

Very confident

It was okay

Not too sure

# Thank you being brave and coming into school today!

# Remember- We are working as a team to support learning, any problems:

year2@springdaleprimary.co.uk
enquiries@springdaleprimary.co.uk

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# 20.04.23 Year 2 Mastering Number Parent Feedback Form.

NAME of Child OPTIONAL_____

Following todays Workshop circle the face that best describes your response:

Do you feel you understand more about how maths is taught at Springdale?

Will you feel more confident supporting maths at home?

Has the Workshop helped you feel more involved in school?

**Is there any more help you feel we can offer to help support learning at home?**

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