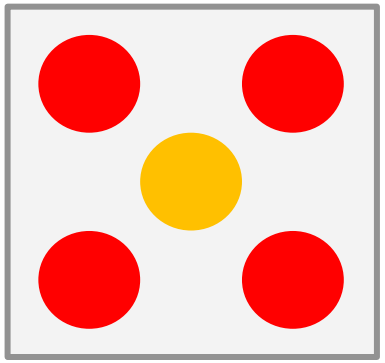
Welcome to our Maths Workshop.

Please find a place to sit, so you can see the screen comfortably.

Leave a space next to you for your child. Probably 3 or 4 adults per table.

# Mastering Number at Home

## Year 2



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# Aims of the session

- Share with you some of the things your child will be learning in school
- Improve your confidence in helping your child with maths
- Create some games and activities for use at home
- Share with you the home learning activities
- Let you know about other ways you can support at home.
- Numbots
- Importance of ‘knowing’.

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# Why engage you in your child's learning?

Research evidence suggests that when parents are engaged in their children's learning, outcomes for children can be improved.

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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# Numbots – Why we have it in school?

The most painful part is the initial choosing their own Bot!

## Engaging Game Play

**Children LOVE playing NumBots which means any difficulty getting them to practise maths will be long forgotten!**

- **Magical storyline** encourages children to continue playing to discover what's coming next.
- Dozens of **friendly characters**, including SportyBot, UnicornBot and NinjaBot.
- New levels and features to unlock.
- Motivational **stars, badges and trophies** to collect.
- Coins awarded for correct answers are used to upgrade child's own NumBots character.

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# Keeping an eye on child's learning journey

**Follow your child's progress and join in the fun by logging into the parent area.**

- Easy to understand statistics.
- View children's progress all time or over the last 7 days.
- Track your child's usage and check whether they've met their daily goal.
- Discover how much your child has improved at key learning objectives.
- Two free parental accounts enable two adults to log in, play and see children's progress.
- Optional family leaderboards can reveal a competitive side in children and parents!

Username and password are in children's reading diaries.
You don't need to pay for anything.
Just download the App.

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## Designed for Families

**We prioritise keeping your family safe, so you can let your child play worry free.**

- No chat functions.
- No in game purchases.
- No ads.
- GDPR compliant.
- Child friendly interface enables children to play independantly.
- Pupil led – each child learns maths at exactly the right pace for them.

**It is most effective when played for about 3 minutes a day - 4 or 5 times a week.**

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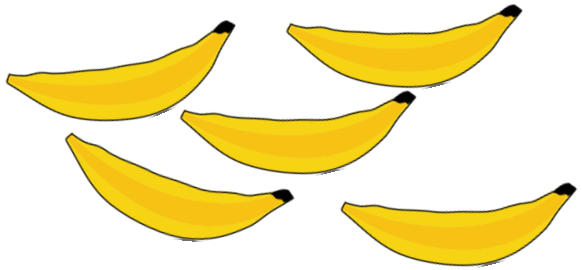
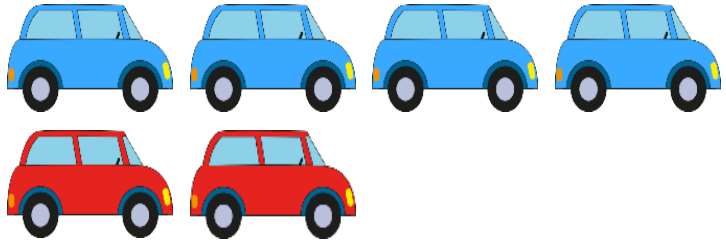
# How does Mastering Number help us to teach maths in school?

The 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

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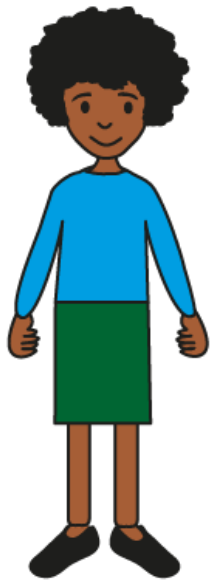
# How does knowing how numbers are ‘made’ help children?

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

$5 + 3 = 8$



$50 + 30 = 80$

$500 + 300 = 800$

$8 - 3 = 5$

$80 - 30 = 50$

$0.5 + 0.3 = 0.8$

$0.8 - 0.3 = 0.5$

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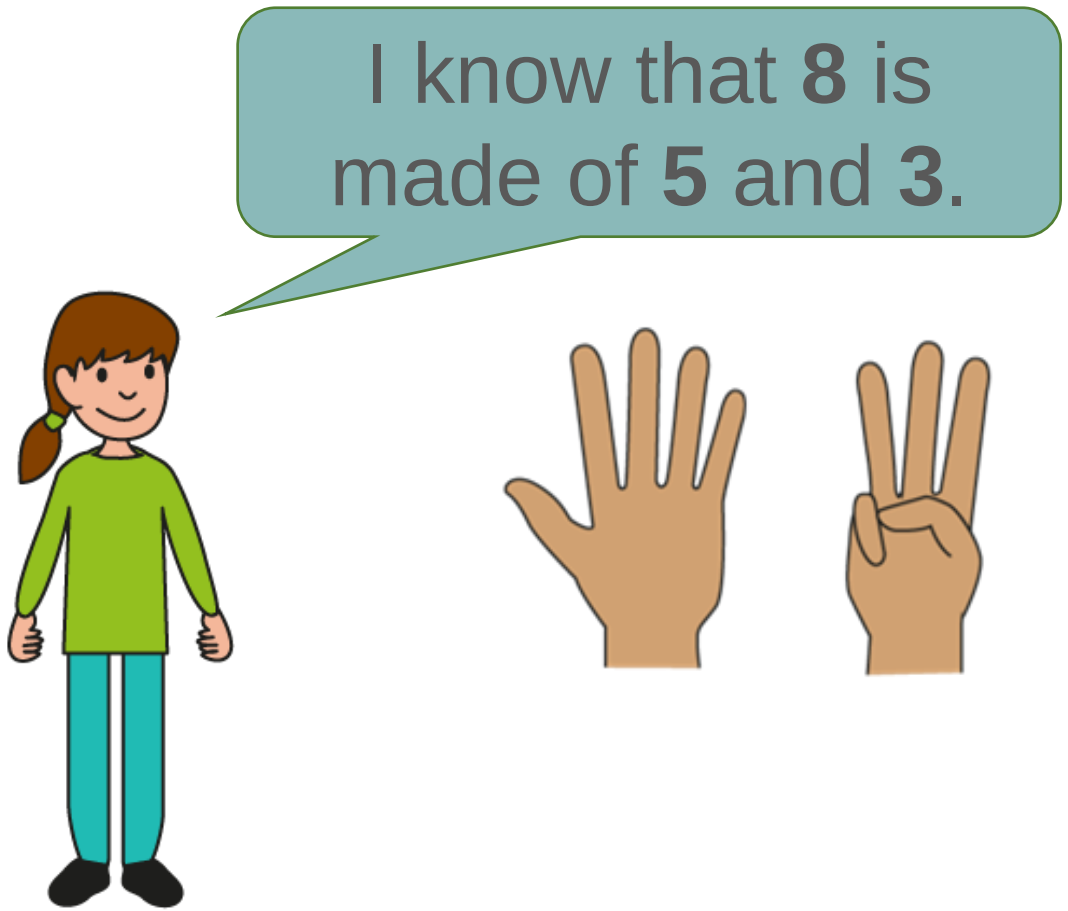
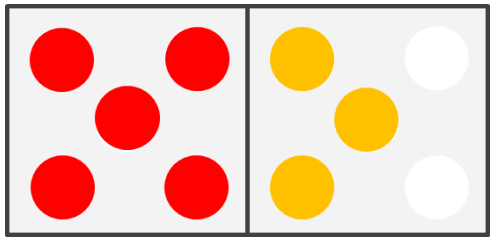
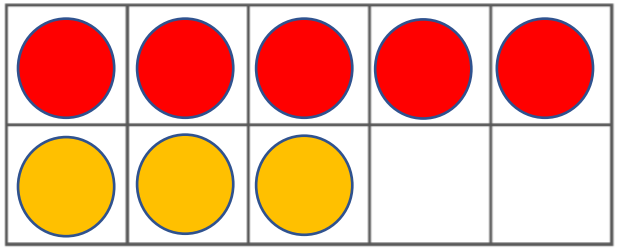
# Looking at the numbers 6, 7, 8 and 9

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





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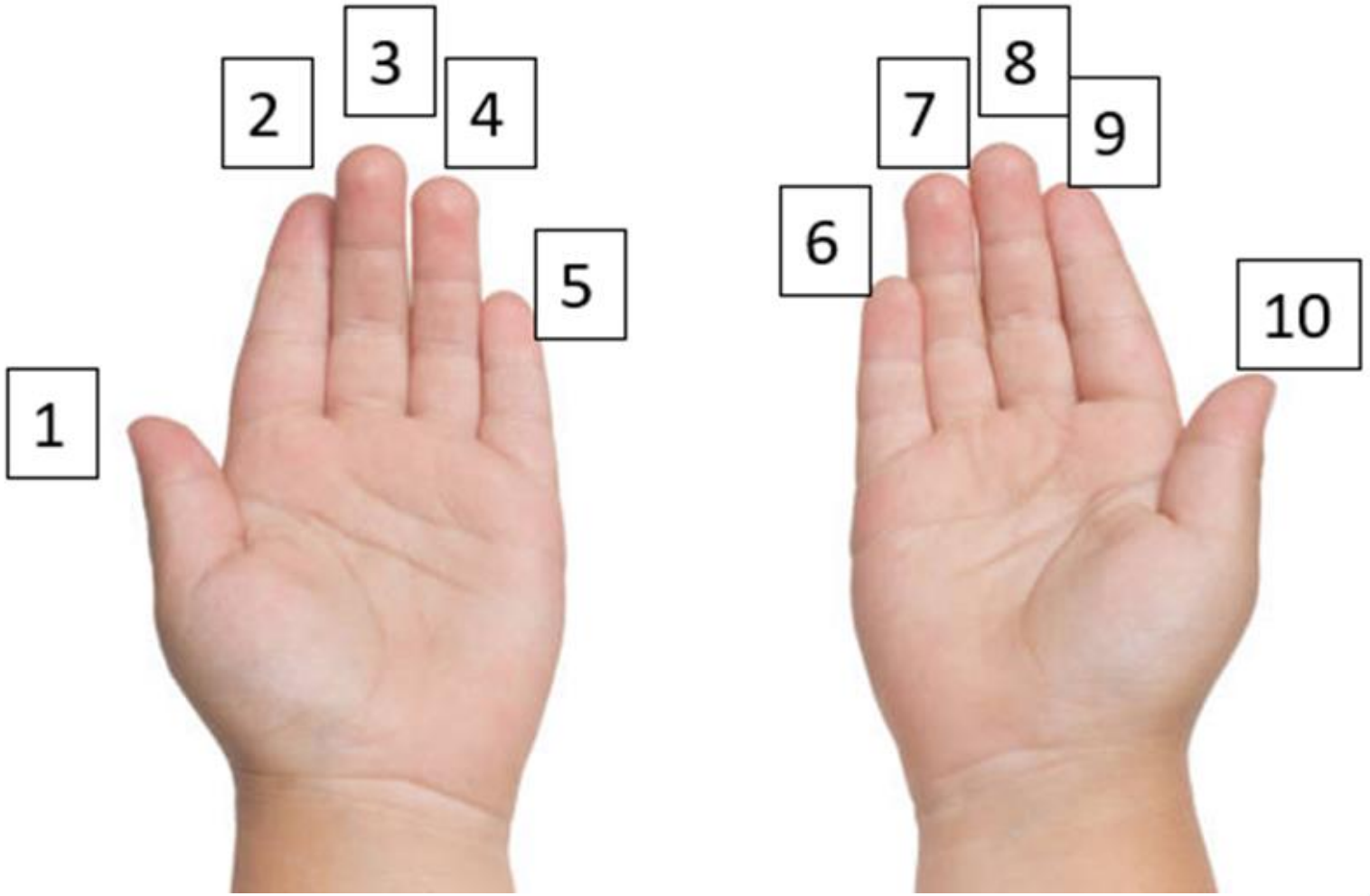
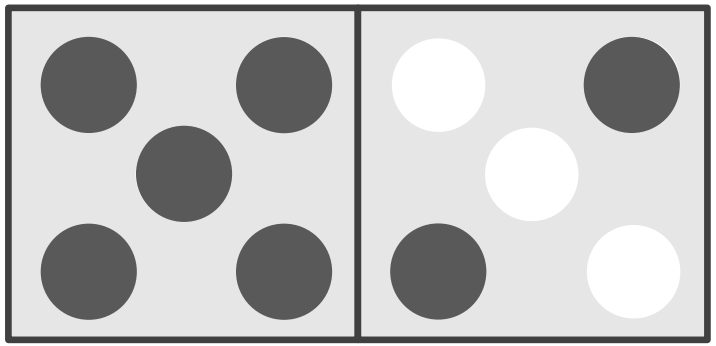
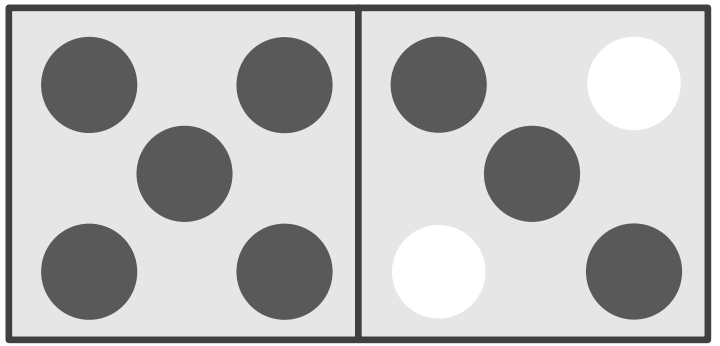
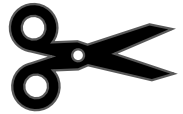
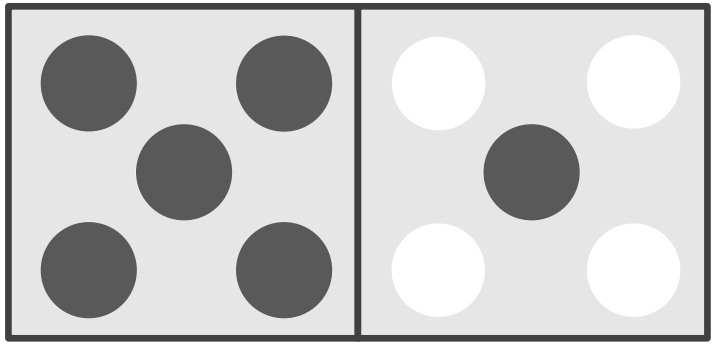


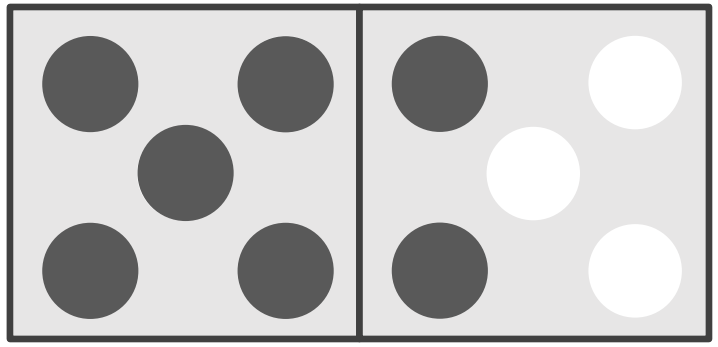
# Prepare the matching activity by cutting out the cards











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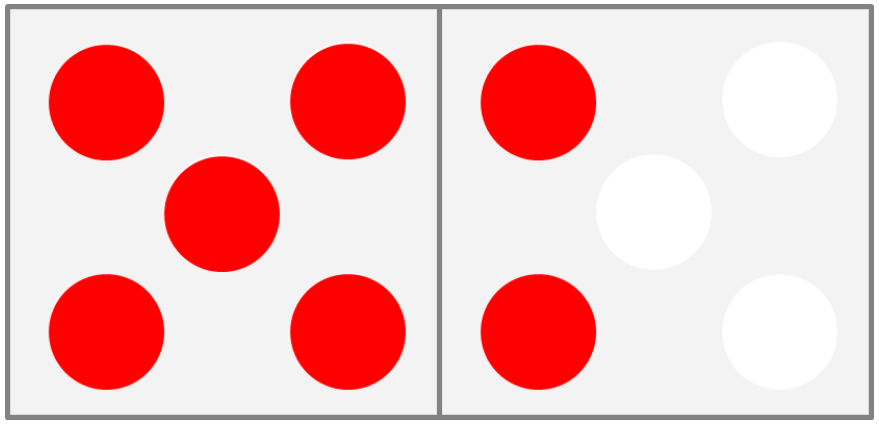
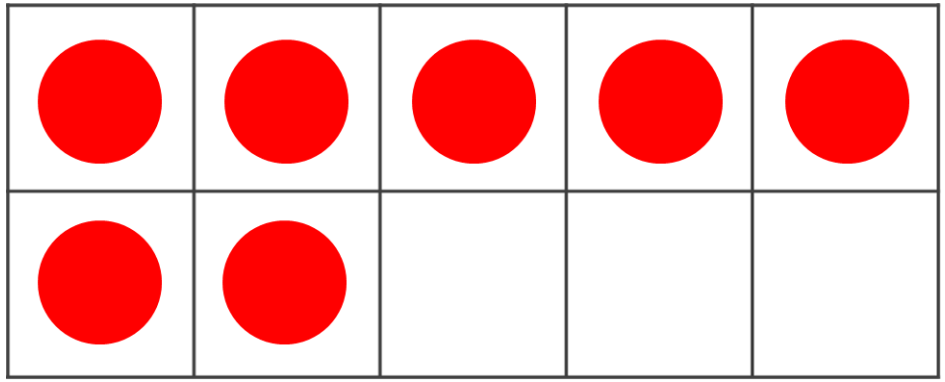
# Play ‘Copy my number’

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’?





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

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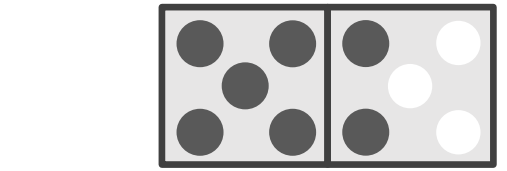
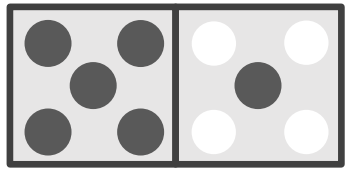
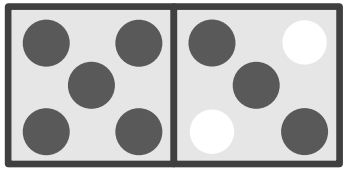
# Play ‘Shows 7 / Does not show 7’

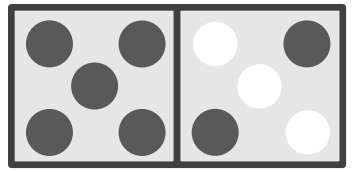
Sort the cards:

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









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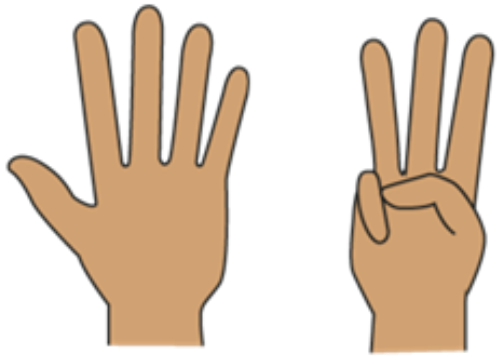
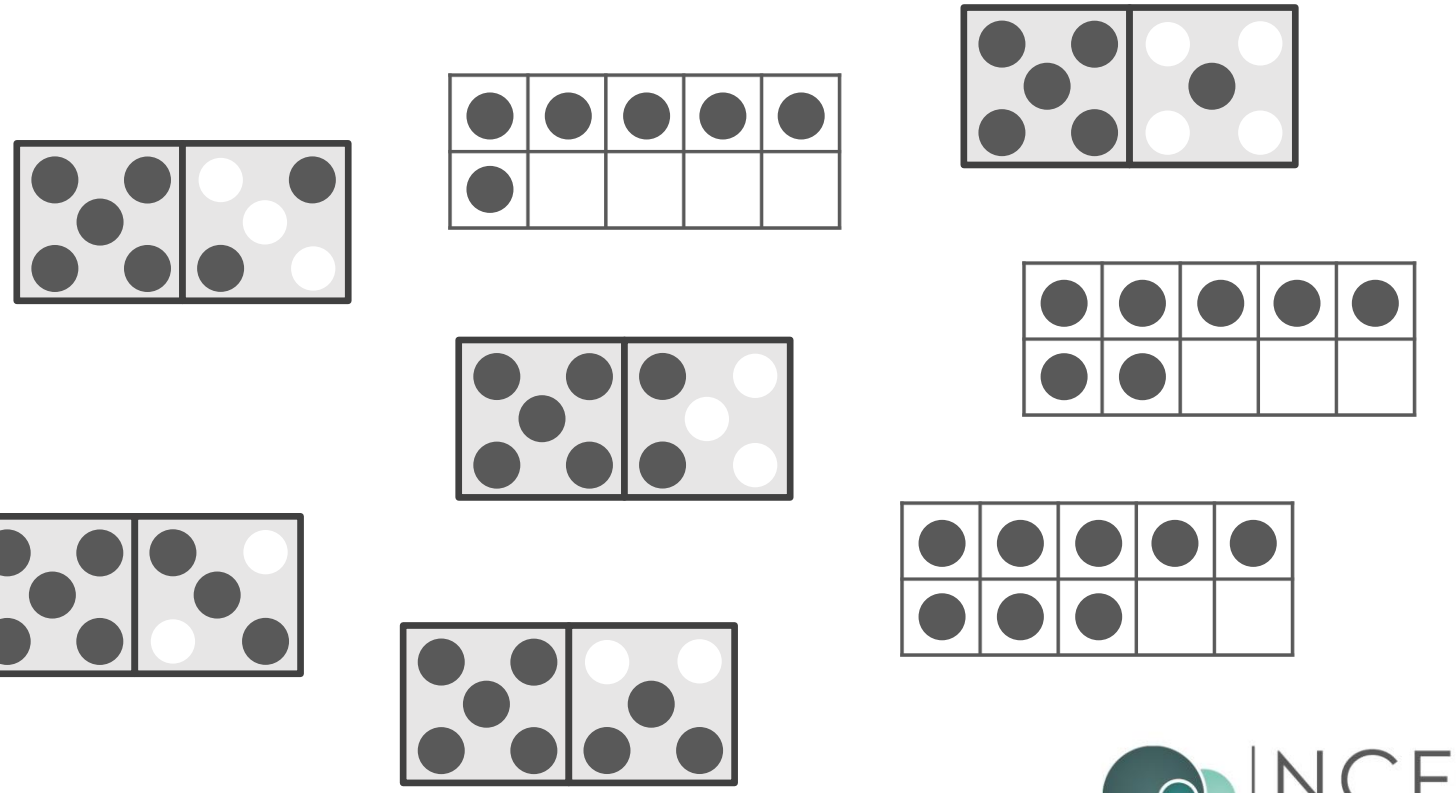
# Play ‘Match my fingers’

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





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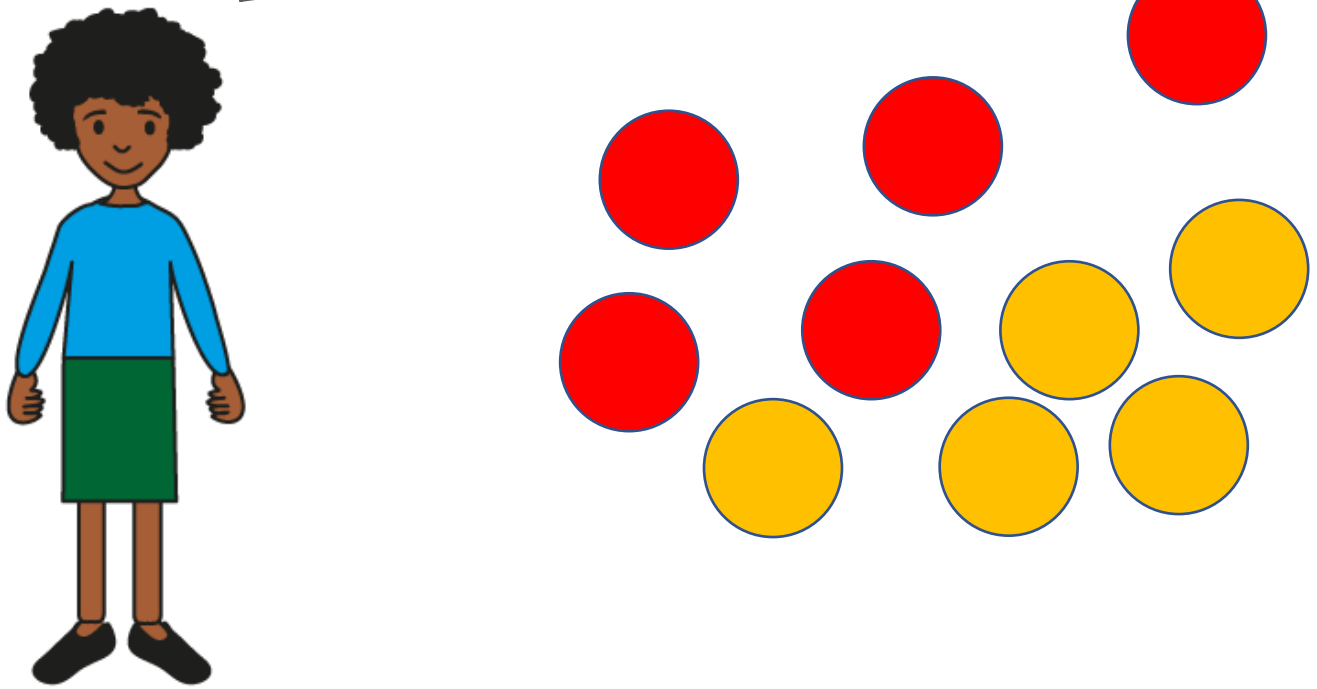
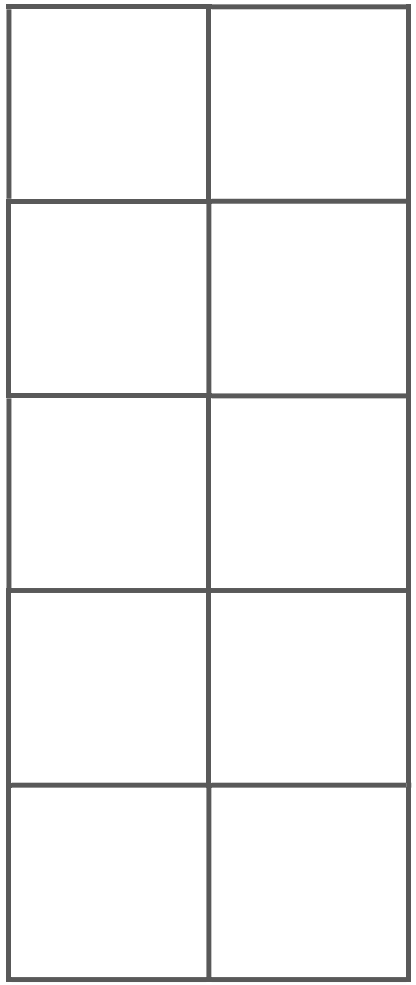
# Play ‘Ways to make 10’

You will need your 10 frame and 10 counters.





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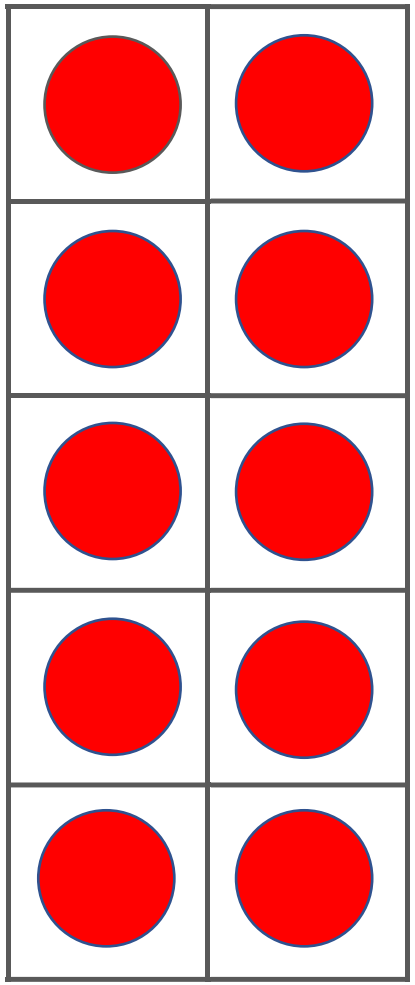
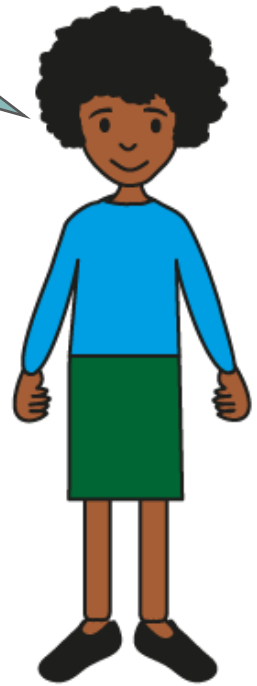


Start at the bottom and place two at a time.



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

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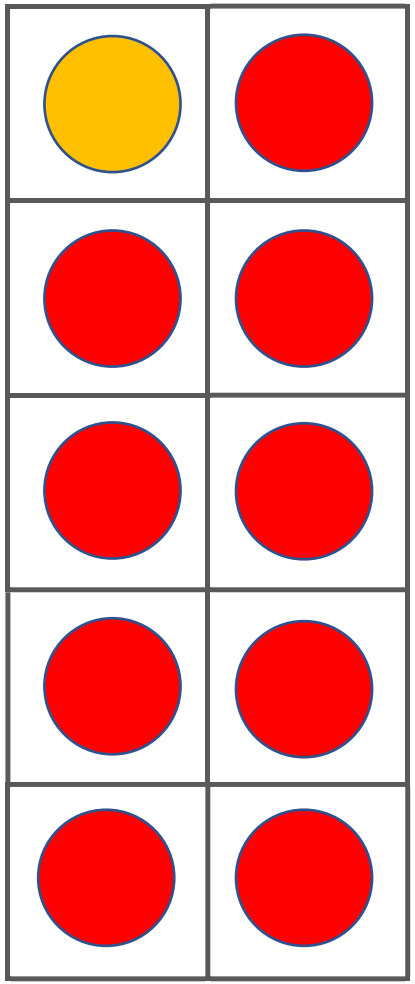
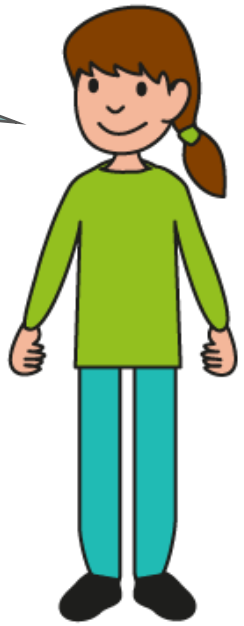
Grown-ups: turn one counter over at a time.



Say the stem sentence together.



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

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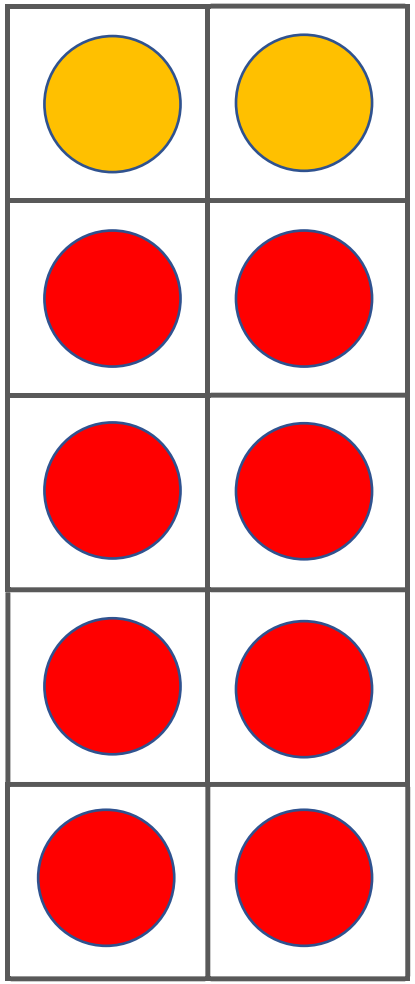
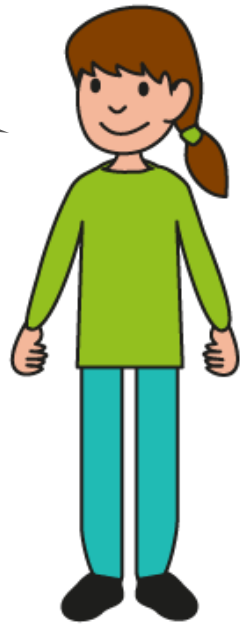


Keep saying the stem sentence together.



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

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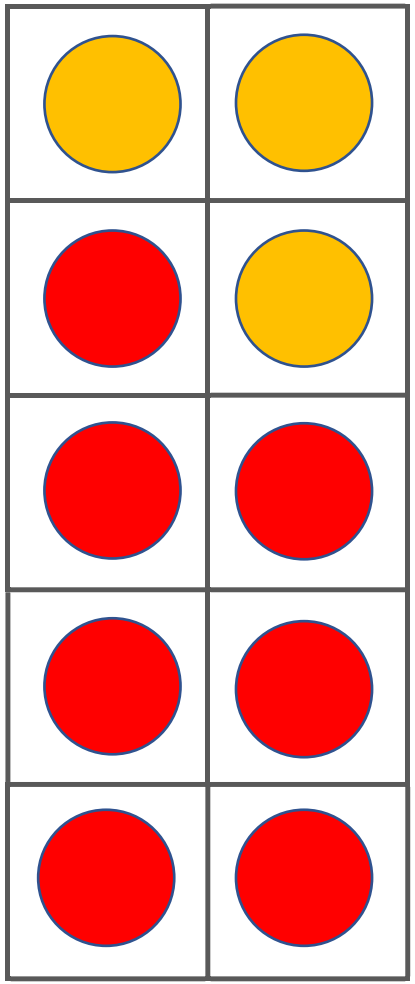
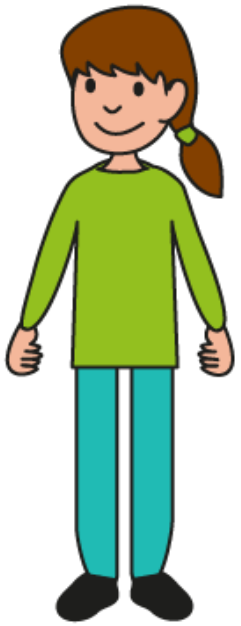


Continue doing this until all the counters are yellow.



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

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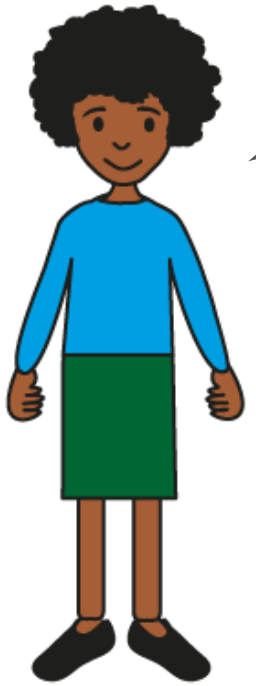
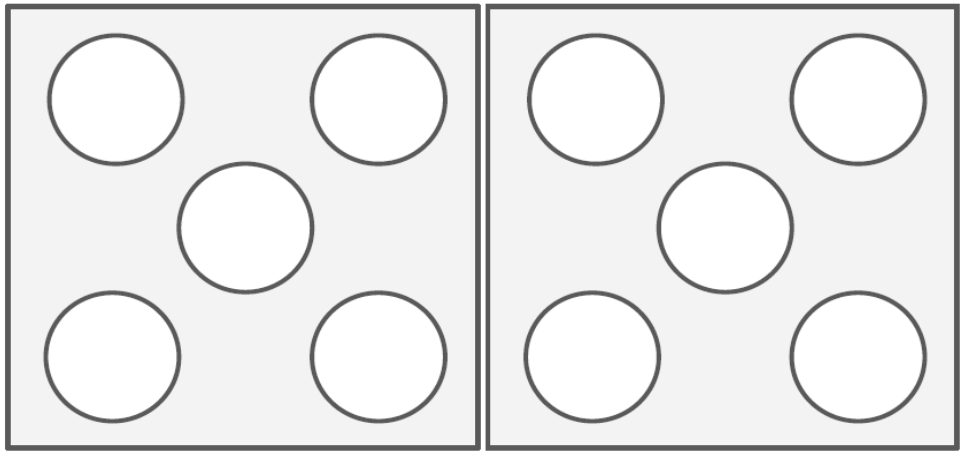
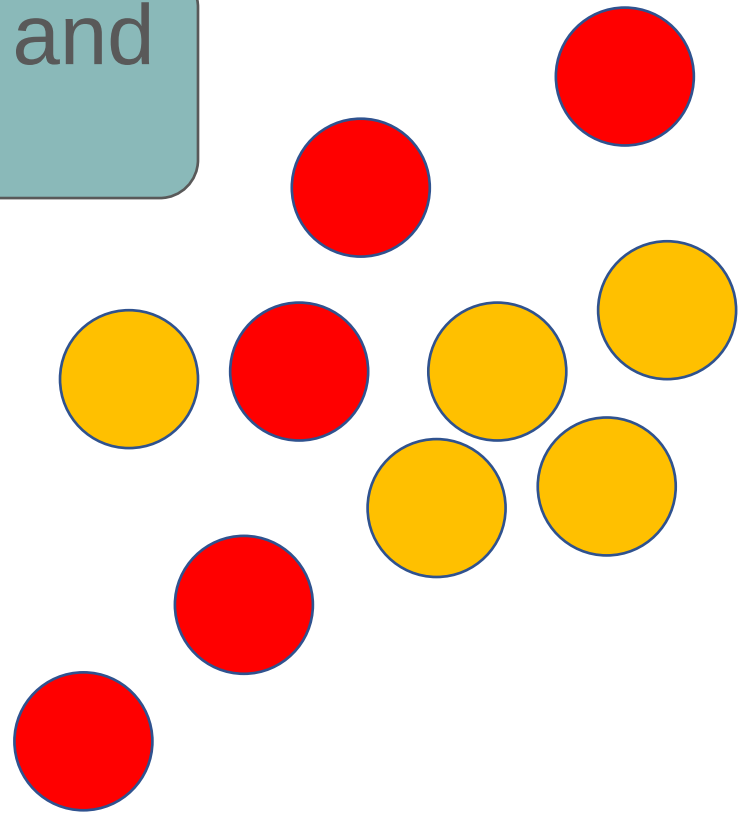
# Play ‘How many more to make 10?’



Now you will need your dice frame and 10 counters.





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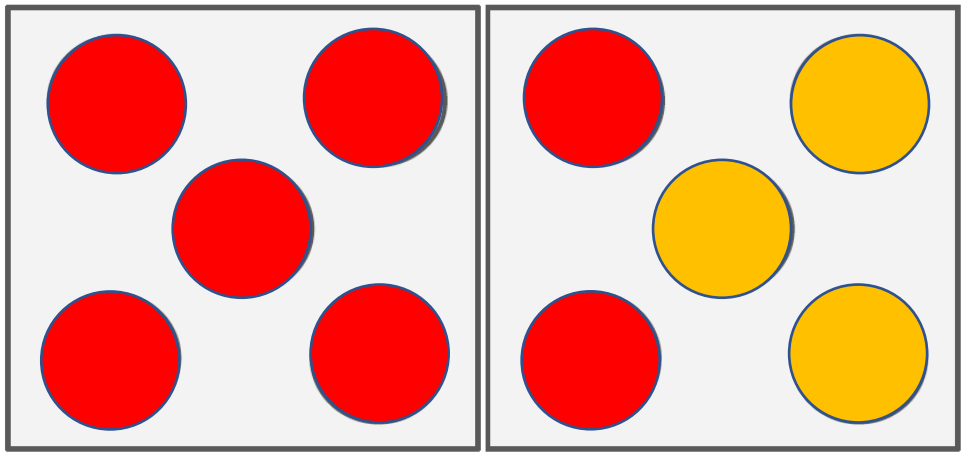
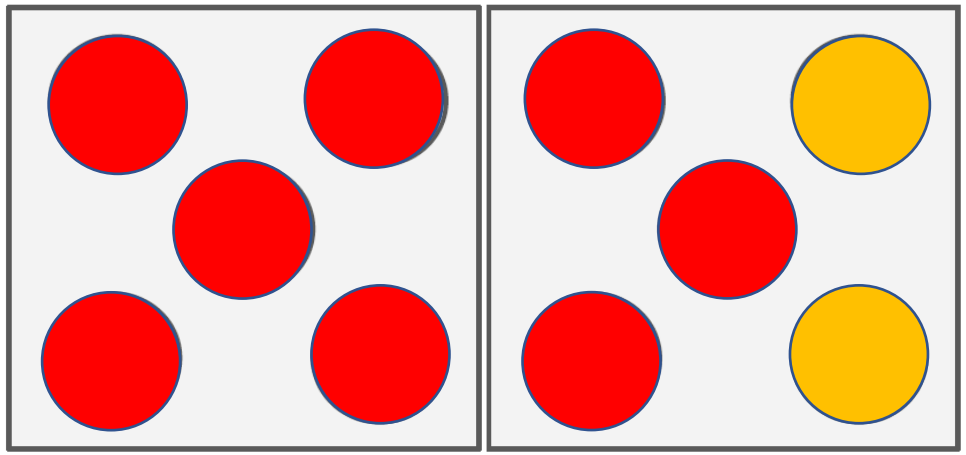
Grown-ups: Place 7 red counters onto the dice frame, using the ‘5 and a bit’ pattern.

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



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

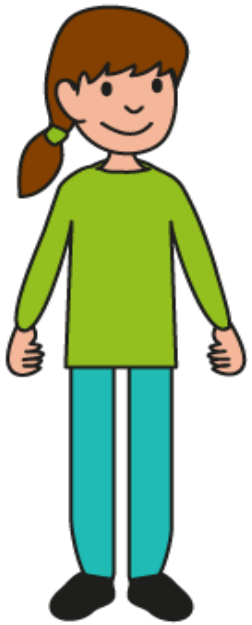
Grown-ups: Repeat using a different ‘5 and a bit’ number (e.g. 6, 8 or 9).

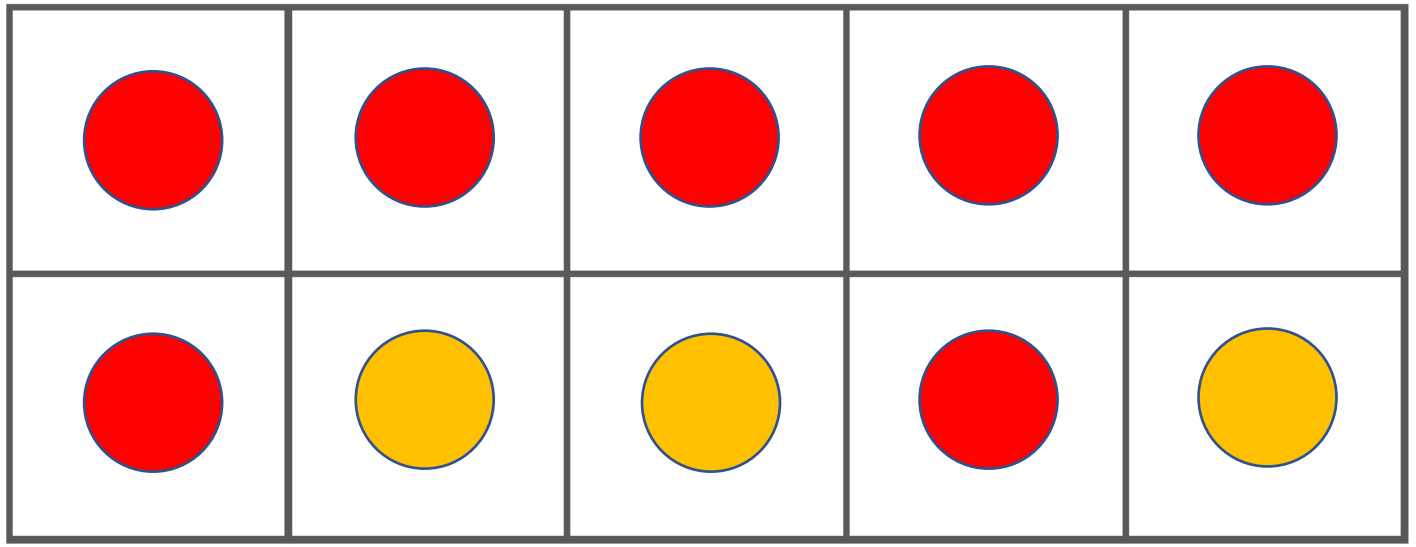


10 is made of _____ and _____.
_____ and _____ make 10.

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!



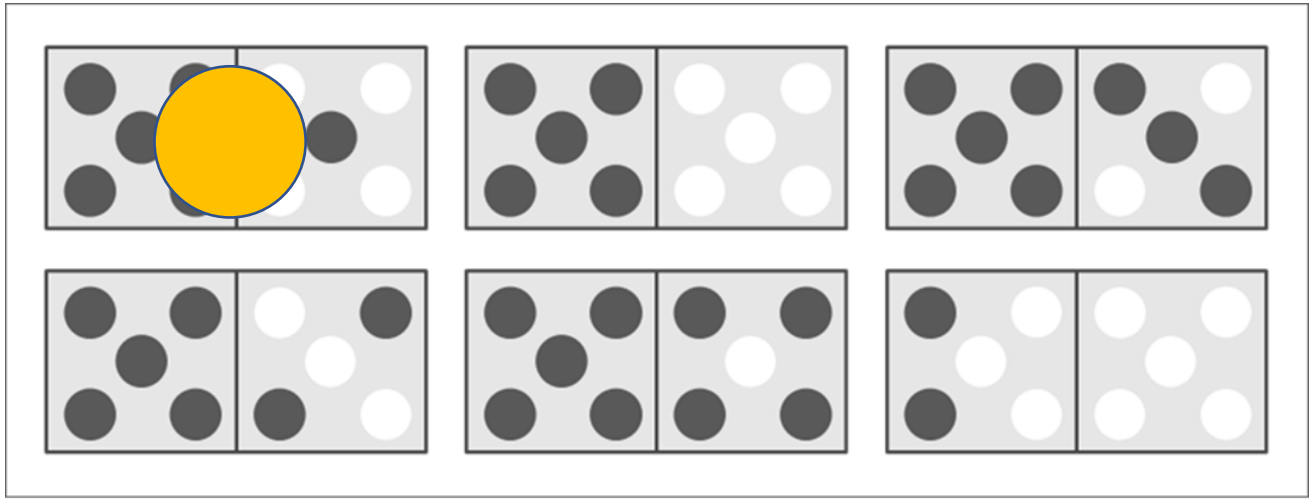


10 is made of _____ and _____.
_____ and _____ make 10.

# 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?



_____ needs _____ to make 10.

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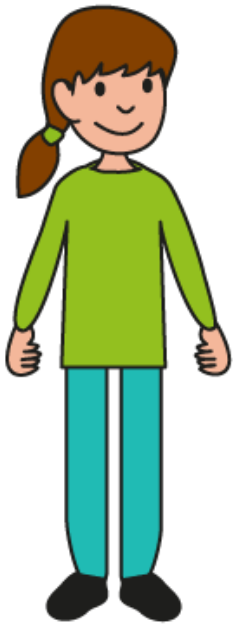
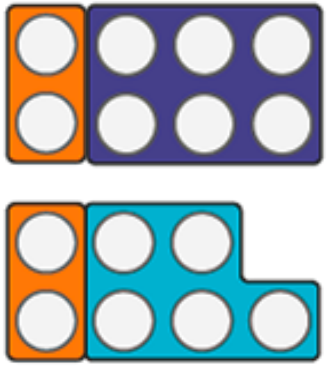
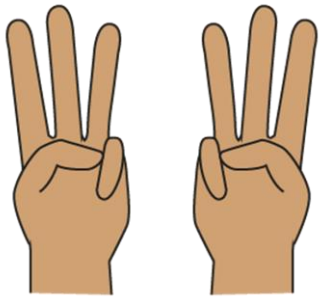
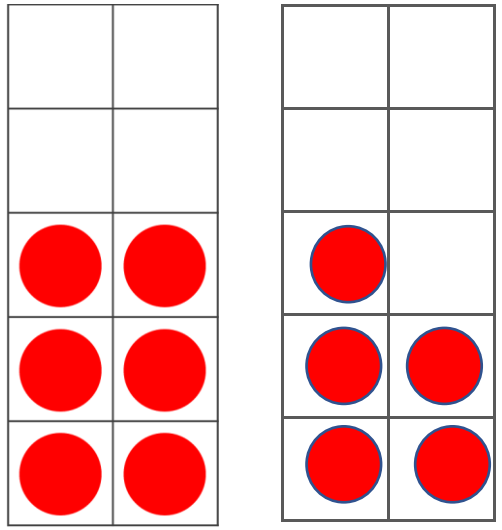
# Odd and even numbers ‘inside’ other numbers

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



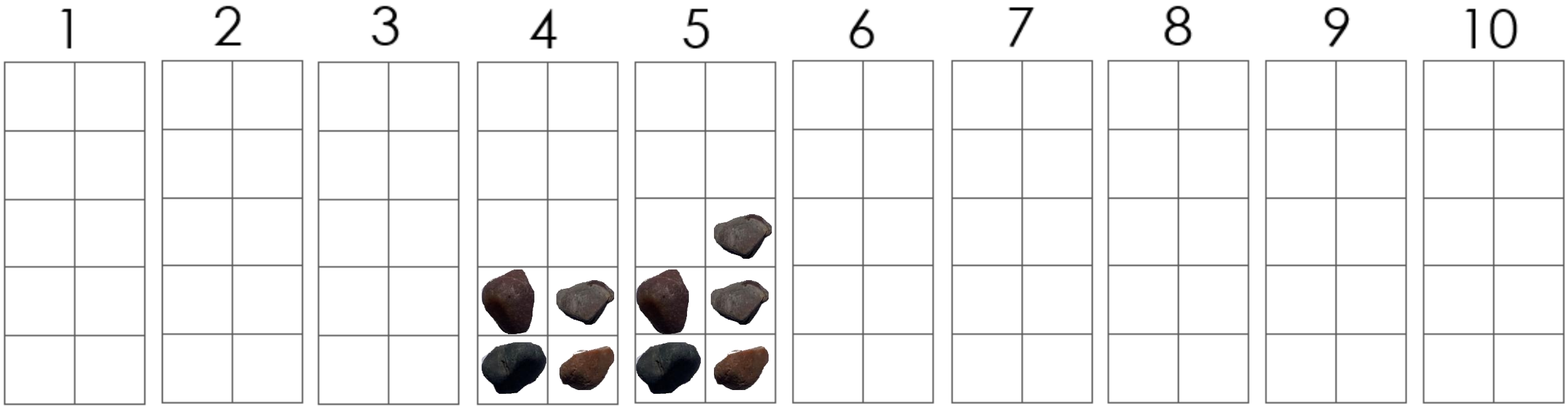




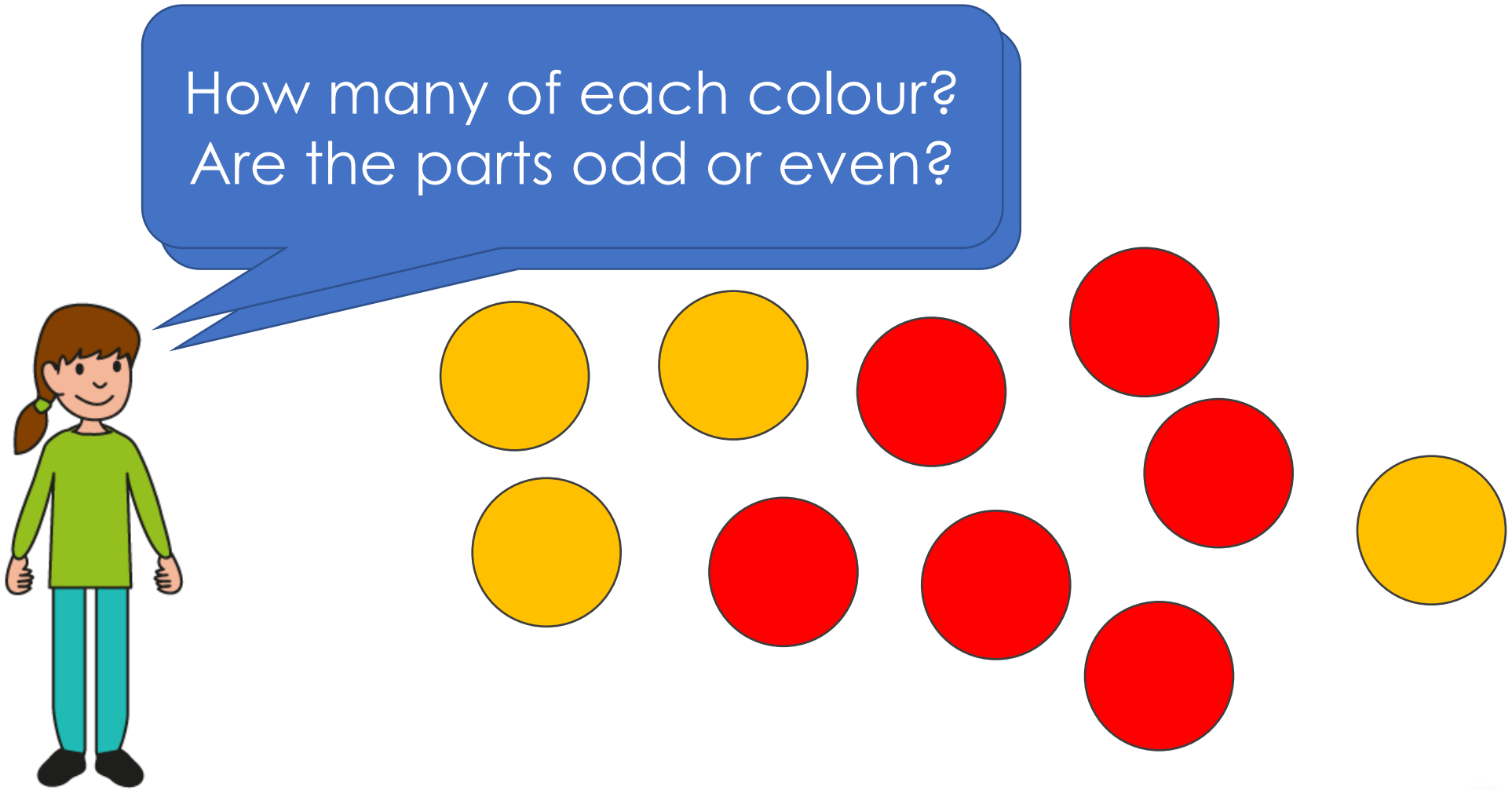


Use your objects to show the numbers on the 10-frames.
Place them in the order shown.

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

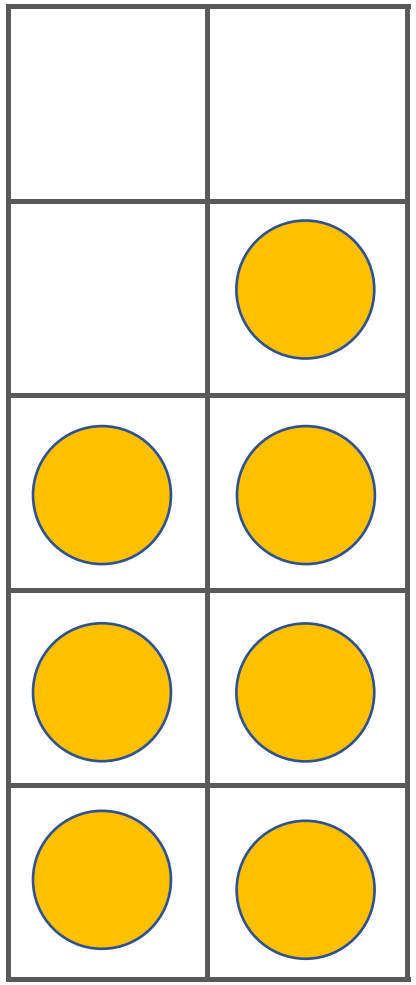


# Play ‘Drop 10 counters’

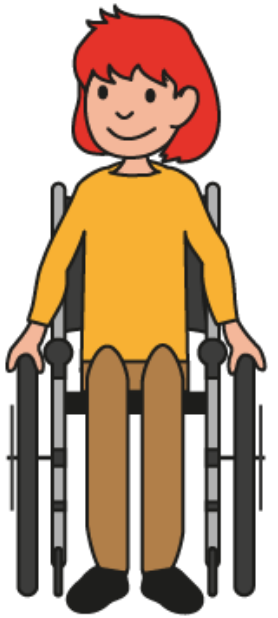


# Play ‘Ways of making 7 and 8’

| |
|---|
| 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?



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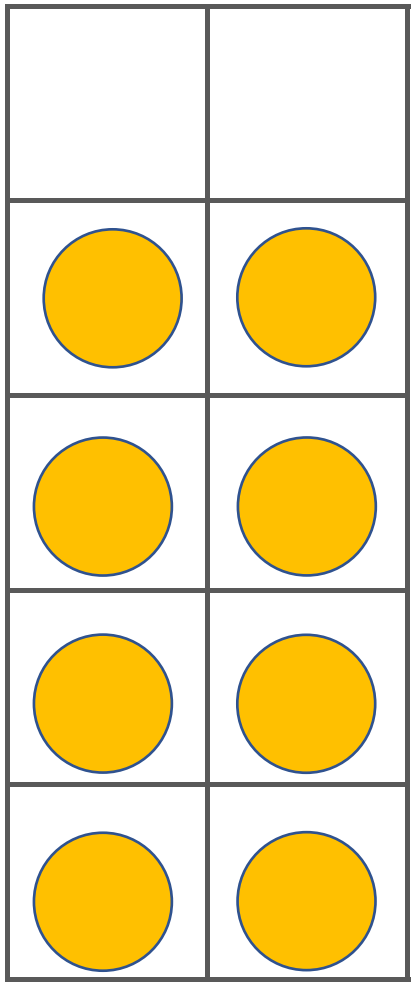
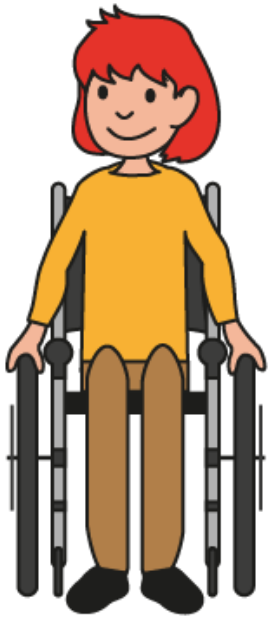
7 + 1



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



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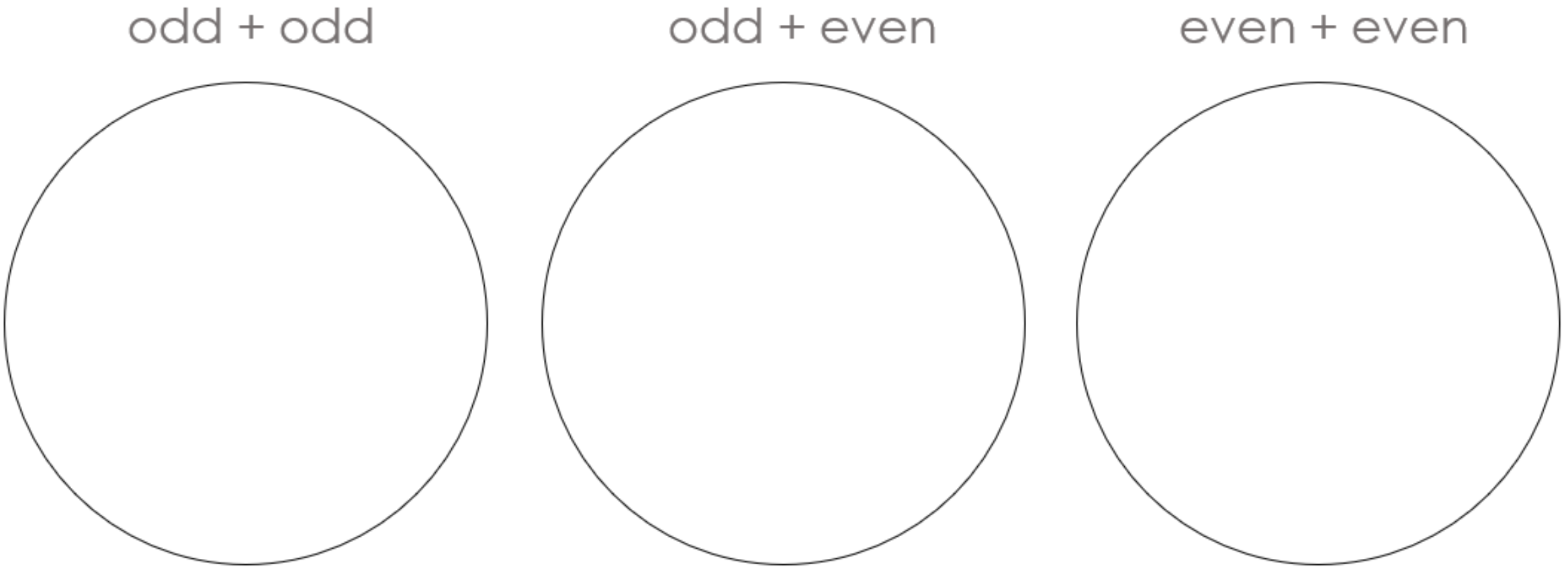
# Introducing ‘Sorting expressions’




Week 5

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# Home Learning

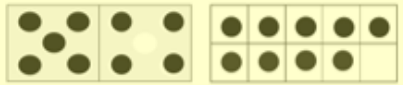
You are going to take all the games we made today home with you to practise.

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

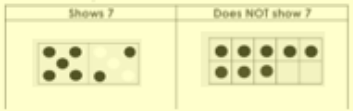


(Monday, Wednesday and Friday)

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

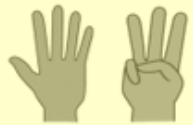
- For this game you will need the worksheets **'5-and-a-bit cards'** and **'Sorting table'**.
- Place the cards face-down on a flat surface.
- Take it in turns to pick up 1 card.
- If the arrangement on the card shows 7, place it in the 'Shows 7' column of the sorting table. If it does not, place it 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 

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# What else can we do to help at home?

**Get a bit old-fashioned**

- Tell the time on a ‘real’ clock to the nearest 5 minutes.
- Use money.

**Know Facts – by end of year 2**

- Number bonds to 20
- 2x, 5x, 10 x facts and the division facts

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# Thank you

**Resources will be on the website.**

**Please do enjoy these activites.**

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# References

Axford, N., Berry, V., Lloyd, J., Moore, D., Rogers, M., Hurst, A., Blockley, K., Durkin,H. and Minton, J. (2019) How Can Schools Support Parents' Engagement in their Children's Learning? Evidence from Research and Practice. London: Education Endowment Foundation.

Desforges, C. & Abouchaar, A. (2003), The impact of parental involvement, parental support and family education on pupil achievement and adjustment: A literature review. London: Department for Education and Skills.

Goodall, J & Vorhaus, J (2011), Review of Best Practice in Parental Engagement. Department for Education.

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