LONDON MEED PRIMARY SCHOOL

Welcome to our Year 1 Mastering Number Workshop

Monday 13th January 2025

Mrs Denham - EYFS Teacher and Maths Lead
Mrs Balan – Year 6 Teacher and Maths Lead

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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

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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.

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.

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

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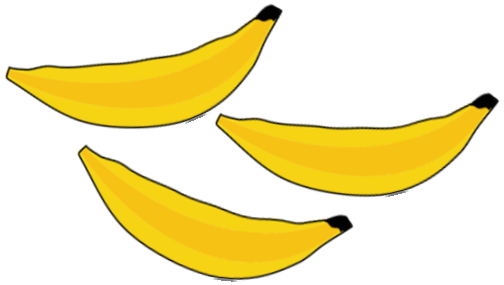
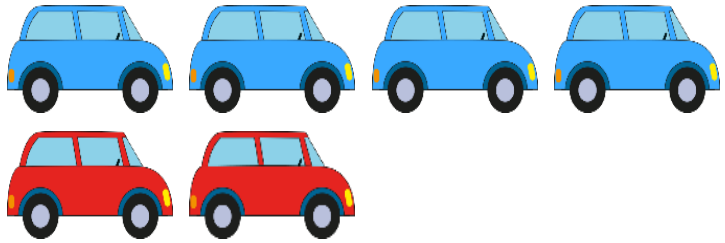
How does Mastering Number help us to teach maths in school?

The Mastering Number Programme in Year 1 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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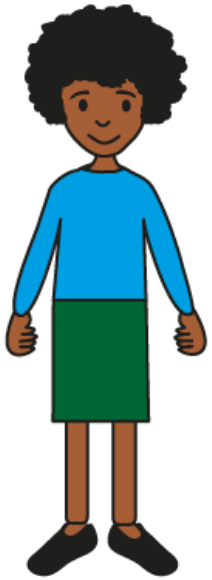
How do we develop good number sense?

Knowing how numbers are ‘made’ will help children later on with calculations.

I know that 6 is made of 4 and 2 so I will also know...



40 + 20

400 + 200

6 - 2

60 - 20

0.4 + 0.2

0.6 - 0.2

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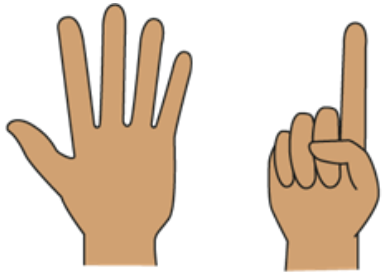
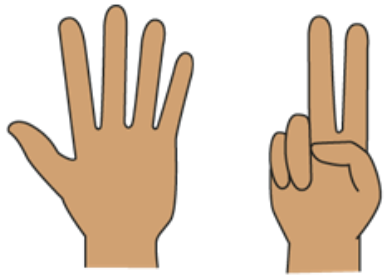
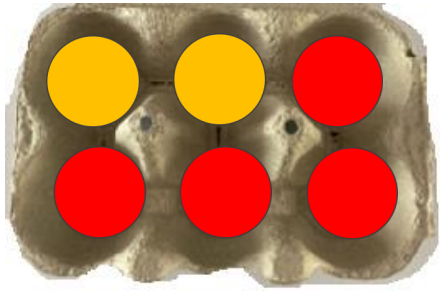
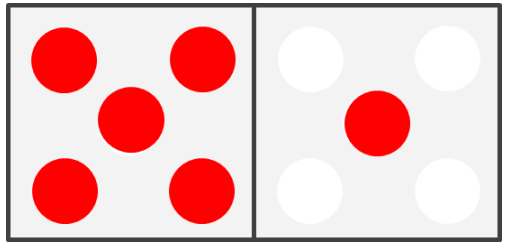
Let’s look at 6 and 7!

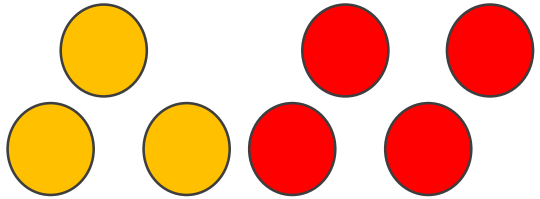
Finding all the ways that 6 and 7 are ‘made’ and then doing activities that give them a chance to practise will help children.

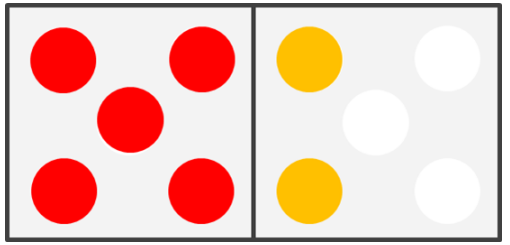












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Recognising small ‘numbers’

For all of the activities you will be doing at home, we want children to use a special skill called ‘subitising’.

Get your fast eyes ready!
Show on your fingers and tell your grown-up how many dots you can see!

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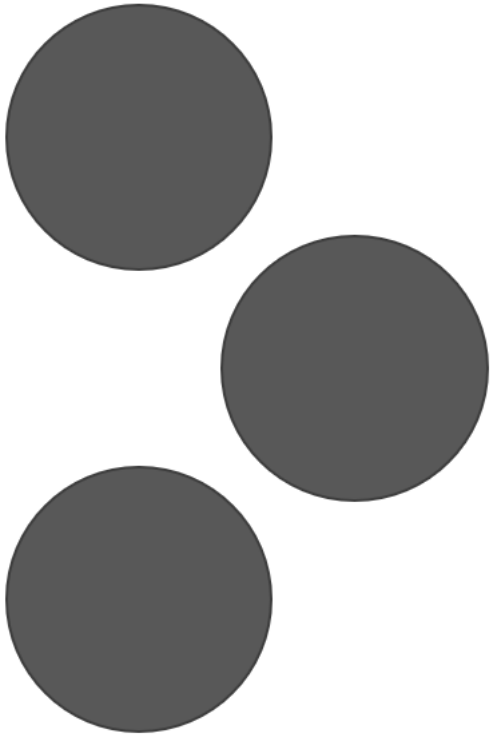
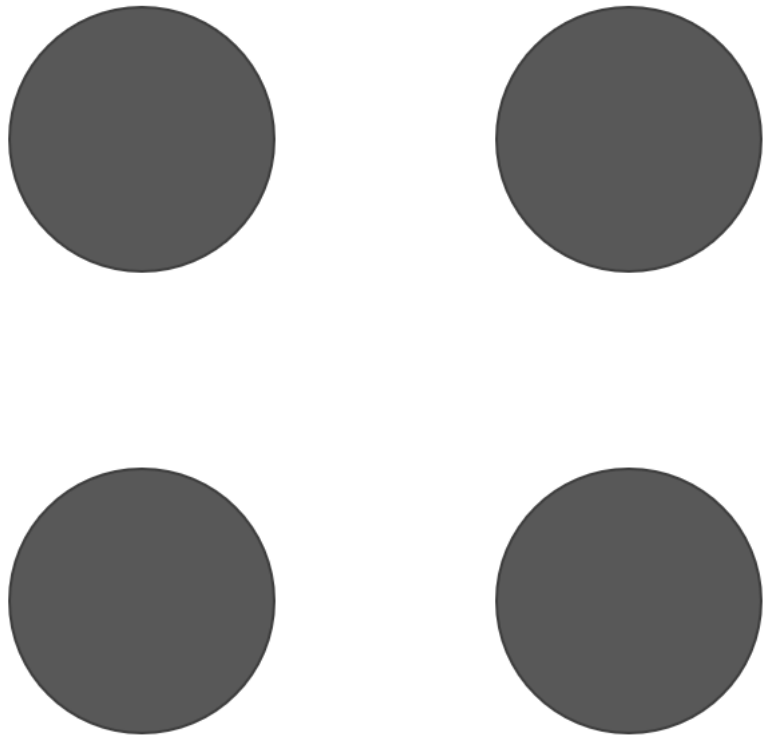
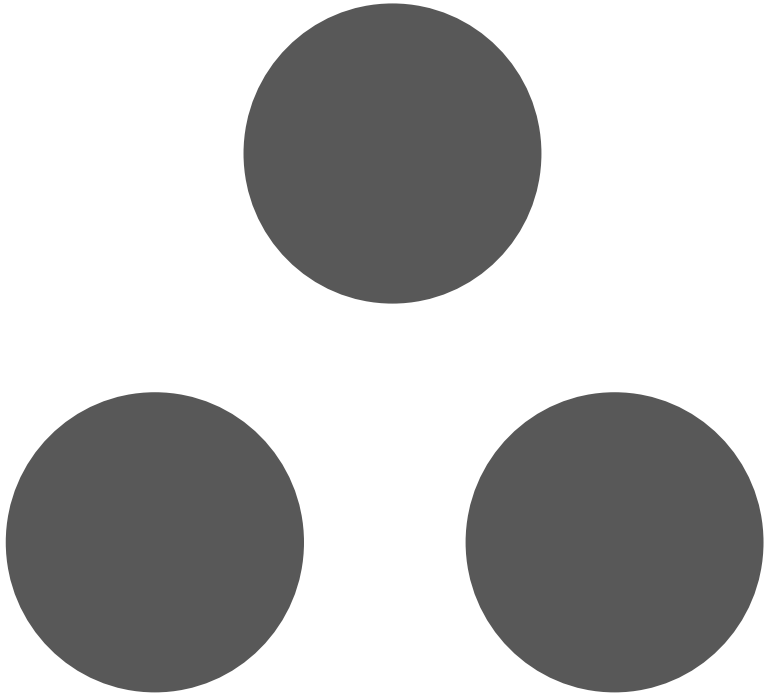
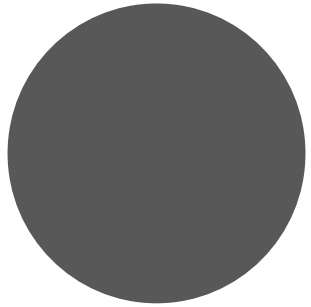
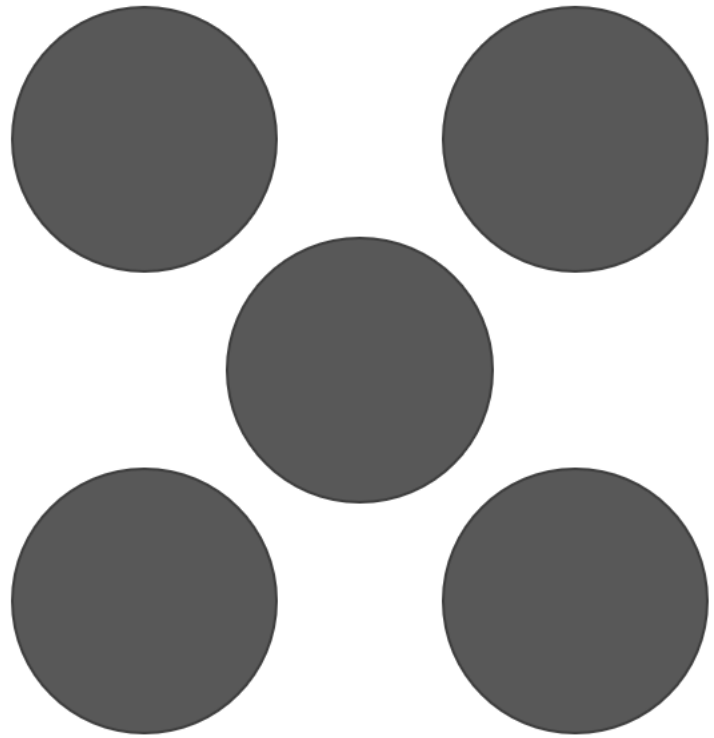
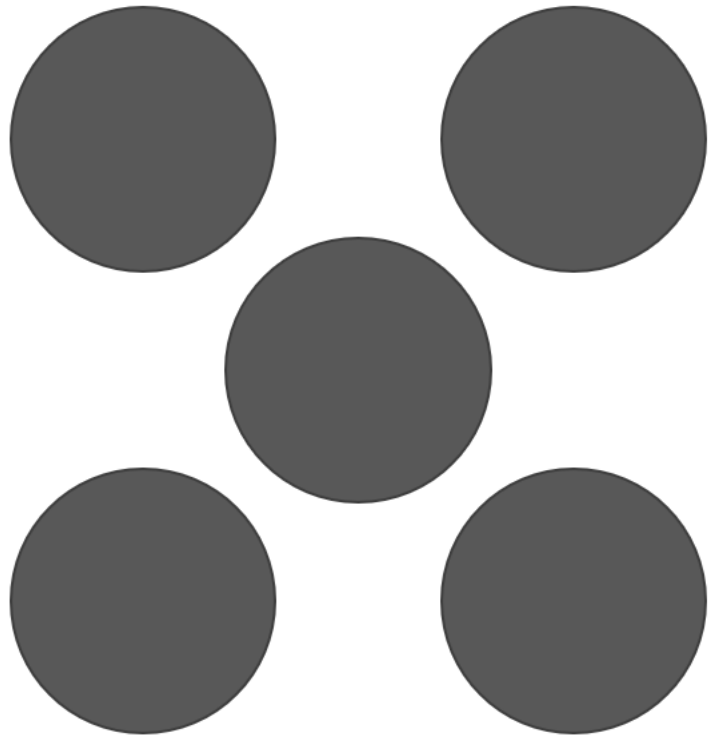


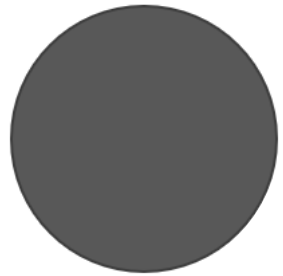








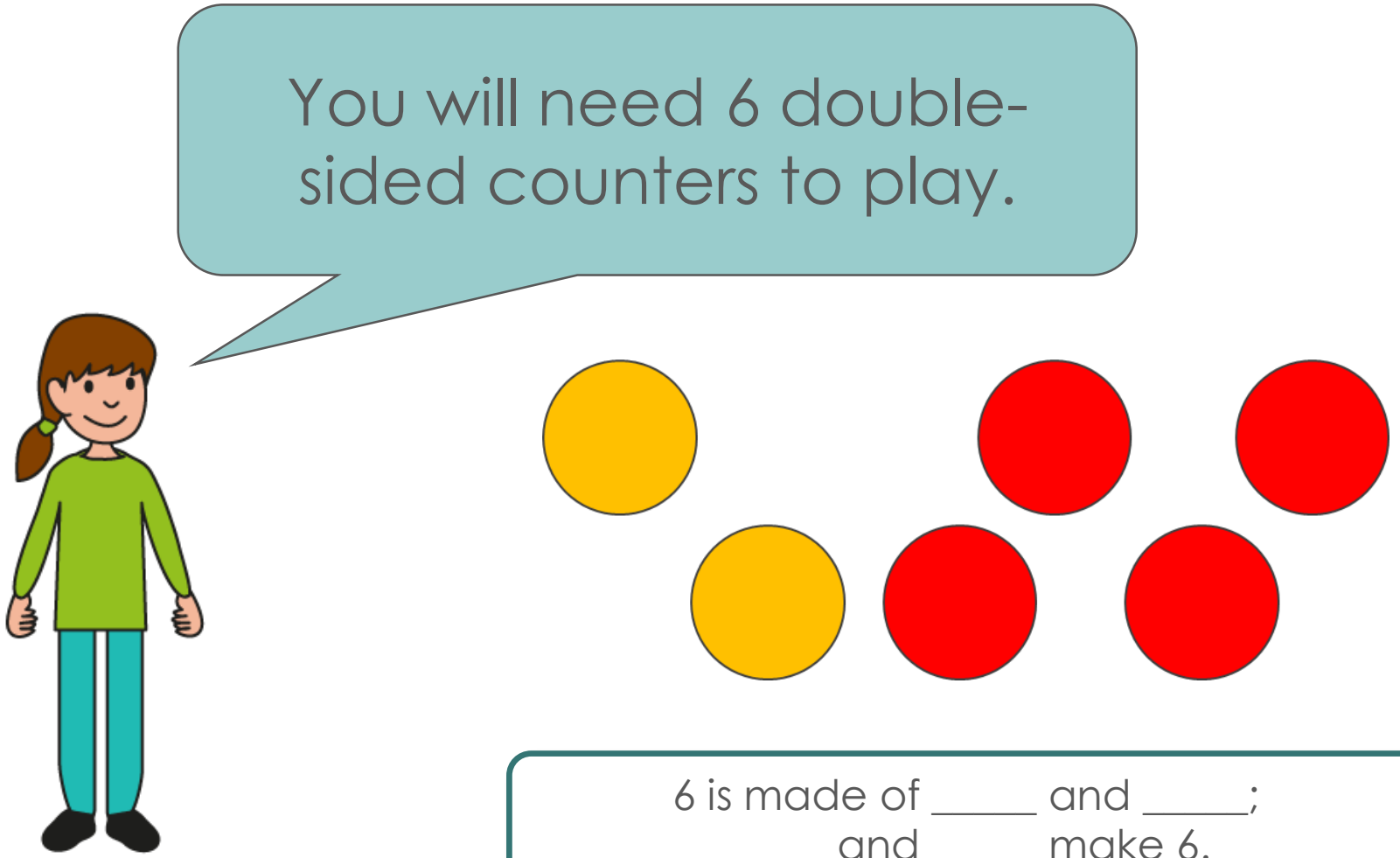




Home learning tasks

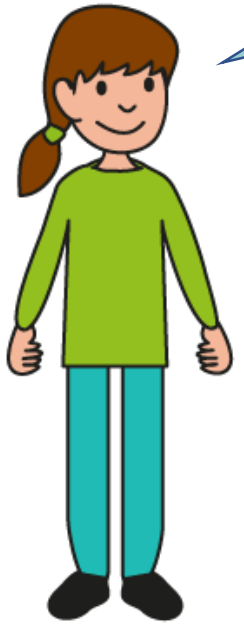
- Each week, you will be given a sheet that explains some activities that children can do with their grown-up.
- In Year 1, the tasks will all be about finding ways to make 6 and 7, but these tasks could be used for other numbers later on.
- In all of the tasks, children should be encouraged to ‘see’ the amount of objects without counting – just as they did in the previous activity.

Play ‘Drop the counters’

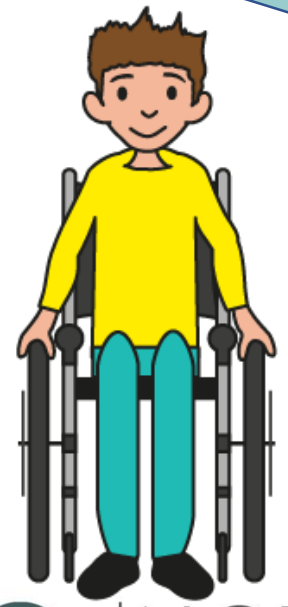


6 is made of _____ and _____;
_____ and _____ make 6.

Play ‘Drop 6 counters’ with a grown up! How quickly can you say what you see?



6 is made of 4 and 2; 4 and 2 make 6!



6 is made of _____ and _____;
_____ and _____ make 6.

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Year 1, Week 1 – Drop the counters

Monday				Wednesday				Friday			
Player 1		Player 2		Player 1		Player 2		Player 1		Player 2	
Colour 1	Colour 2	Colour 1	Colour 2	Colour 1	Colour 2	Colour 1	Colour 2	Colour 1	Colour 2	Colour 1	Colour 2
red	yellow	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	1	5	1	5	1	5	1	5	1	5	1
4	2	4	2	4	2	4	2	4	2	4	2
3	3	3	3	3	3	3	3	3	3	3	3
2	4	2	4	2	4	2	4	2	4	2	4
1	5	1	5	1	5	1	5	1	5	1	5

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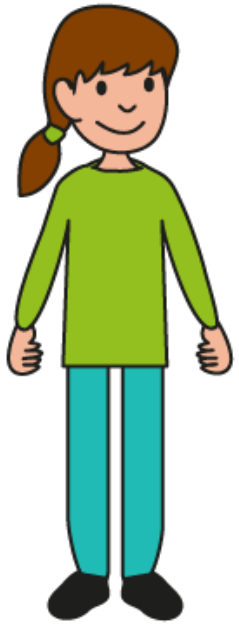
Play ‘Egg Box 6’ with counters

Use your stem sentence strip again, this time using your egg box and counters.



6 is made of _____ and _____;
_____ and _____ make 6.

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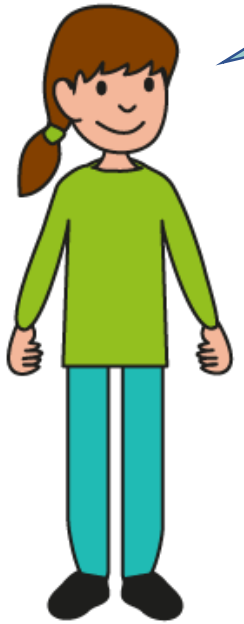
Let's work in order to find the ways to make 6.



6 is made of _____ and _____;
_____ and _____ make 6.

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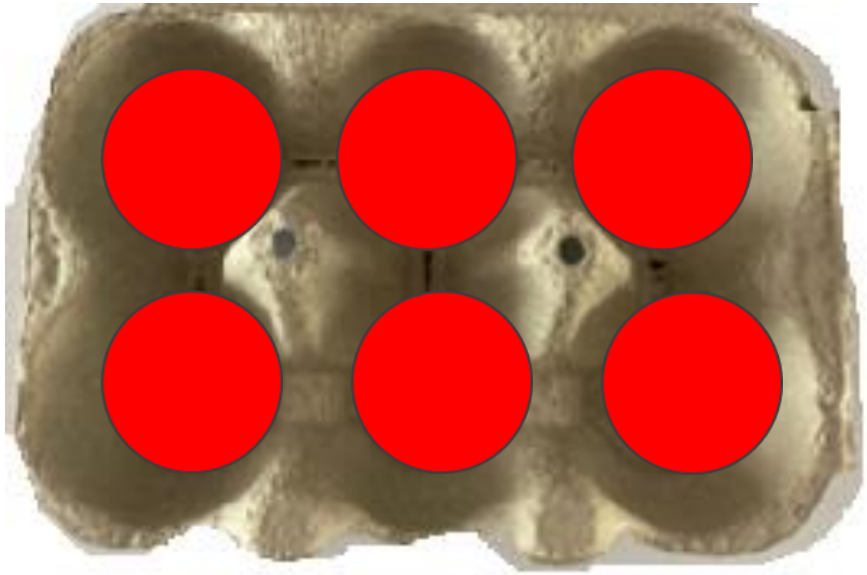
Place all counters red side up

How many red counters?



How many yellow counters?

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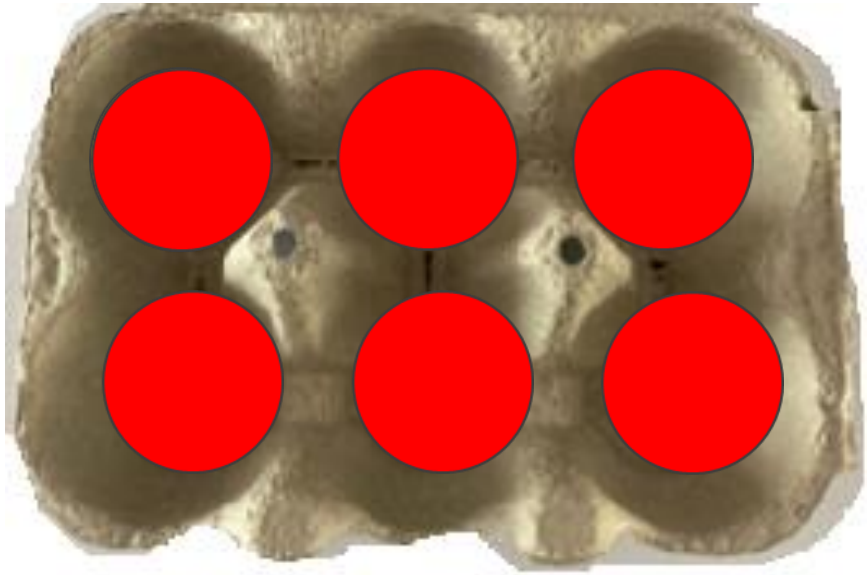
Turn over one counter at a time so you can see the yellow side



6 is made of 1 and 5;
1 and 5 make 6!

6 is made of _____ and _____;
_____ and _____ make 6.

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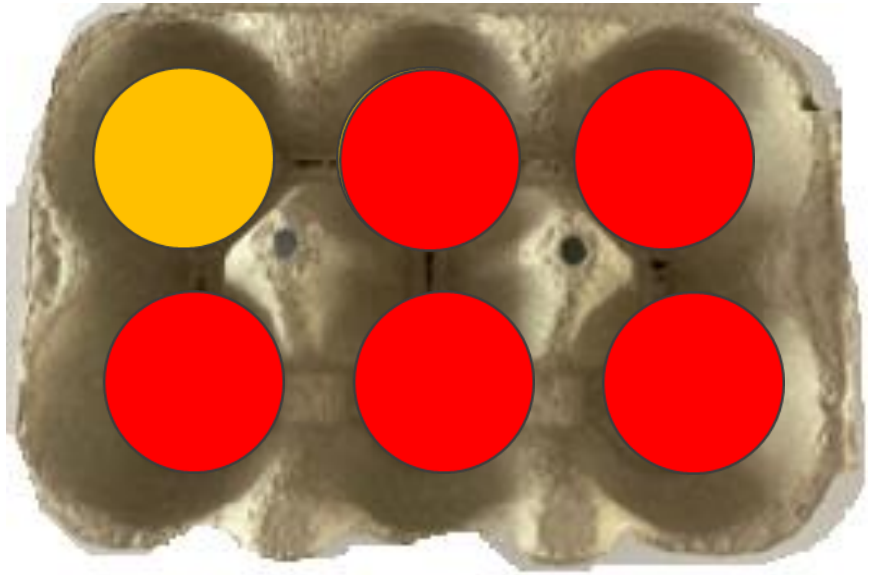
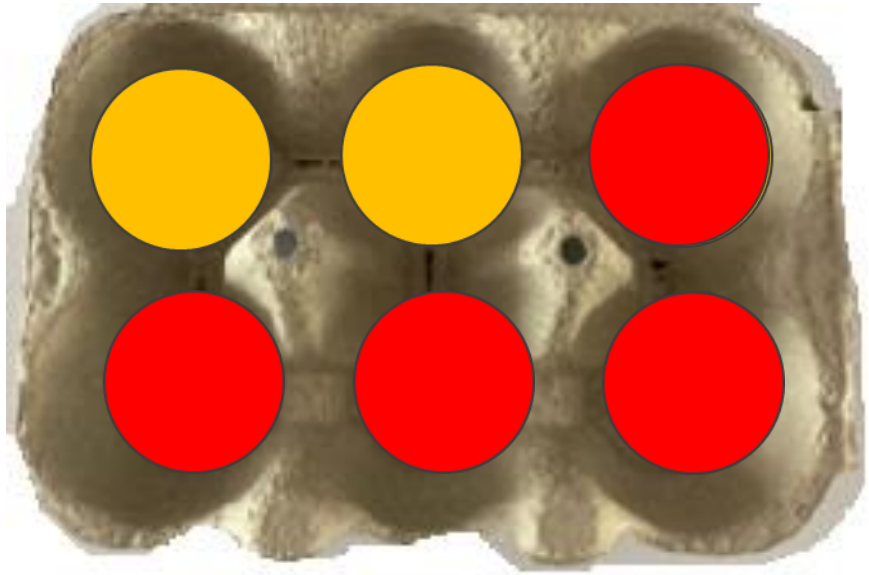


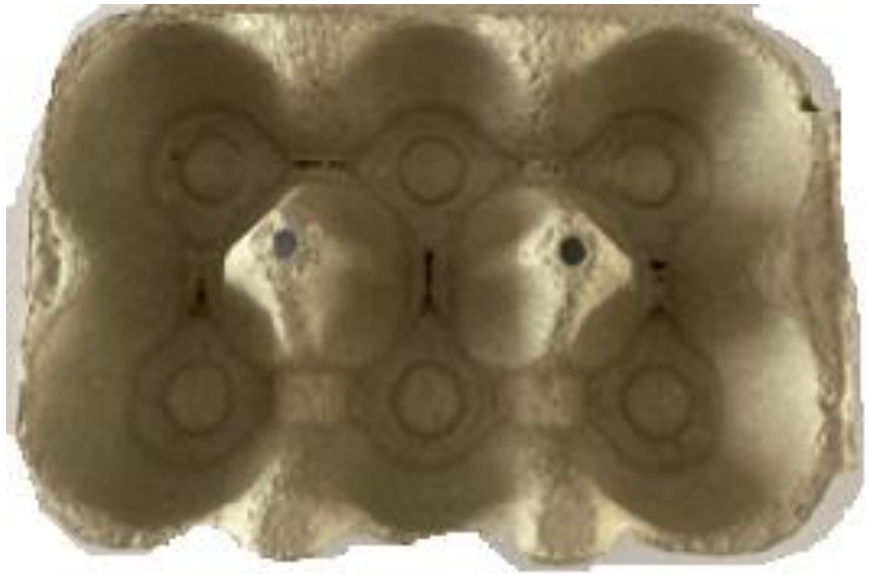
6 is made of _____ and _____;
_____ and _____ make 6.



6 is made of _____ and _____;
_____ and _____ make 6.

Play ‘Egg Box 6’ with objects

Gather 6 objects that can fit in the spaces in the egg box.



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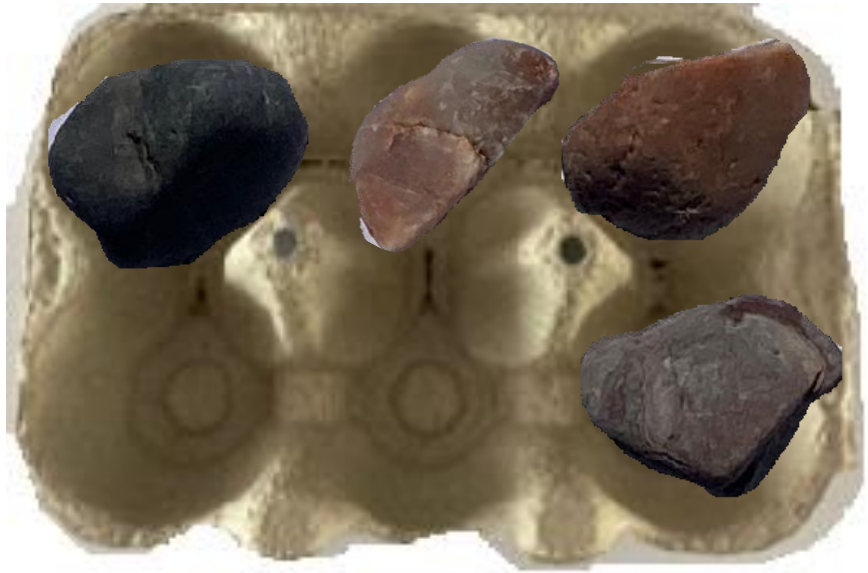
Put some of the objects in the egg box and hide the others.

How many more to make 6?



_____ needs _____ to make 6.

Play this again using different numbers of objects.

_____ needs _____ to make 6.

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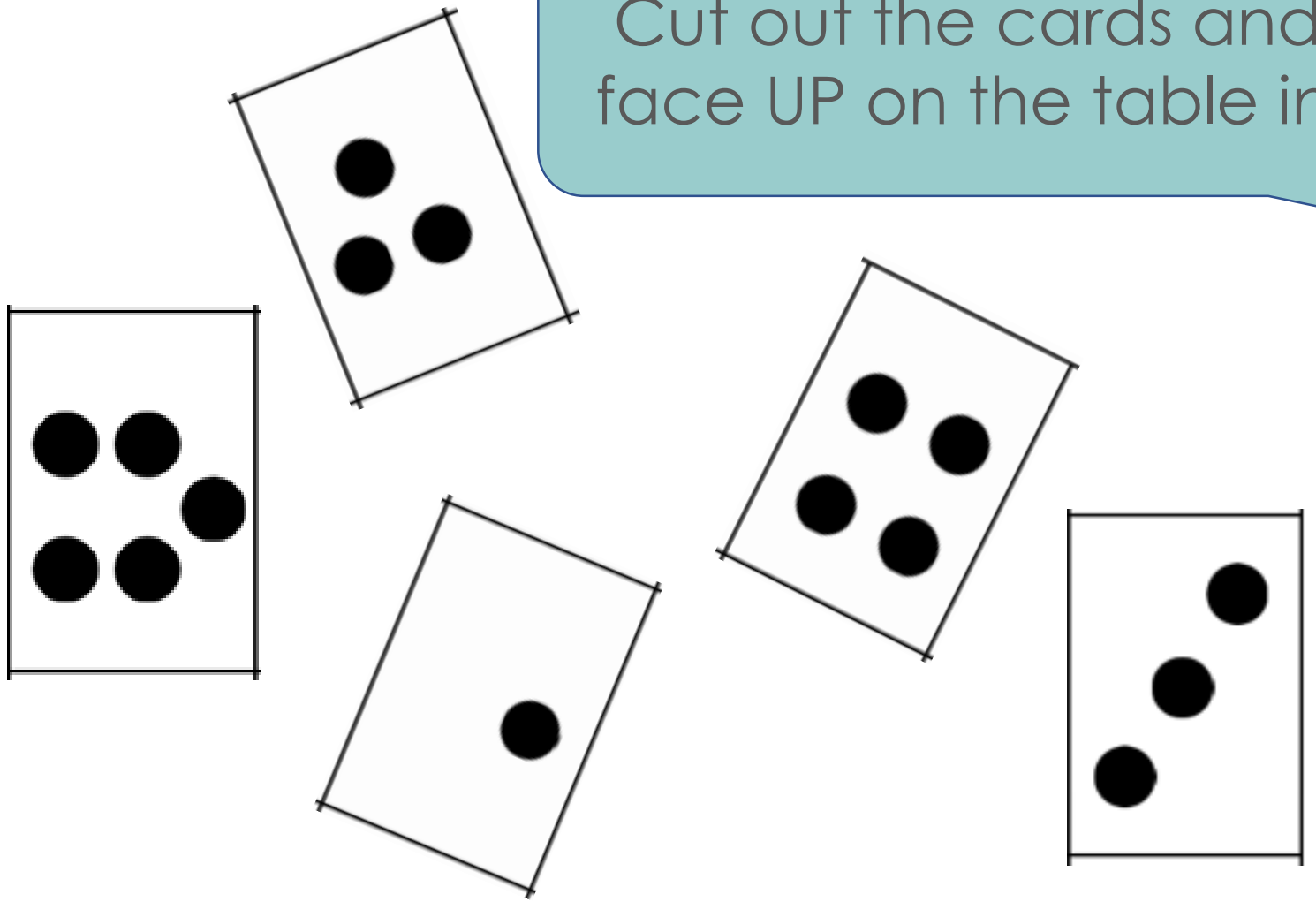
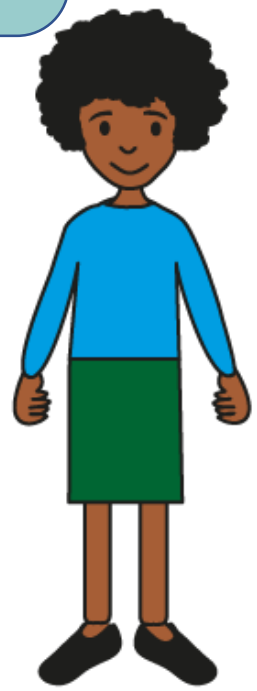
Find pairs to 6 with dots

Cut out the cards and place them face UP on the table in front of you.





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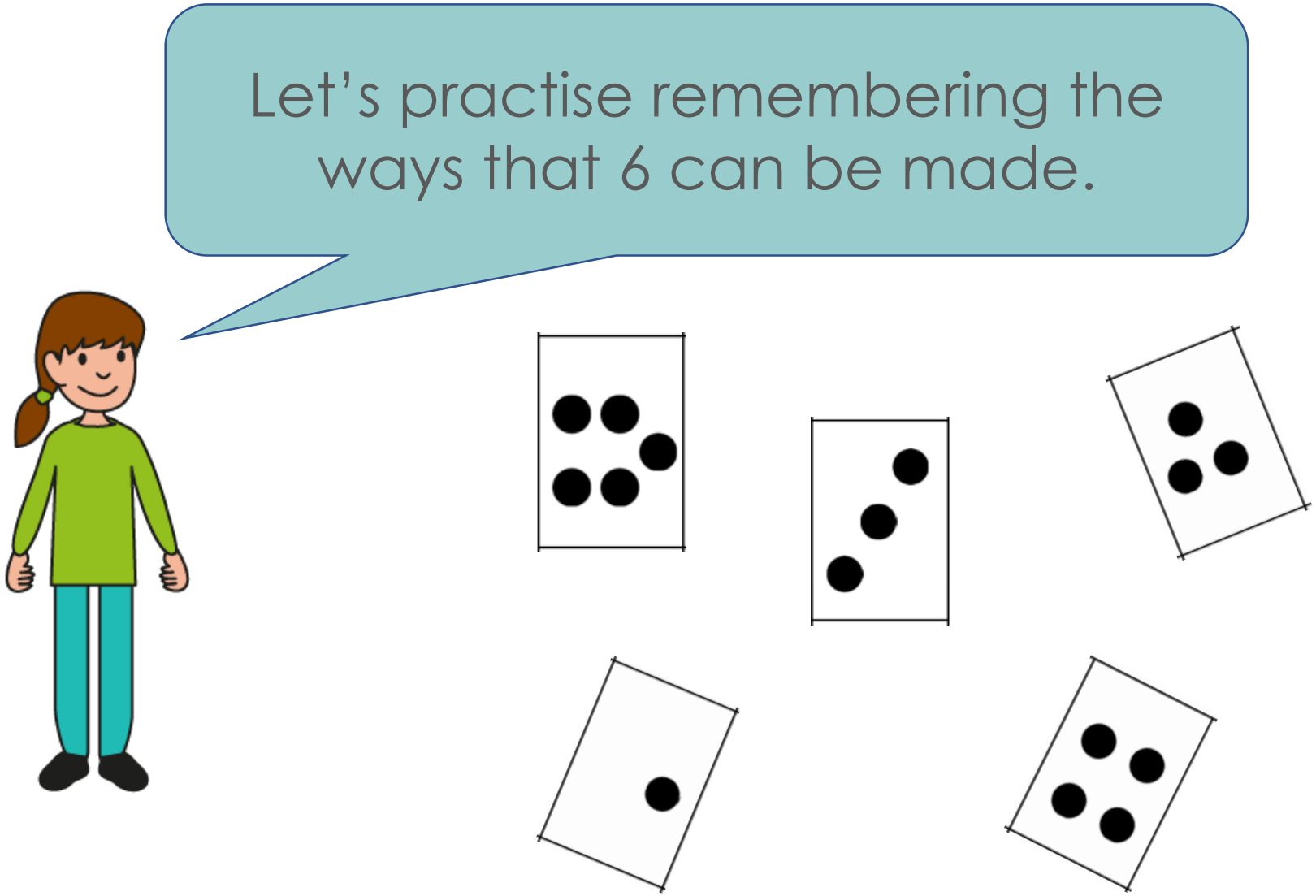
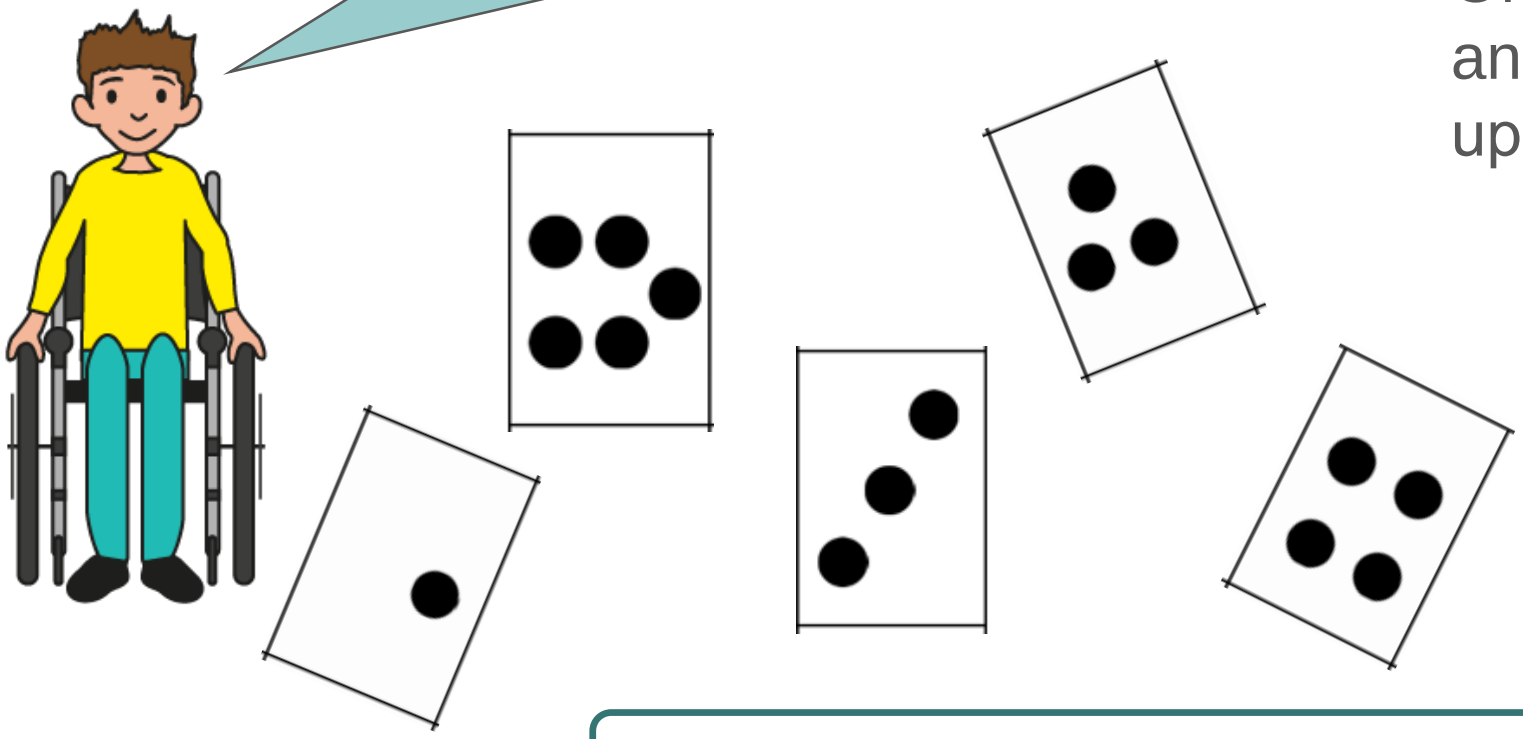
Play: ‘Find pairs to 6’ with dot cards



Find pairs that make 6.



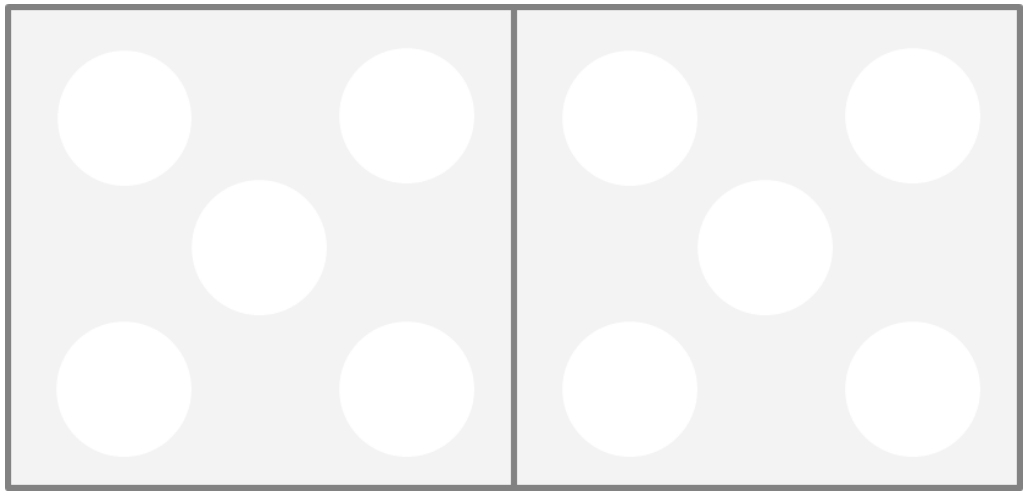
One person will pick up a card, and the other person must pick up the card that will ‘make 6’.

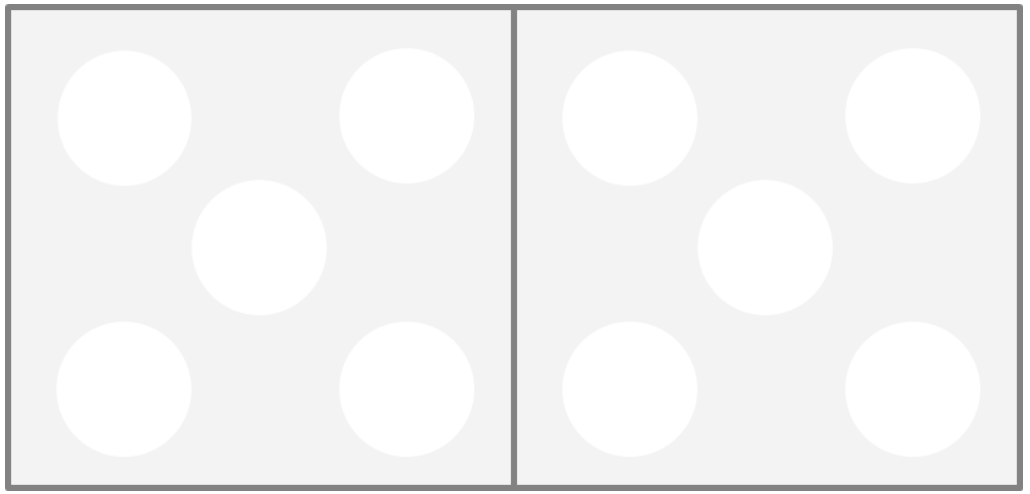
Use the stem sentence to support.

_____ needs _____ to make 6.

Week 2: In Week 4, children will find pairs of numbers that make 7 with dots.

Play ‘Copy my 7’

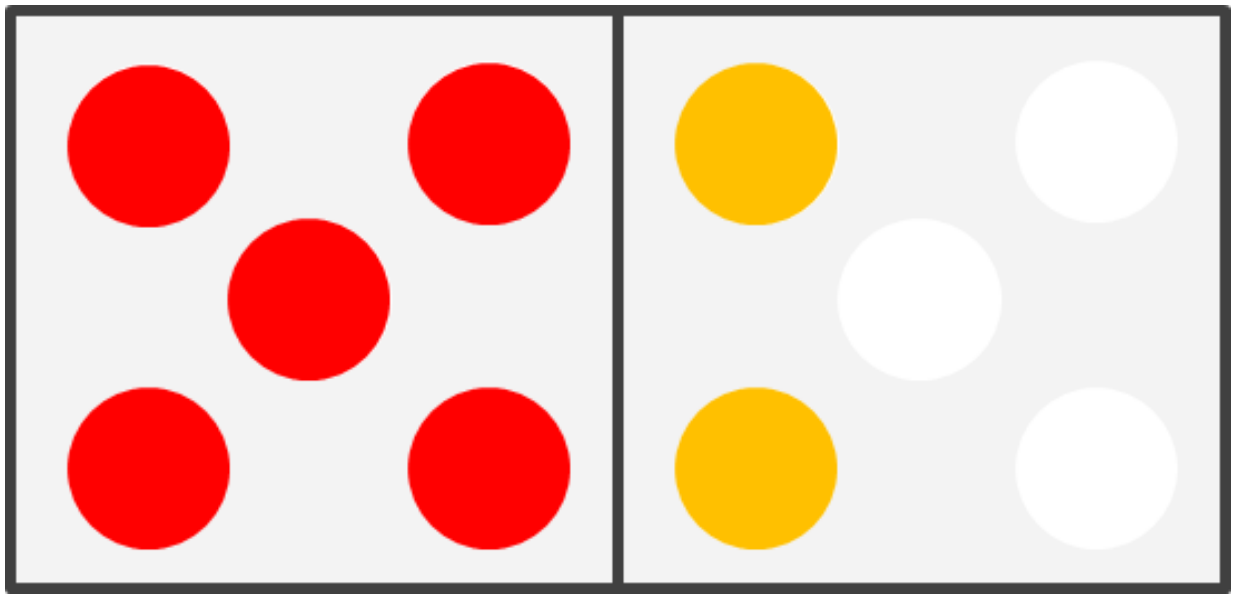




You will need two of these for this activity.

Grown-ups: make this arrangement and briefly show it to your child.

Children: can you copy the arrangement exactly?



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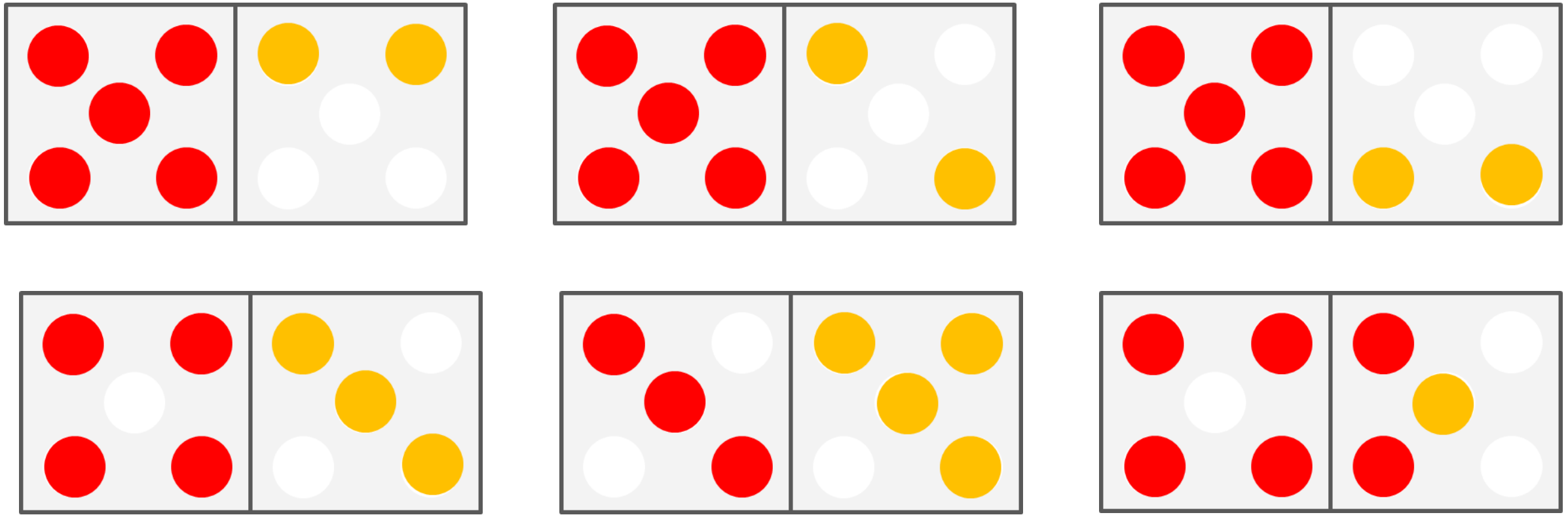
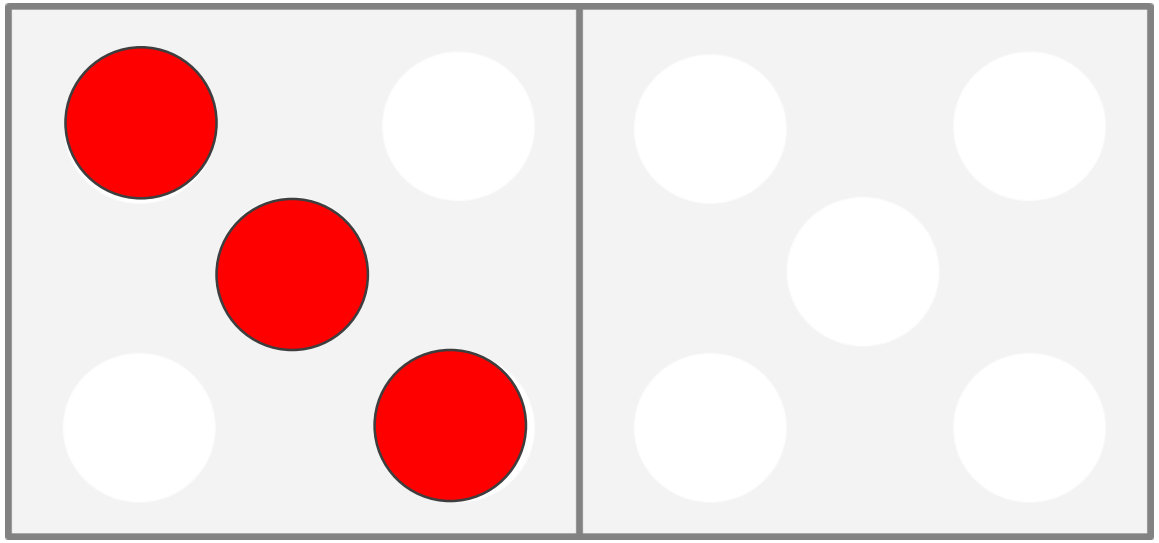
Now try some of these arrangements.



Play ‘Make it 7’



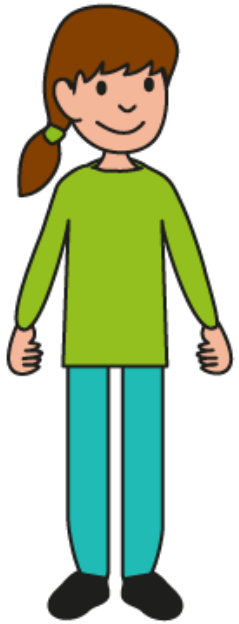
You will need 10 counters altogether.

Grown-ups – Place some counters (up to 5) on one side of the frame.

Children – place counters on the other side to make 7.

Play ‘Make it 7’

Each player needs to have some double-sided counters (up to 10 each).



One player should put some counters down on the table.

The second player needs to make 7 by adding the correct number of counters. Can you do it without counting?

Use the stem sentence to say how many more makes 7.

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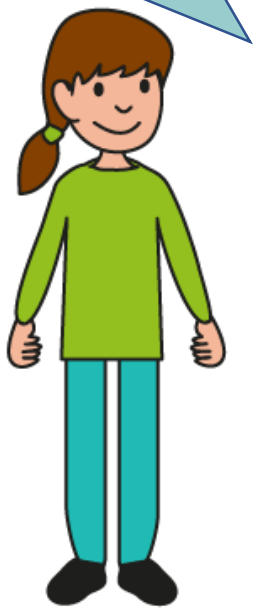
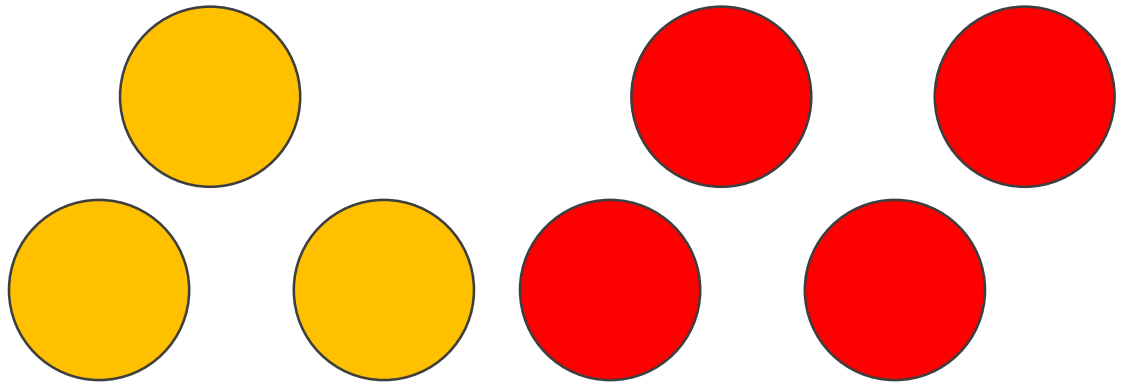
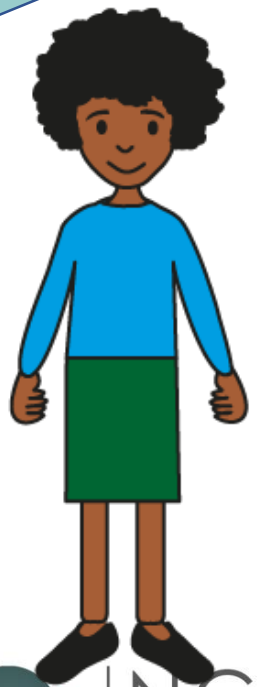
Play ‘Make it 7’

That’s 4! I think 4 needs… 3 to make 7!

Play a game of ‘Make it into 7’ with a partner!







_____ needs _____ to make 7.

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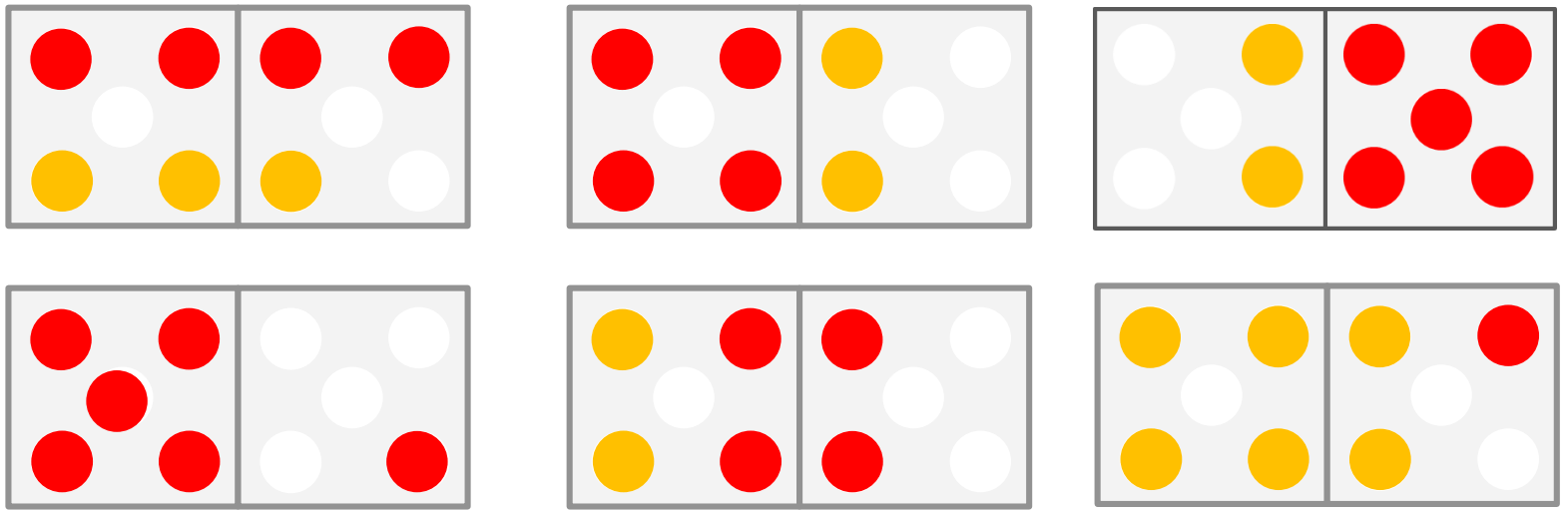
Subitising – 6 or 7

- By the end of the five weeks, your children might well be able to subitise patterns with counters and say whether there are 6 or 7.



Home Learning

You are going to take all the activities 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 1 – Week 1

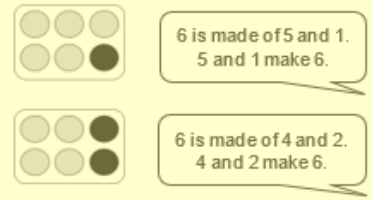
Drop the counters

(Monday, Wednesday and Friday)

How to play

- For this game, you will need 6 two-colour counters and the worksheet **'Drop the counters'**. Decide who will be player 1 and who will be player 2.
- Take it in turns to hold 6 counters in your hand and to drop them all at once onto the table.
- Check how many of each colour are showing. [Note that if all the counters land with the same colour showing, the player misses their turn.]
- Use the stem sentence to say aloud the way you have made 6. [See the example above and the worksheet **'Stem sentences'** for guidance.]
- On your recording sheet, cross out the way you have made 6 with the counters.
- Keep playing until either player has crossed out all the ways to make 6 on their sheet.

Egg box 6



(Tuesday and Thursday)

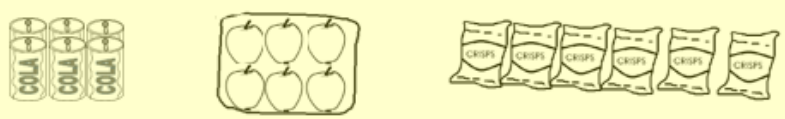
How to play

- For this game you will need an egg box and 6 two-colour counters.
- Place all 6 counters in the empty spaces in the egg box, with the same colour facing up.
- Turn over 1 counter and use the stem sentence to say the way to make 6 that is shown – *"6 is made of 5 and 1…"* [See the example above and the worksheet **'Stem sentences'** for guidance.]
- Keep turning over 1 counter at a time and saying the new way to make 6 until you have found *all* of the ways to make 6.

Other things to try at home

Noticing packs of 6

In your home, can you make a list of things you have bought in packs of 6?



Things to try outdoors

Make sets of 6 things you can find in nature, e.g. 6 leaves, 6 acorns, 6 conkers, 6 twigs, and so on. If you see a collection of fewer than 6 things, ask, *"How many more will make 6?"*

Mastering Number at Home

My Diary – Year 1 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 'Drop the counters'.		Played with dad. Sam was able to say see all the parts of 7.
Tues	We used our egg box and stem sentence to work out ways to make 6.		
Wed	We played 'Drop the counters'.		
Thurs	We used our egg box and stem sentence to work out ways to make 6.		
Fri	We played 'Drop the counters'.		

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

Very confident 

It was okay 

Not too sure 

Suggested websites for virtual maths manipulatives:

MathsBot.com

https://mathsbot.com/manipulativeMenu

Didax

https://www.didax.com/math/virtual-manipulatives.html

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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.

Sarjeant, S (2021) Engaging parents in children's literacy: an investigation into the Impact in Writing programme as a strategy for parental engagement. Available at: https://orca.cardiff.ac.uk/id/eprint/136692/3/1576474%20Suzanne%20Sarjeant%20-%20Final%20thesis%20(002).pdf (Accessed 03.10.2022)

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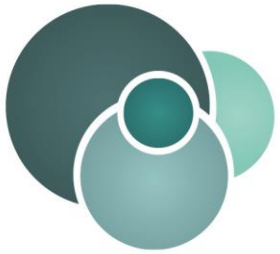
Thank you!



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