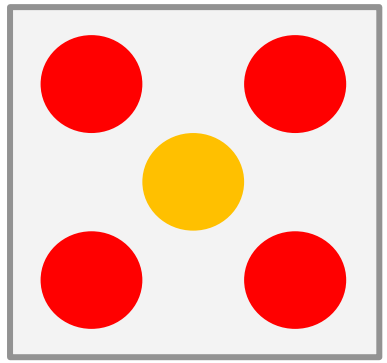
Mastering Number at Home

Reception



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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.

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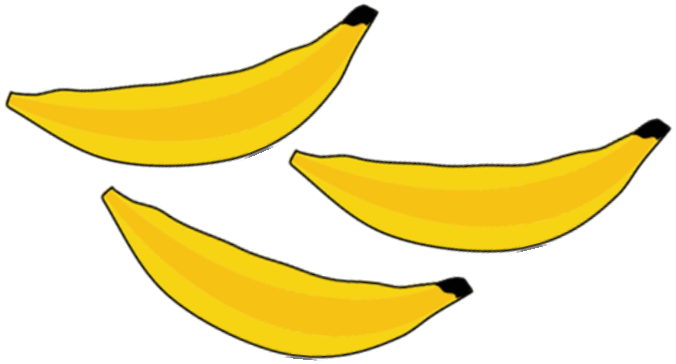
How does Mastering Number help us to teach maths in school?

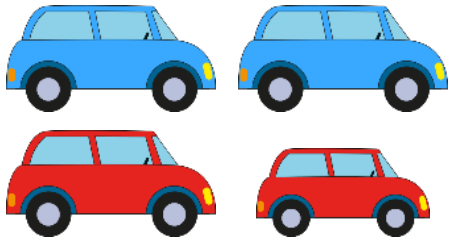
The Mastering Number Programme in Reception will help your child to develop good *number sense*.

Some of the things they are learning include:

Counting



Recognising small numbers of objects and making their own collections



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

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Let’s do some maths!

Look out for when you can use your subitising skills! Get those fast eyes ready!

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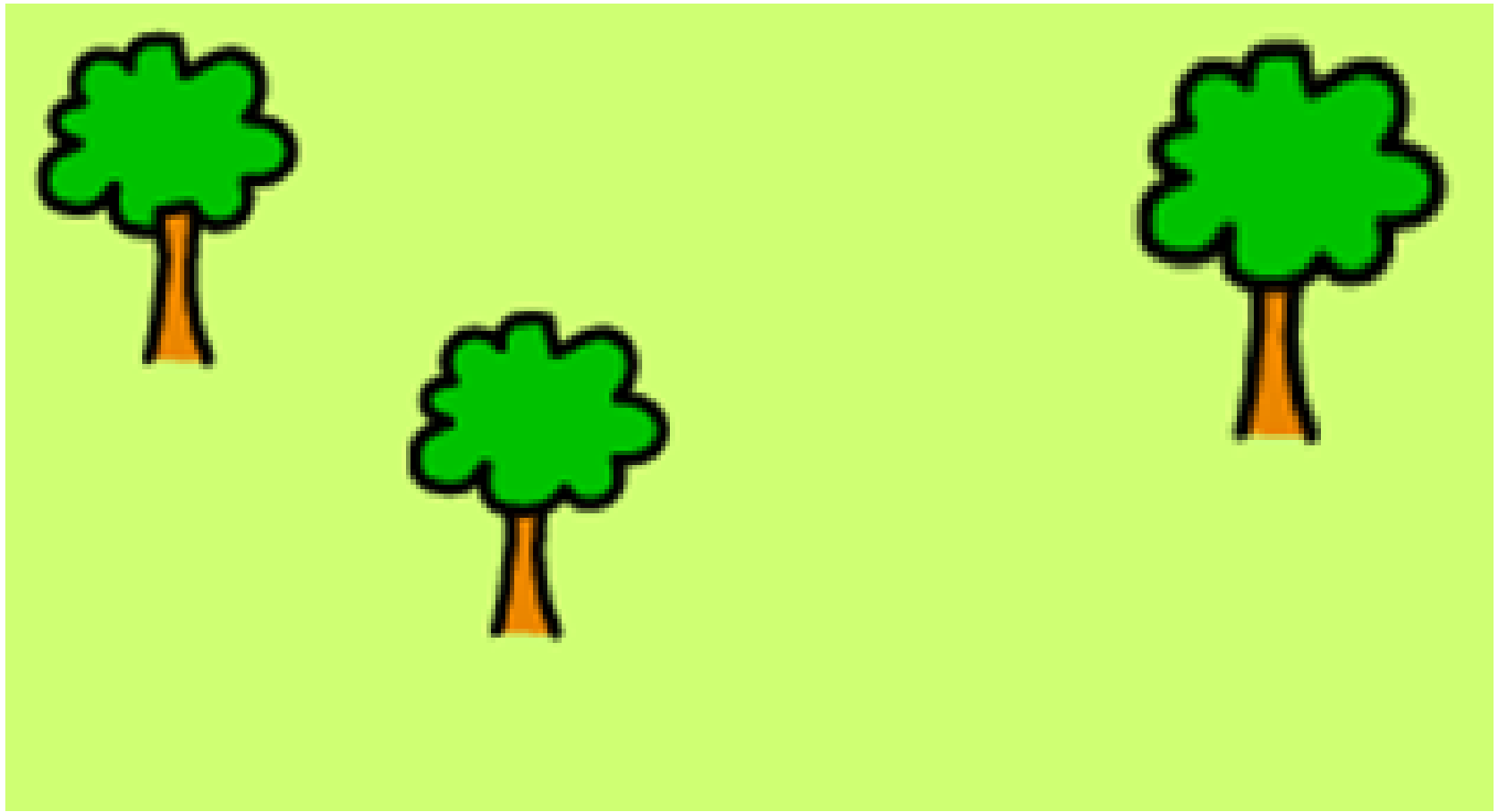

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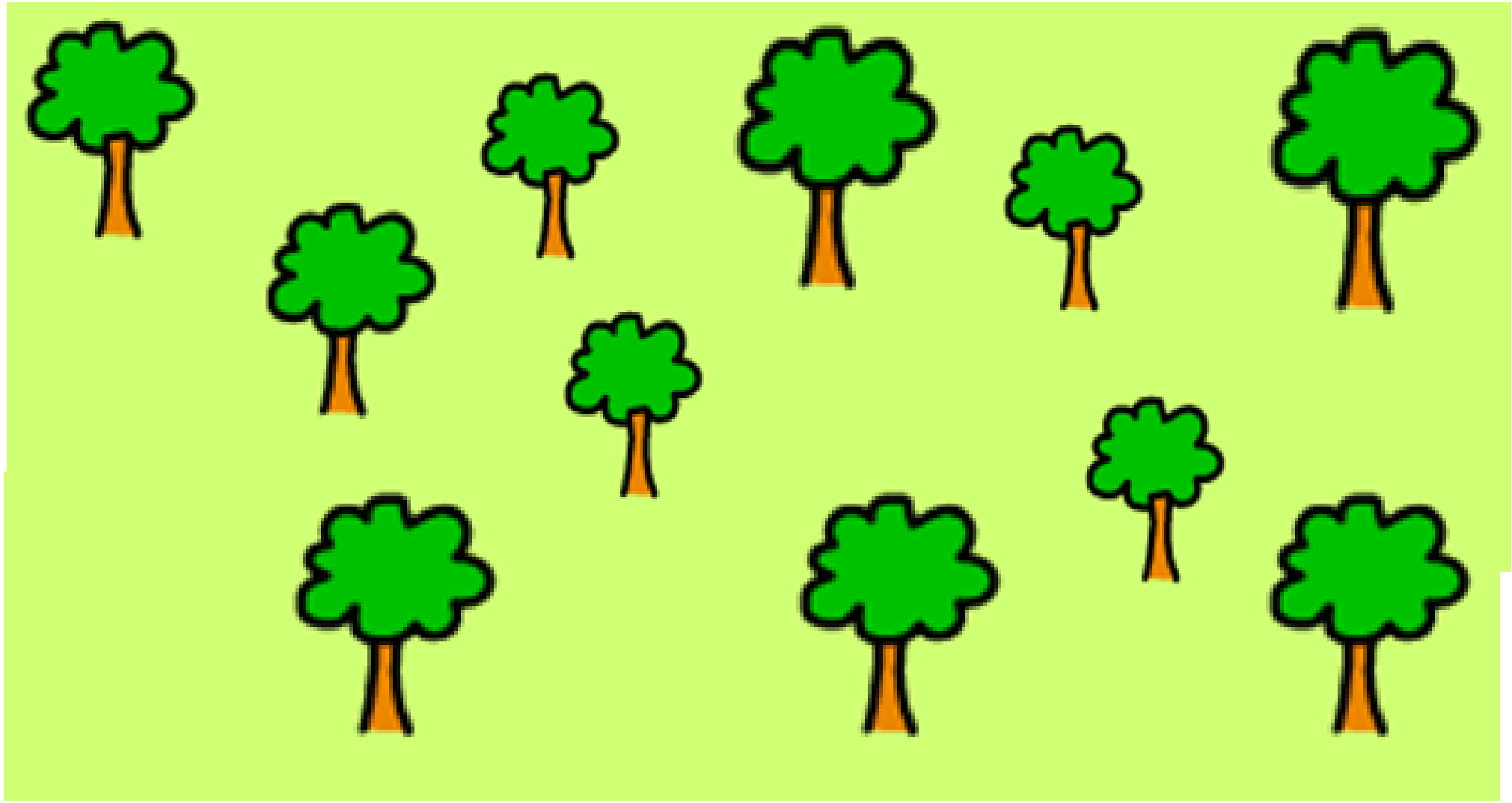

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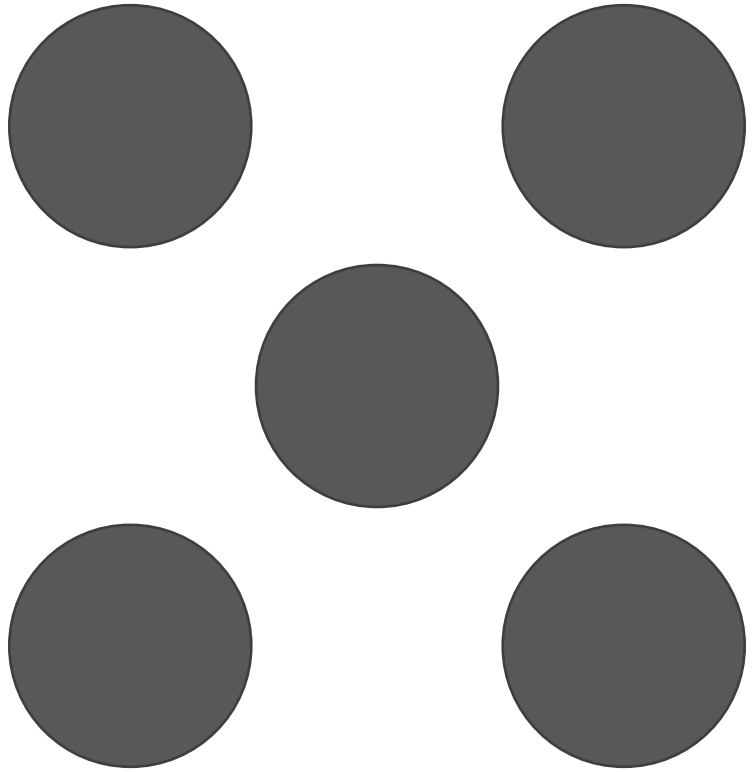

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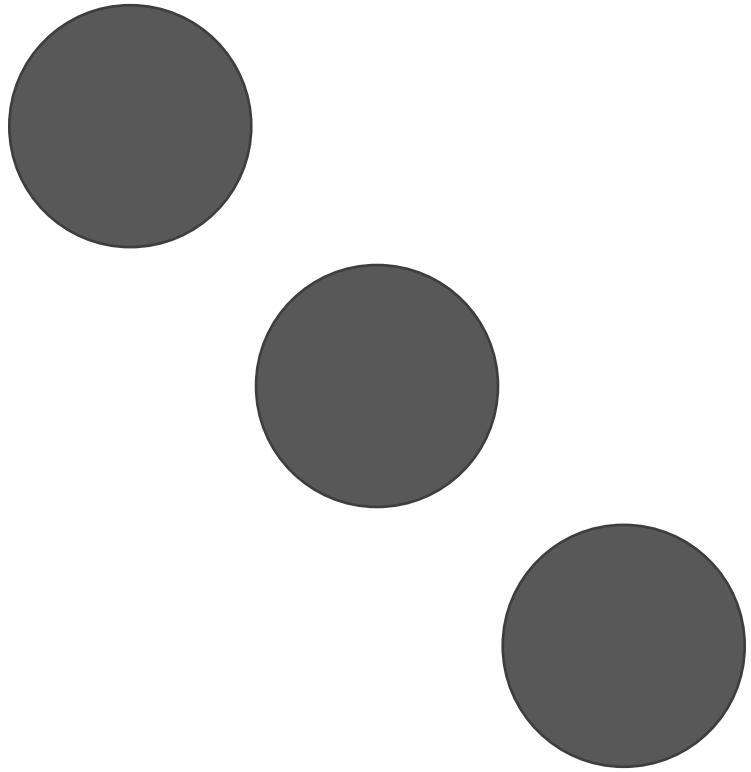

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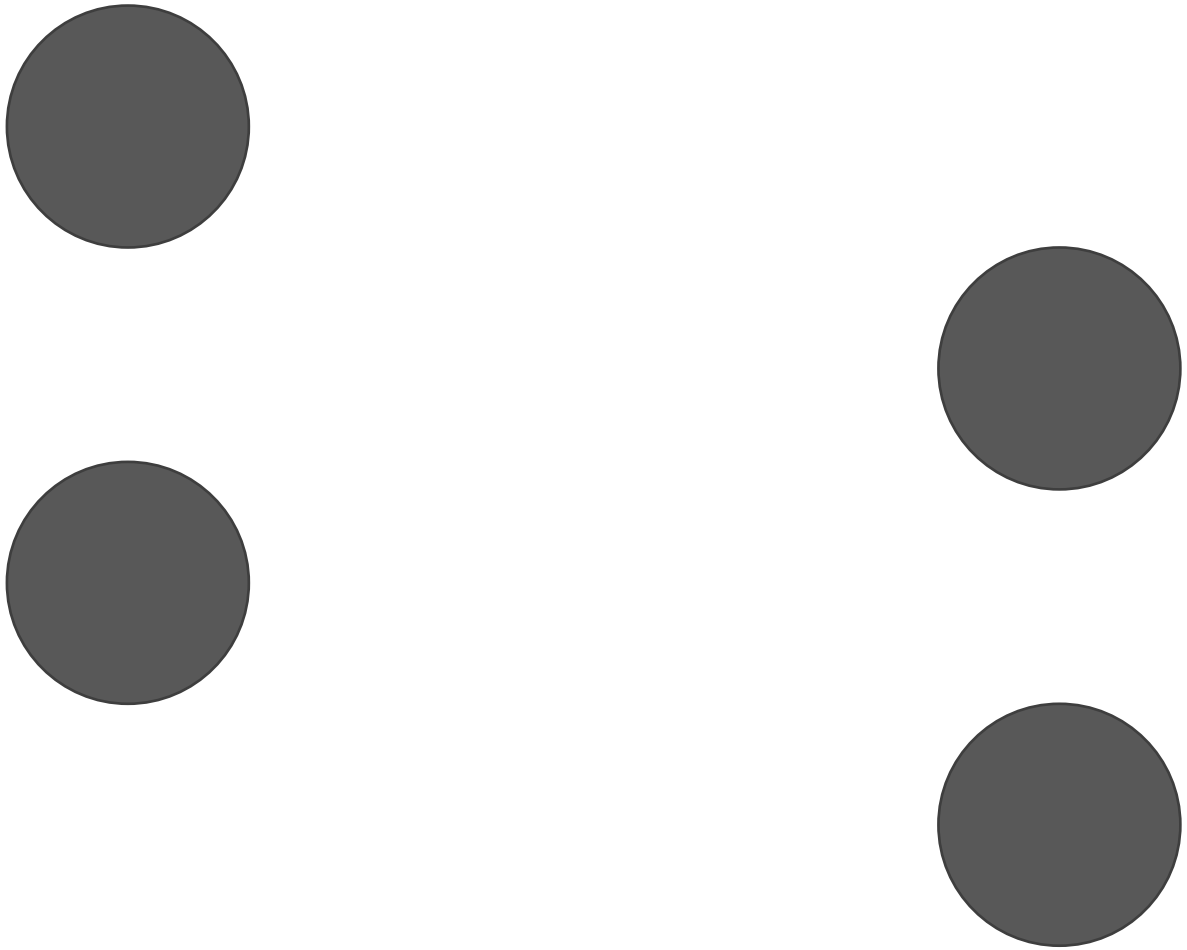

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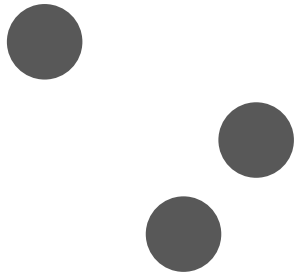
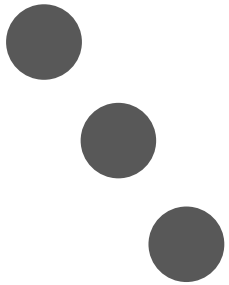
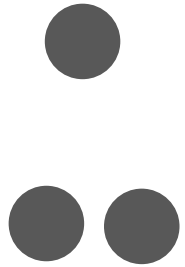
Subitising

Subitising is the ability to recognise a *small quantity* of objects *without the need to count*.

Sometimes when we subitise we can see two groups at once; if we know that 3 can be ‘made’ of 2 and 1, then we know how many there are altogether without counting.







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How will knowing how numbers are ‘made’ help?

If children know that **4 can be made of 3 and 1,** they can apply this knowledge later on to see that:

30 and 10 is 40
300 and 100 is 400
and that;
400 take away 100 is 300

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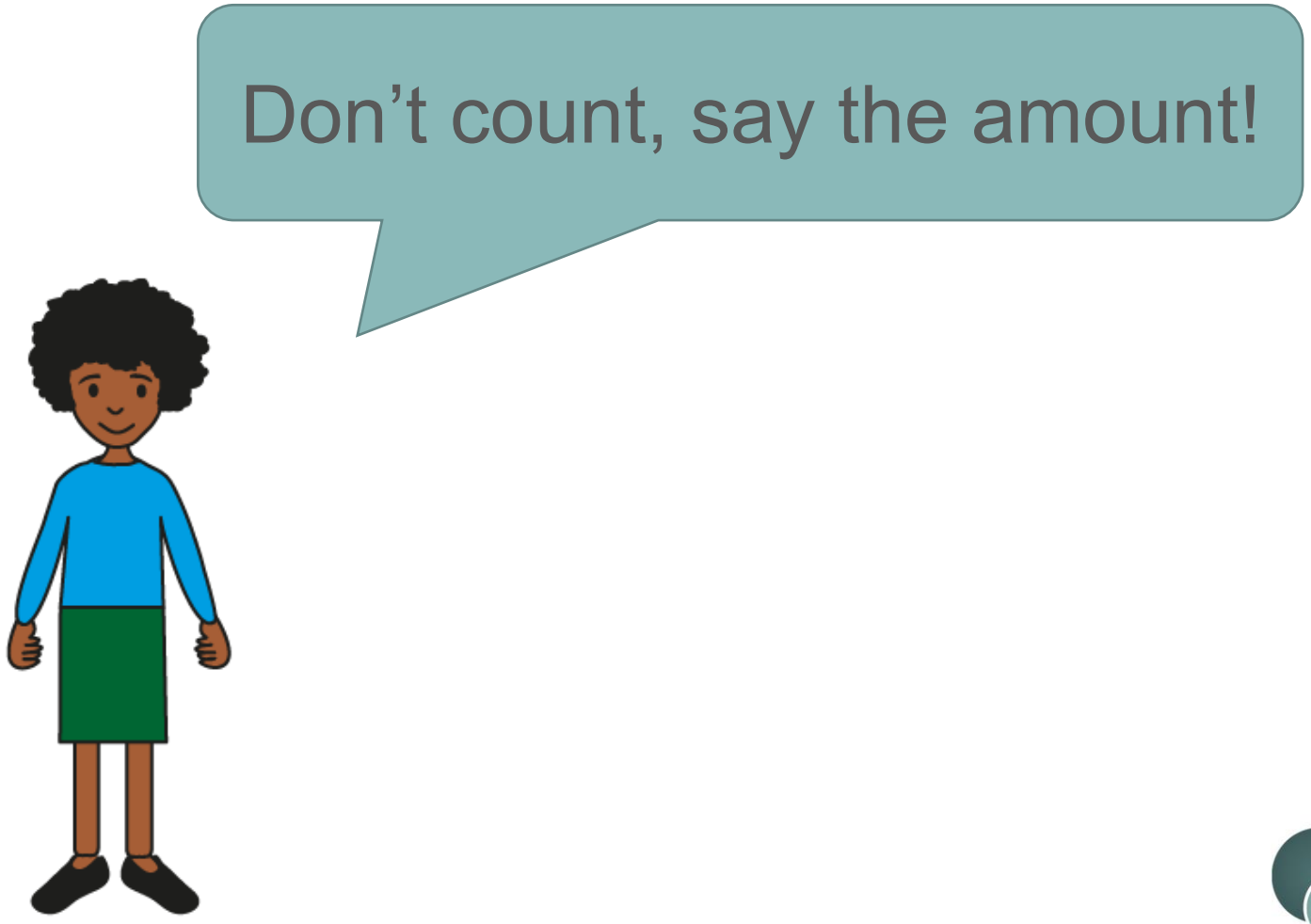
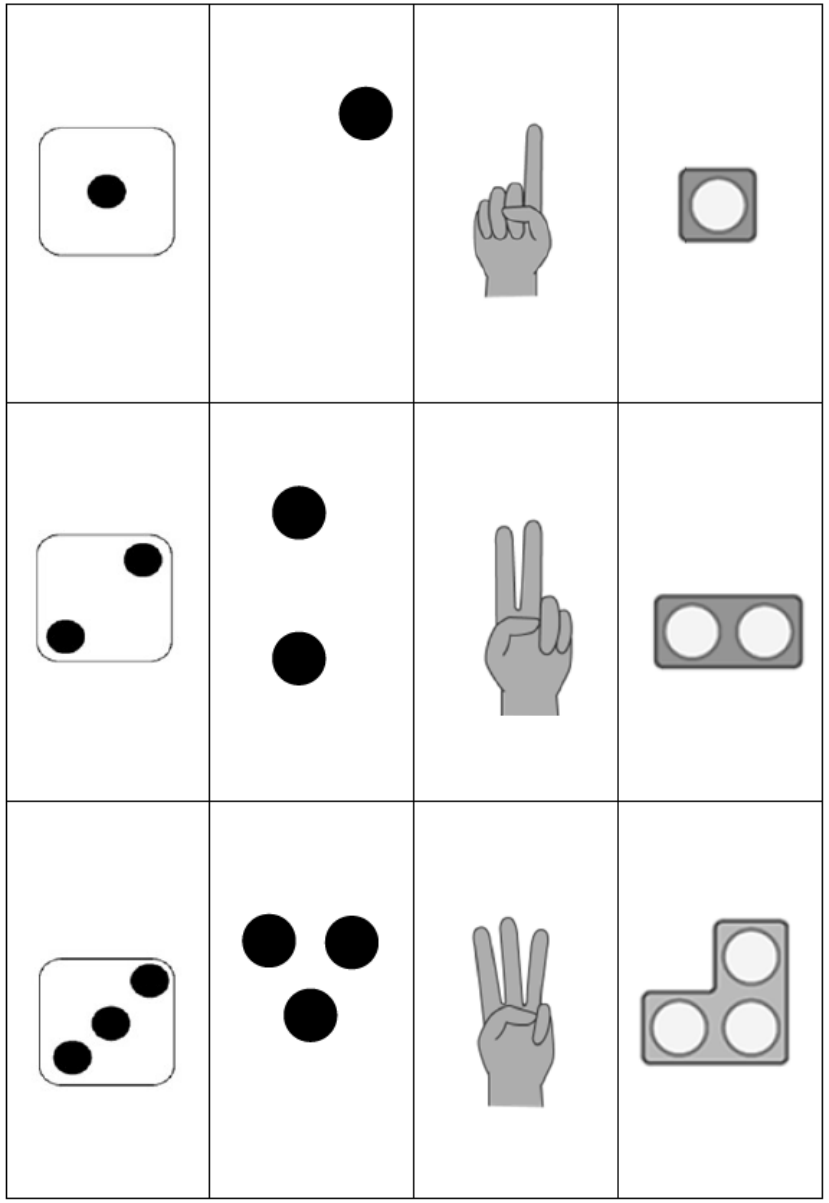
Play ‘Subitising to 3 snap’





On your tables you will have a set of cards like this.

Spread the cards out

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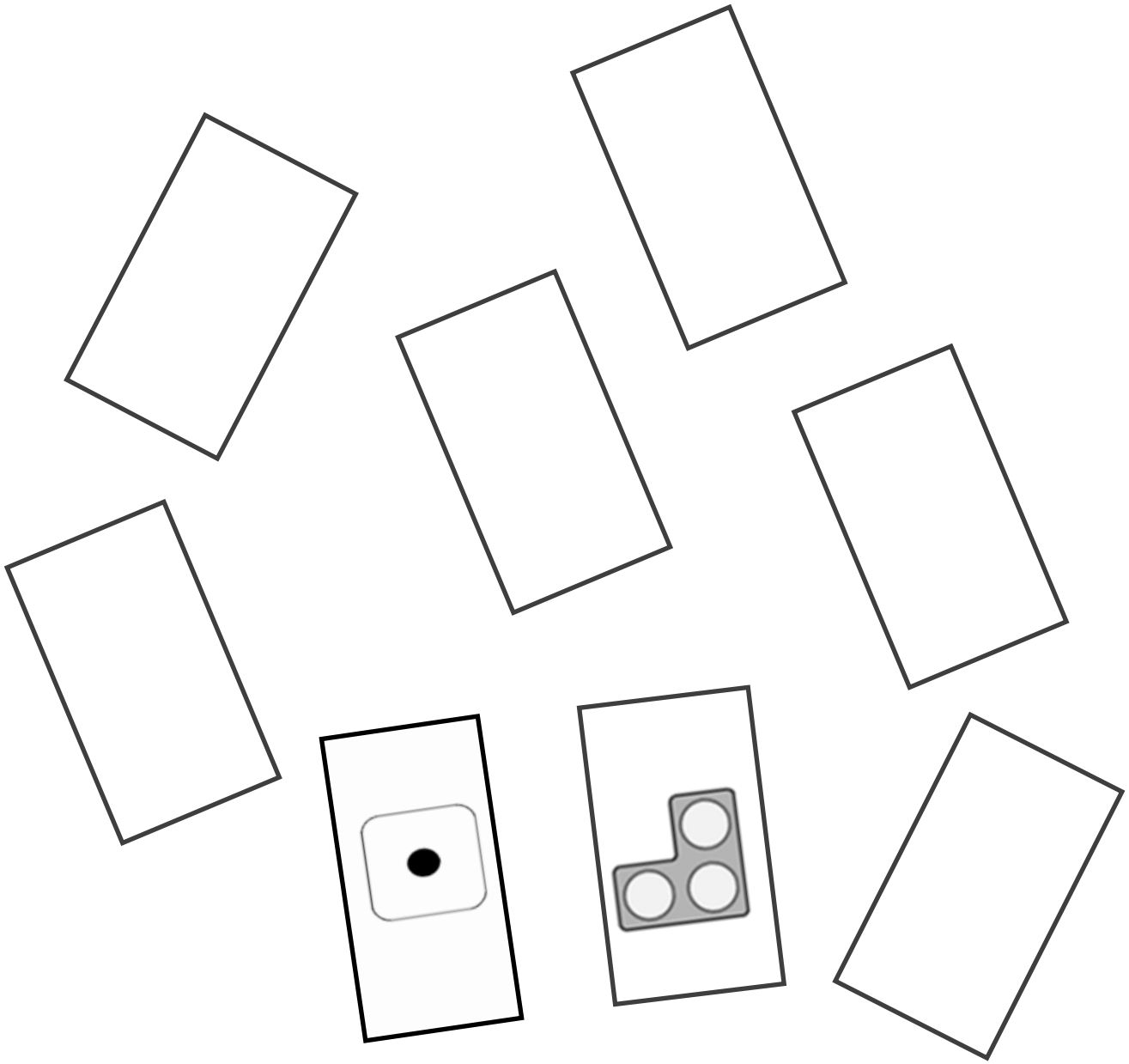

Take turns to turn two cards over and say the number you can see.

If the numbers do not match, place them back and try to remember where they are in case you need them later.

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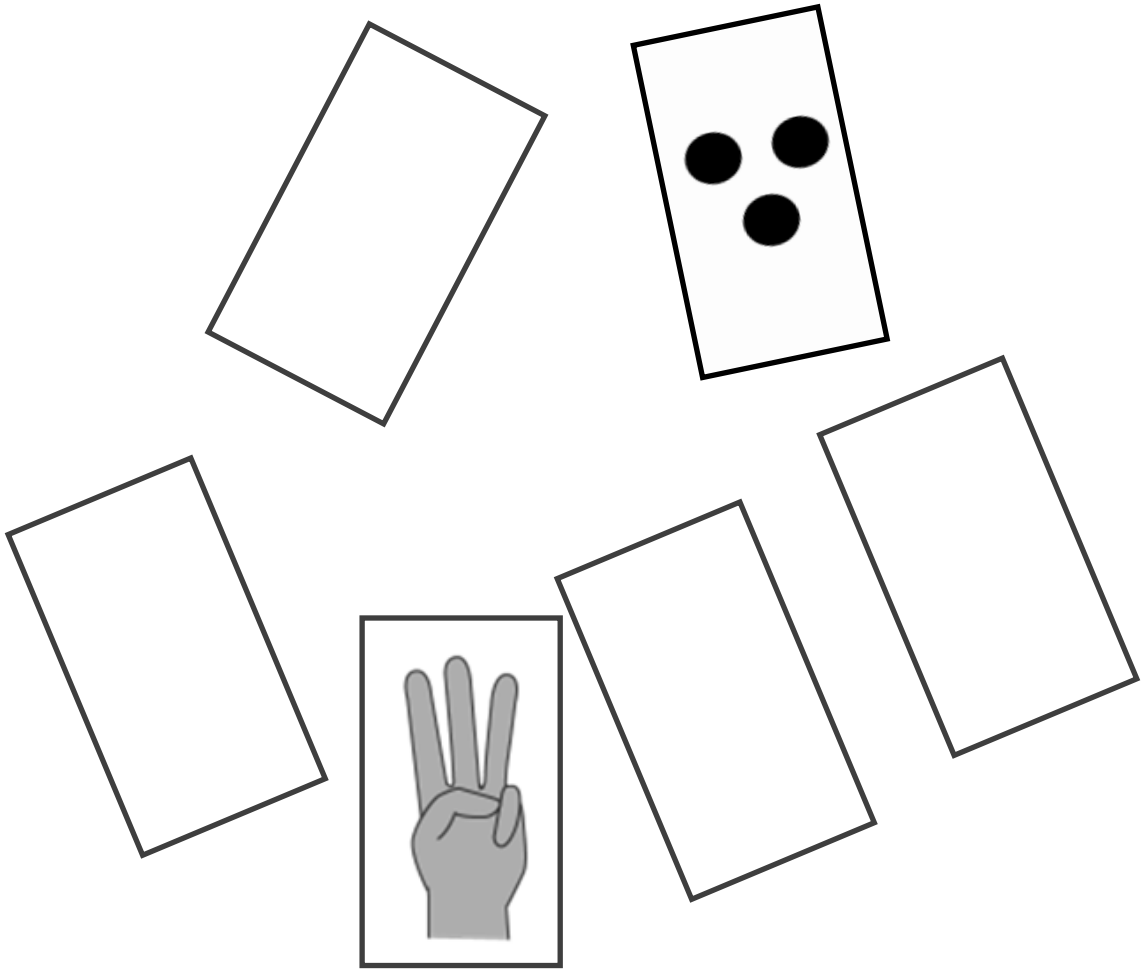

When it is your turn, if you turn over two cards that are the same, you can keep them.

The winner is the person with the most cards when they are all used up.

In Weeks 3 and 5, you will receive extra cards to practise subitising with bigger numbers. Don't throw your cards away!

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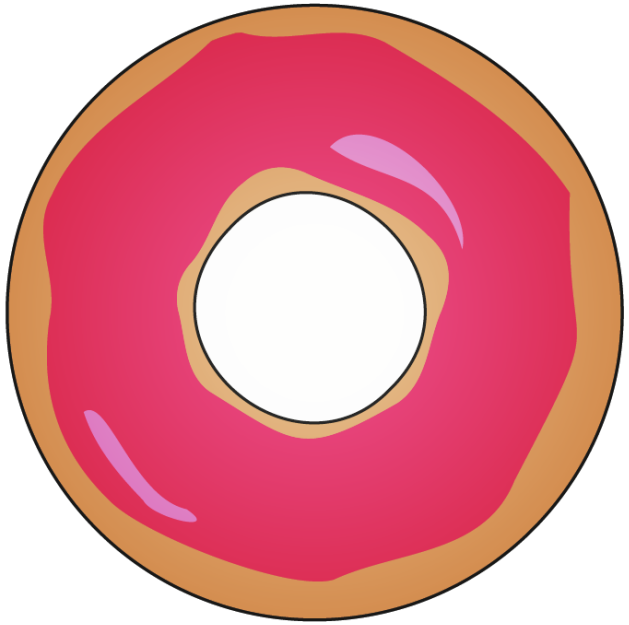
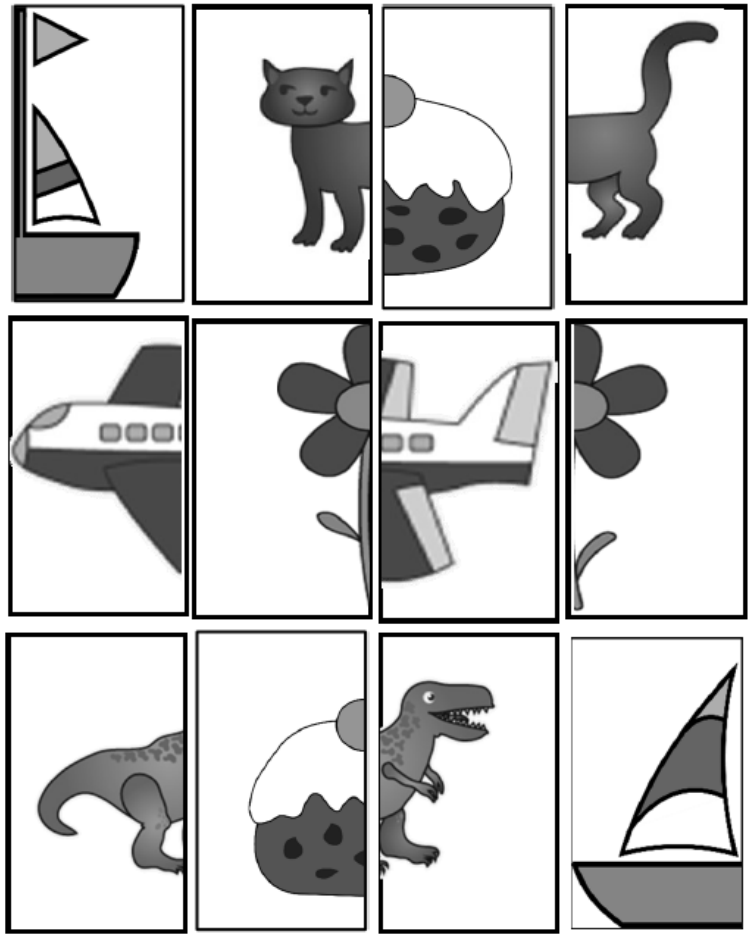
Play ‘Part-part-whole’

The ‘hole’ in the donut?



A ‘whole’ donut?

Find 2 **parts** that make a **whole**.



Cut carefully around each of the images.
Lay the cut cards face-up on a flat surface in front of you.
Take it in turns with the grown-up.
Look for two images that look like they are part of a whole.
Pick them up and say 'part' 'part'.
Put them together and say 'whole.'

You will see cards on your table that look like this.

Spread the cards out and place them face up on the table.

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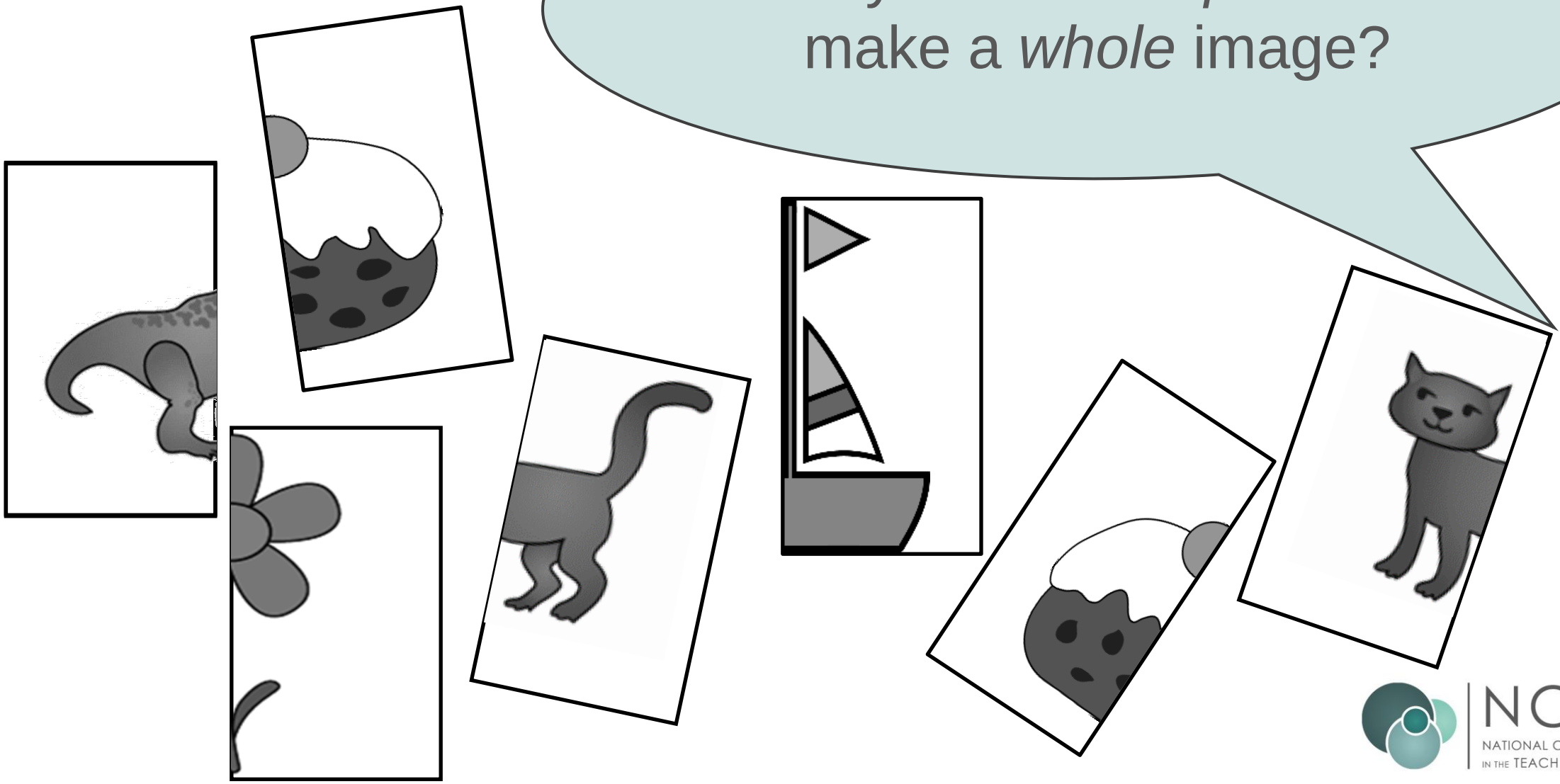
Can you see two *parts* that make a *whole* image?



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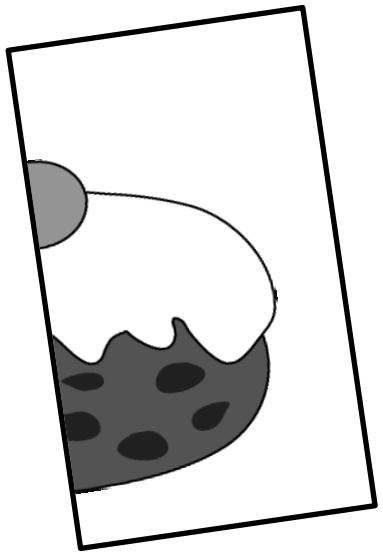
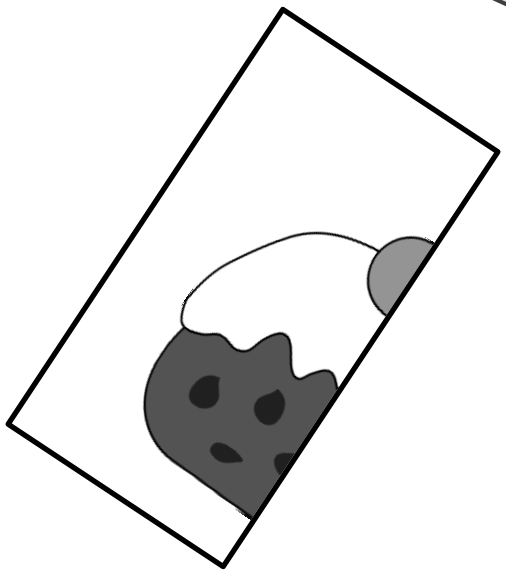
Pick up each piece and say:
‘part… part…’





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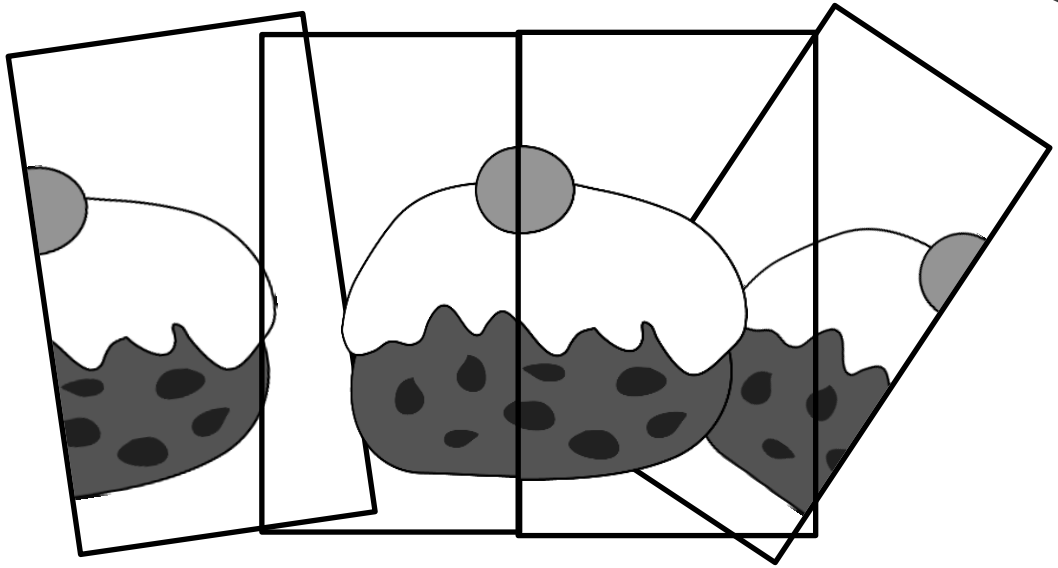
Now put them together and say: ‘whole!’

Can you find all the ‘wholes’ by doing the same?



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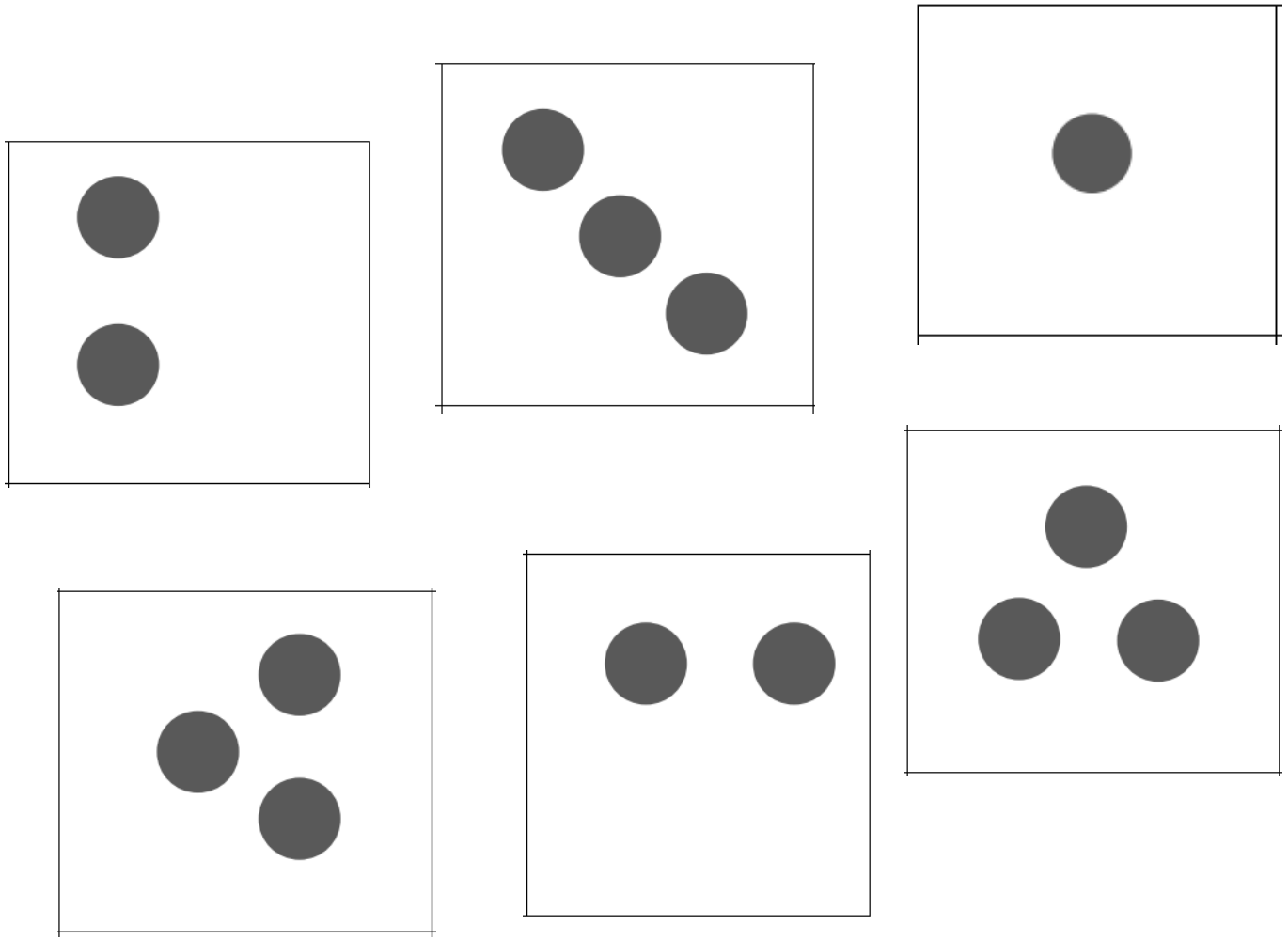
Part-part-whole with dots



In Week 3, you will play ‘part-part-whole’ with dots.

One person will pick up a card, and the other person must pick up the card that will ‘make 4’.

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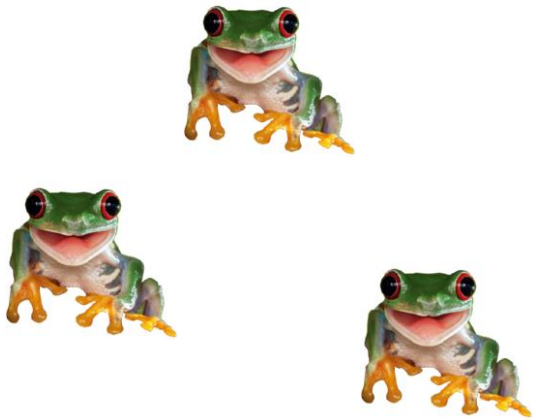
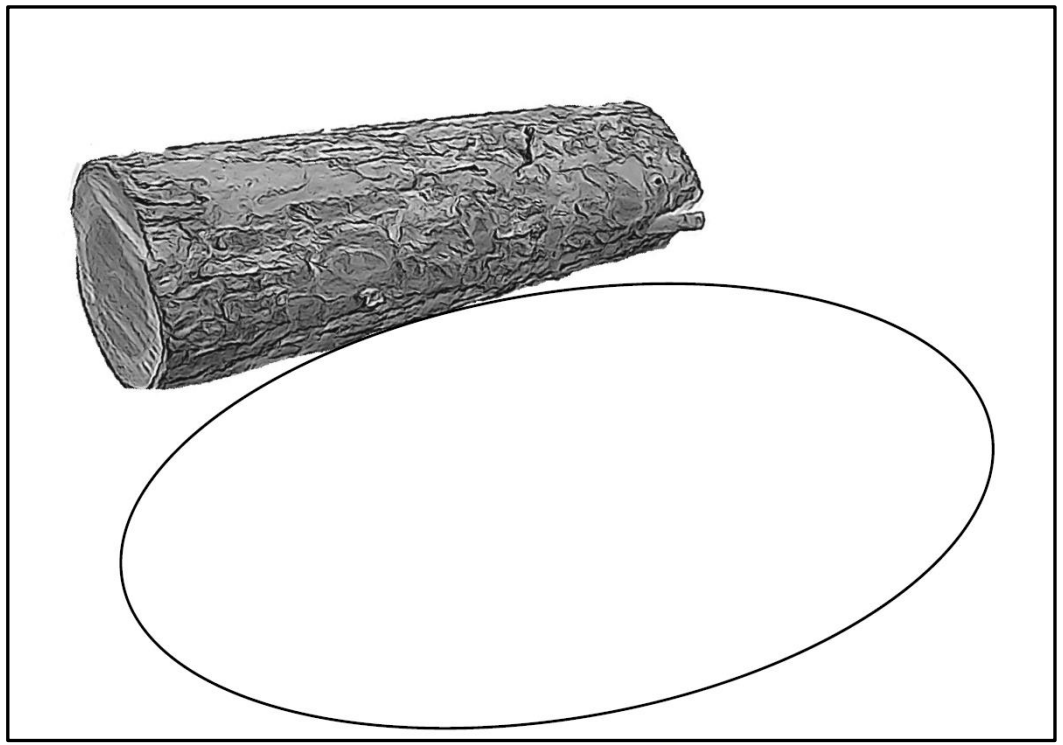
Play ‘3 frogs on a log’

You will need...



3 frogs
(counters)

The frogs on a log sheet



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You will also need to show the numbers on your fingers!

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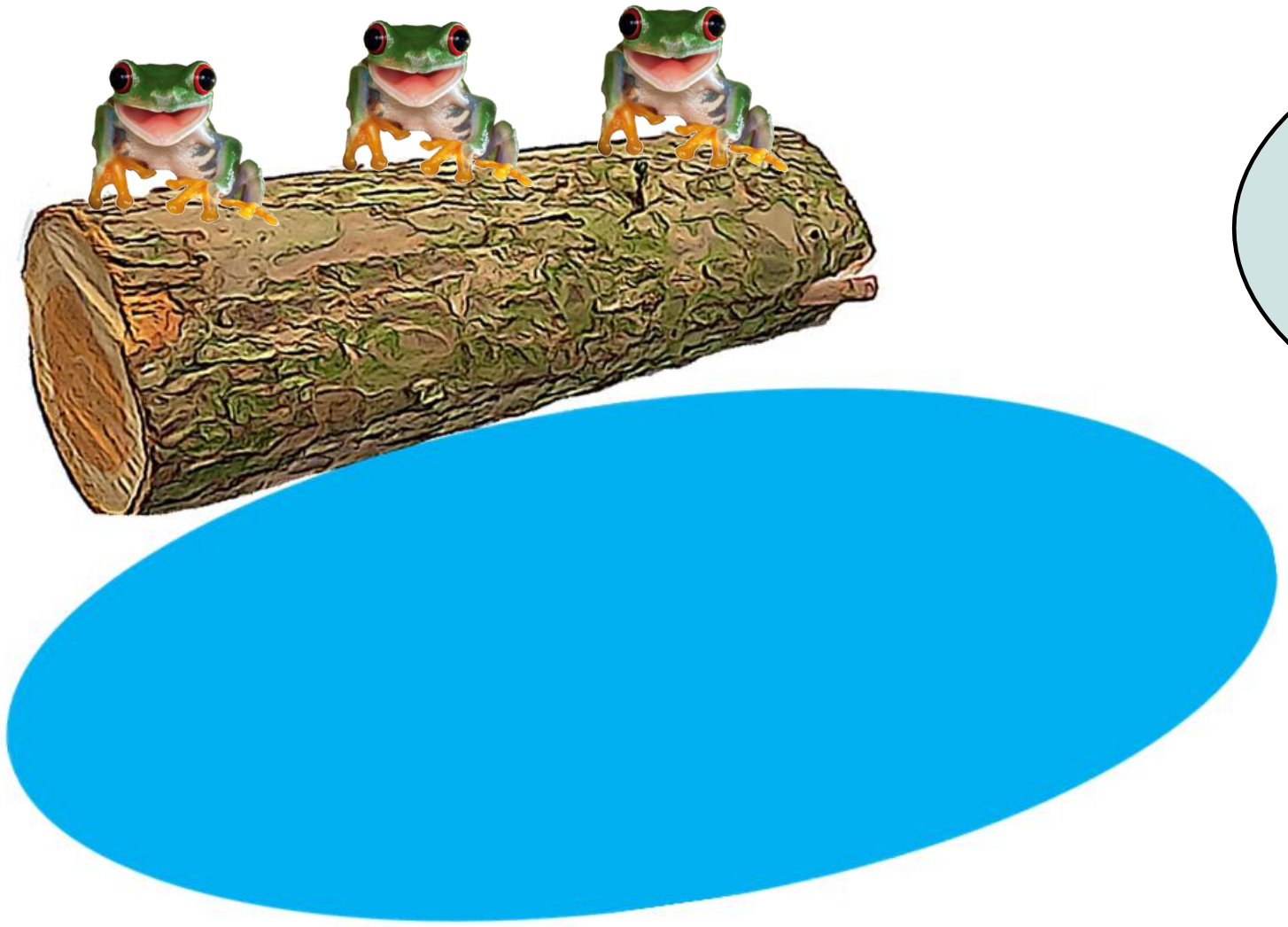
Put 3 frogs on the log



Ask your child

Show with your fingers:
How many are on the log?
How many in the pool?
How many altogether?

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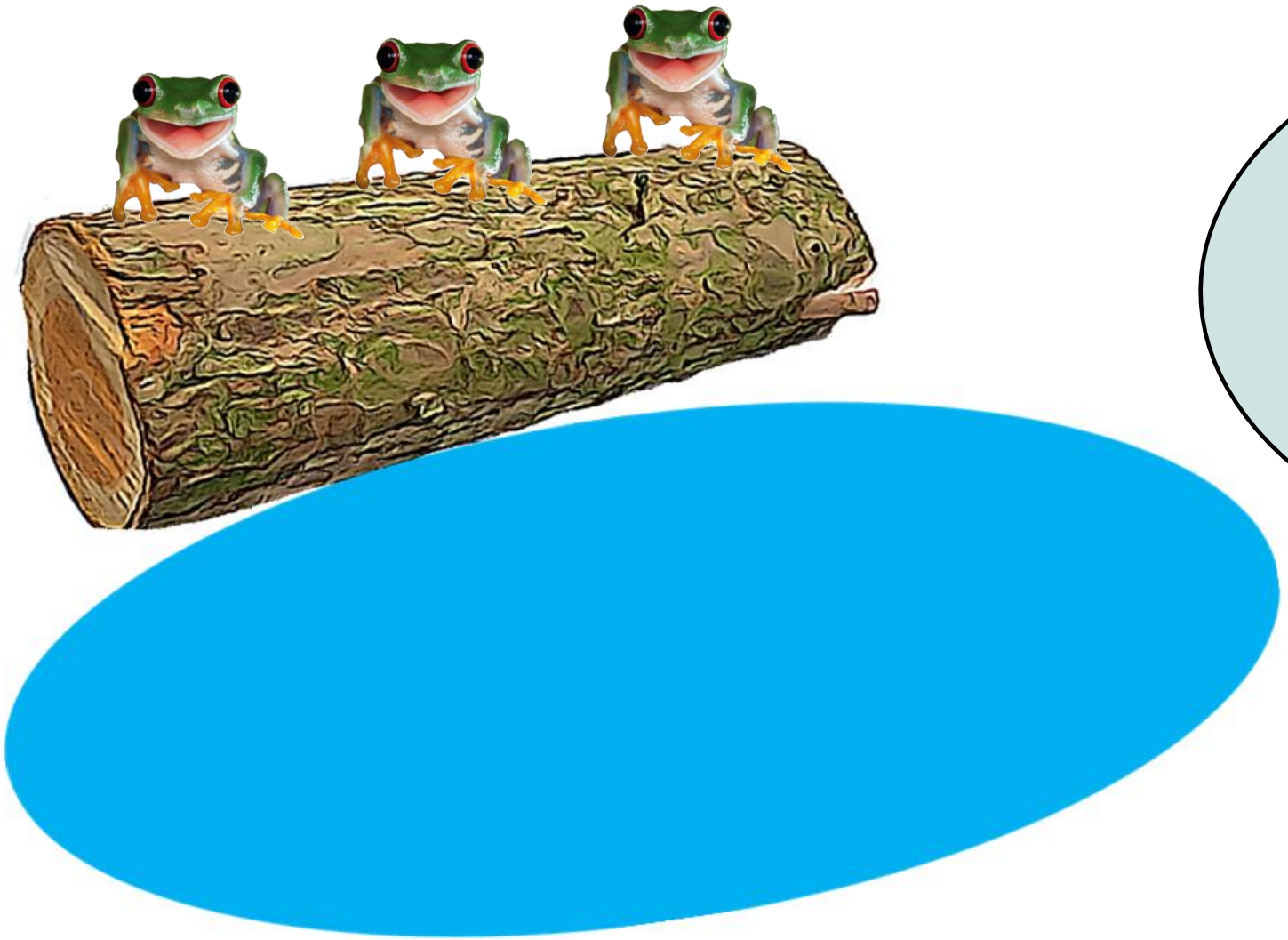
Put 1 frog in the pool.



Ask your child

Is it still three?
Show with your fingers:
How many are on the log?
How many in the pool?
How many altogether?

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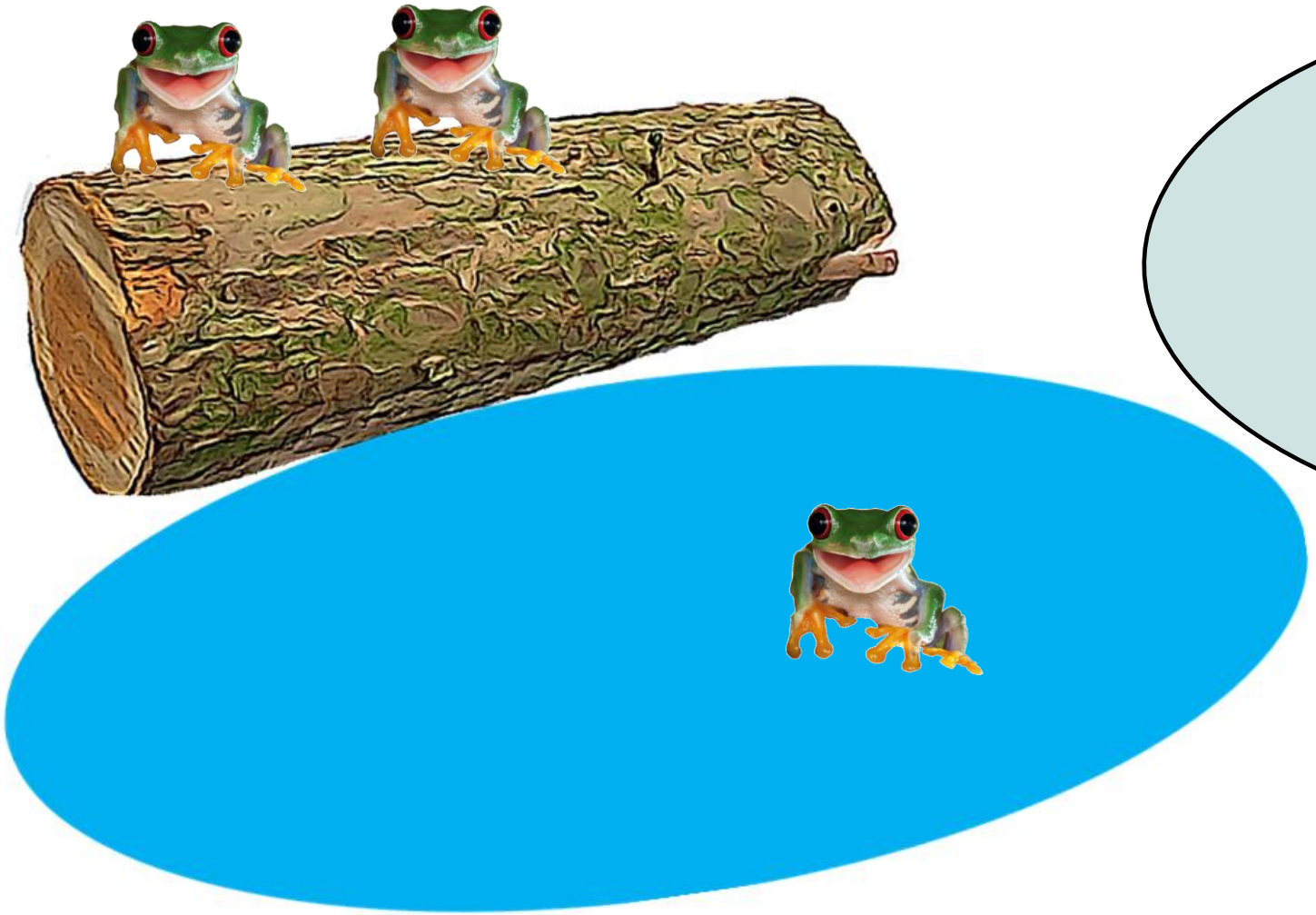
Put another frog in the pool.



Ask your child

Is it still three?

Show with your fingers:

How many are on the log?

How many in the pool?

How many altogether?

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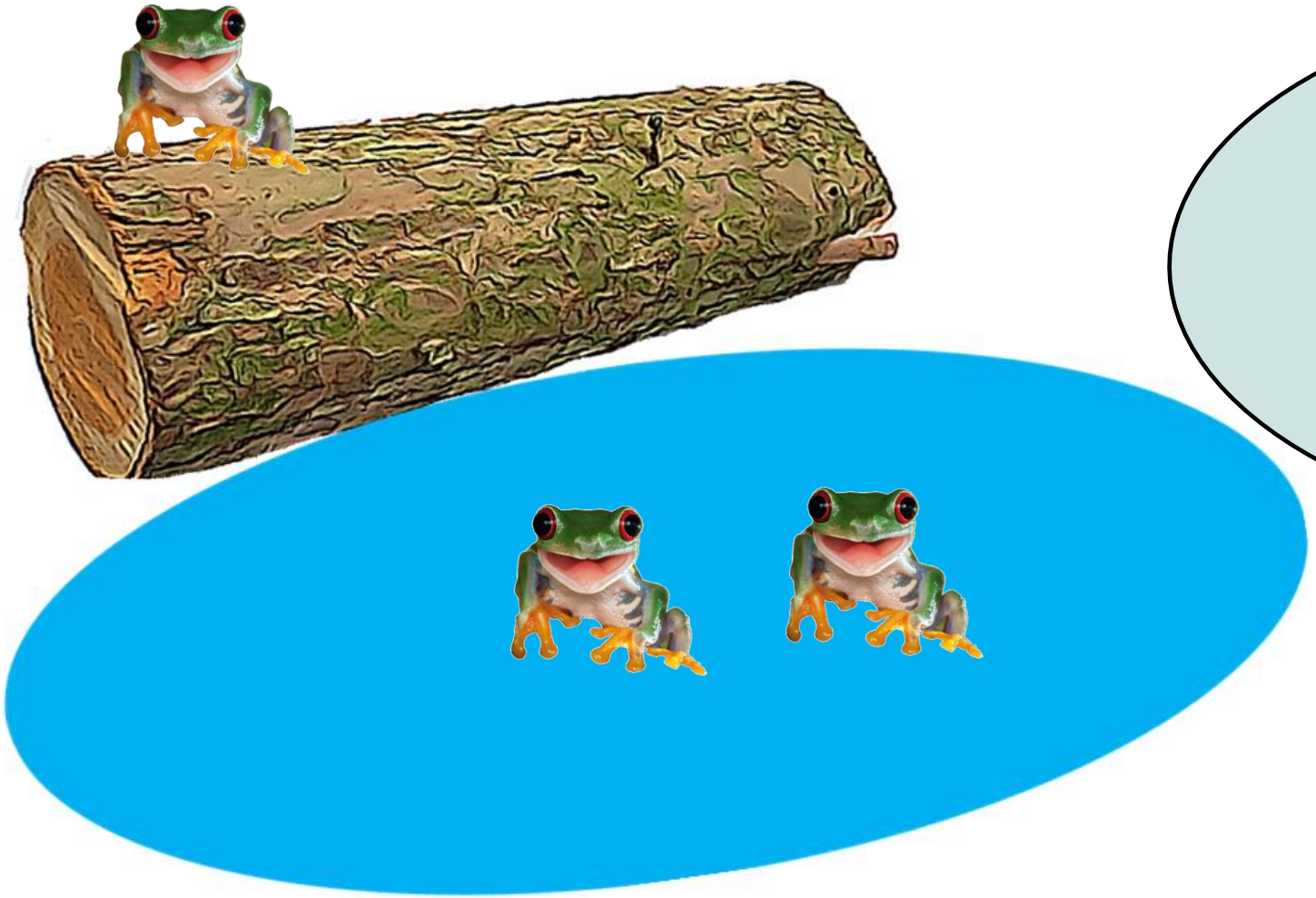
Put another frog in the pool.



Ask your child

Is it still three?
Show with your fingers:
How many are on the log?
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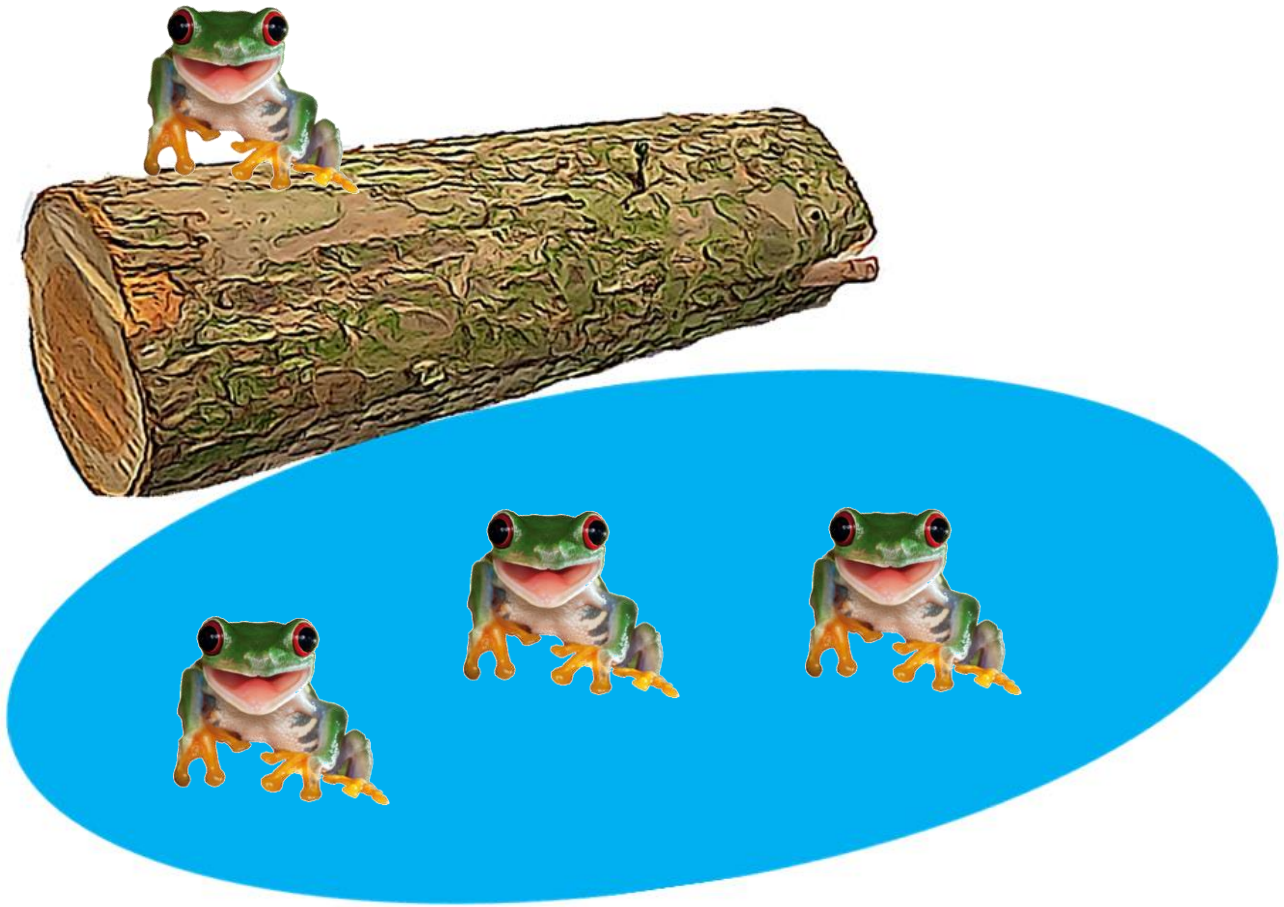

In Week 4, you will play this game again with 4 frogs… or even 5!

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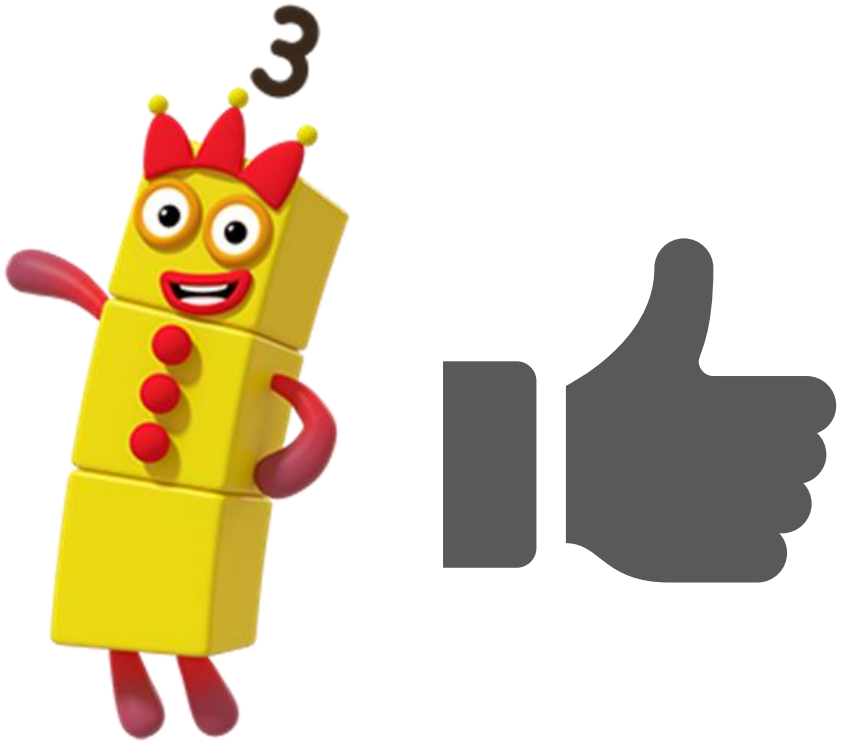
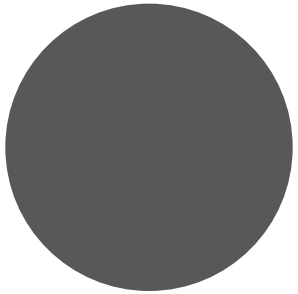
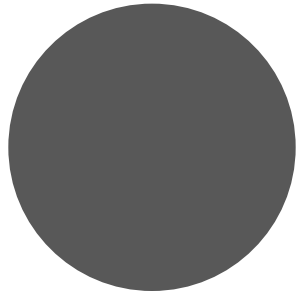
Play ‘3 or NOT 3?’

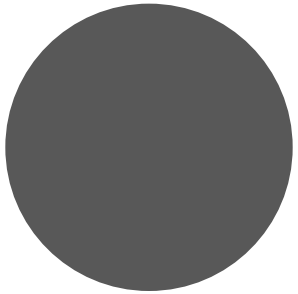
This activity involves spotting when there are 3 of an object or explaining why there are NOT 3.

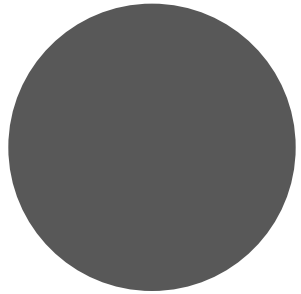
Put your thumb UP if you can see 3, and down if it is NOT 3.

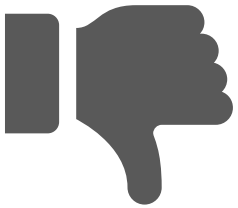


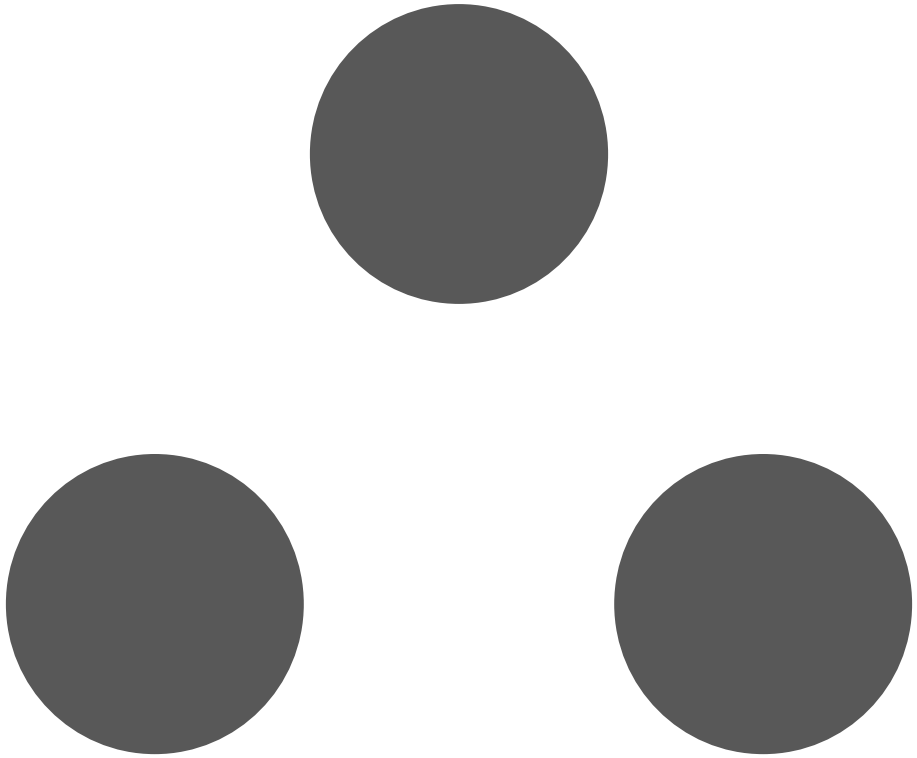


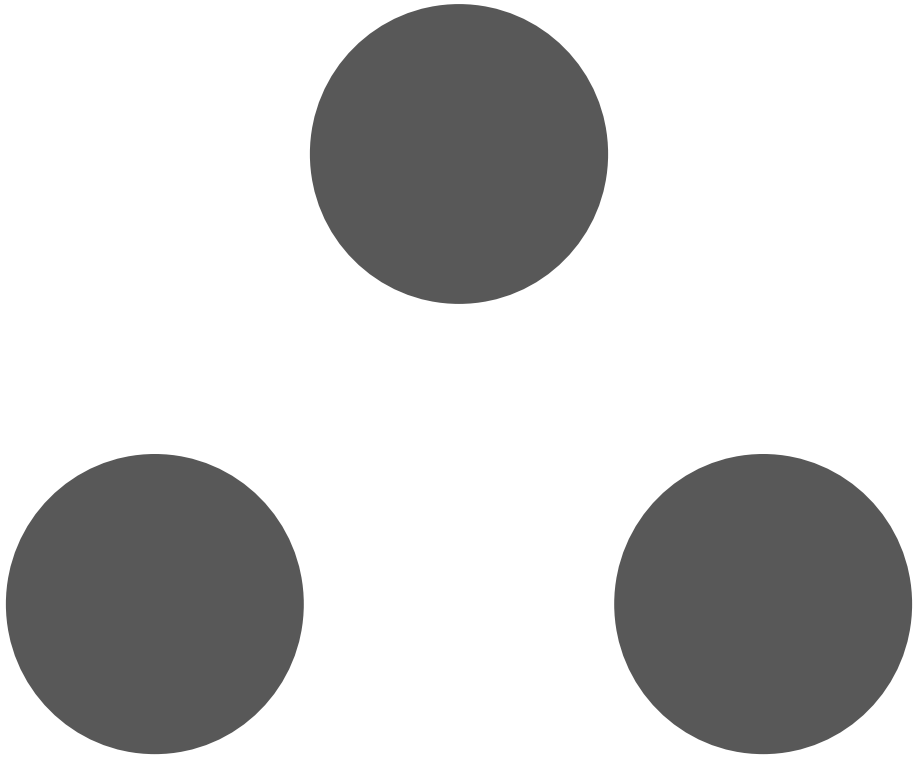


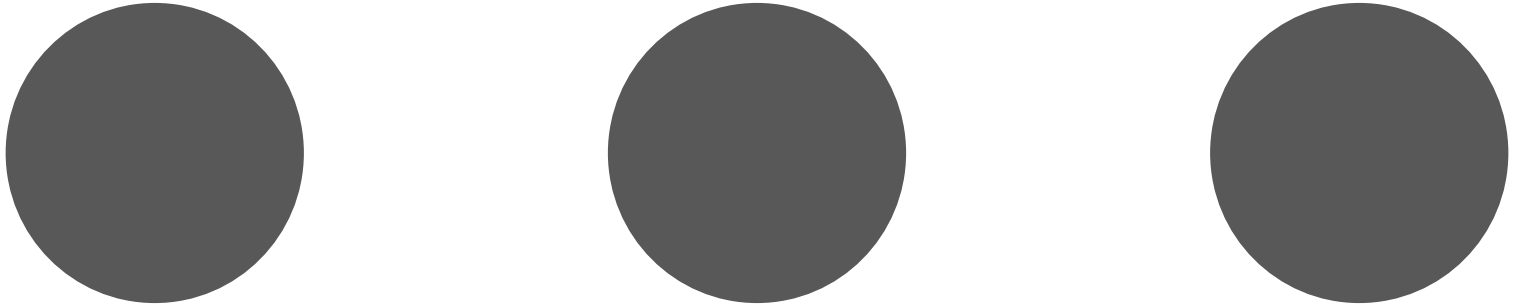


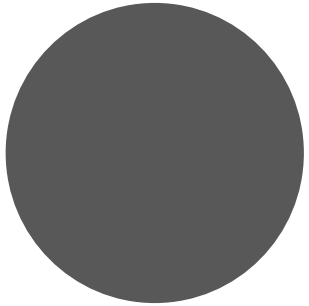
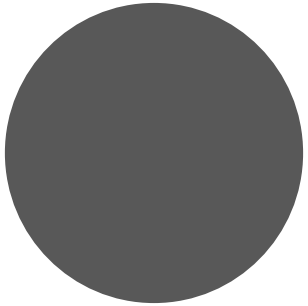
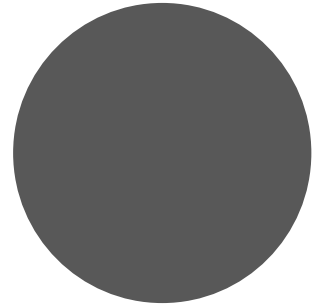








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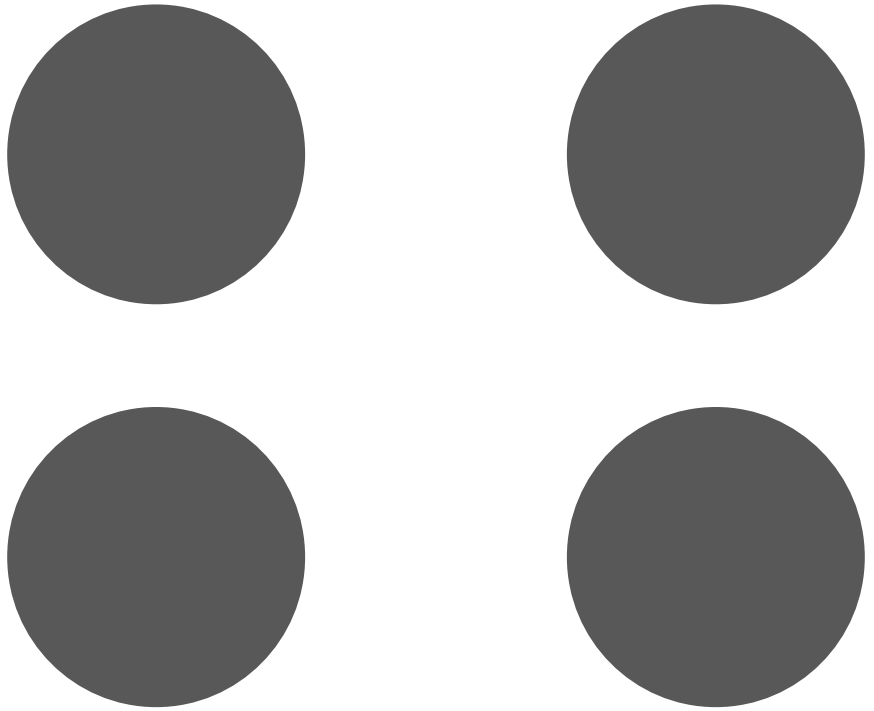
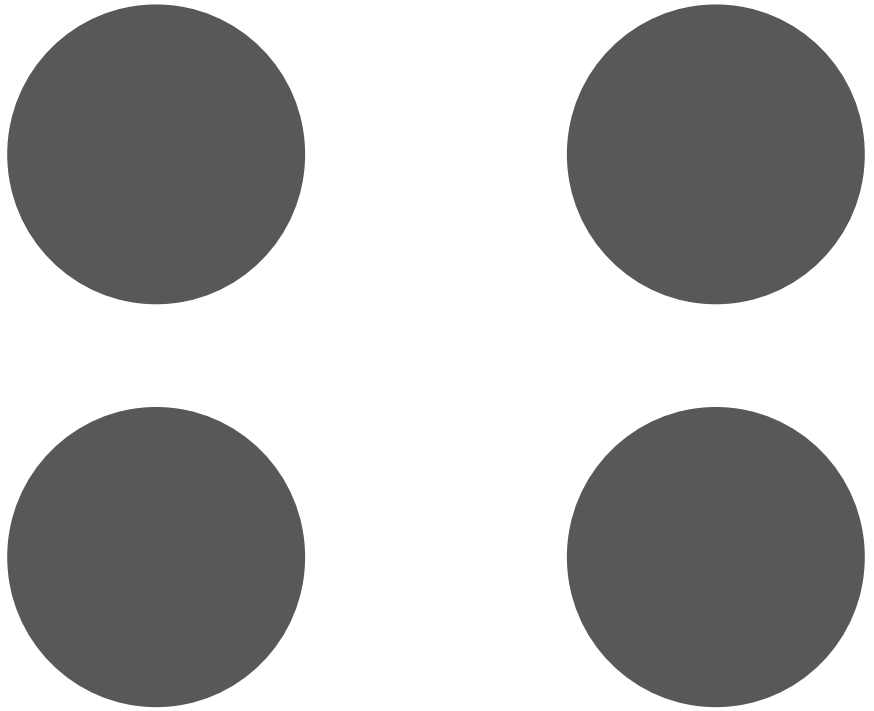
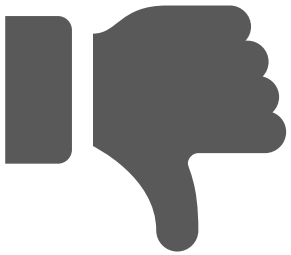
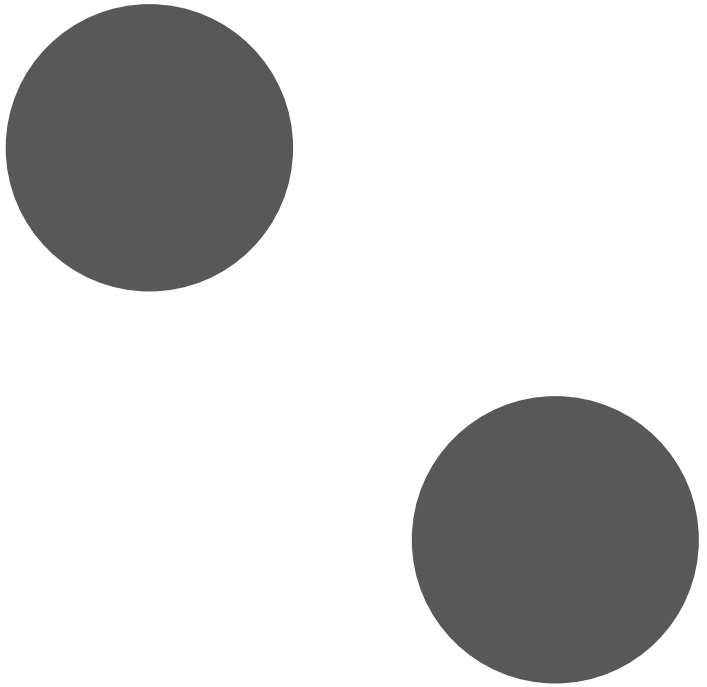
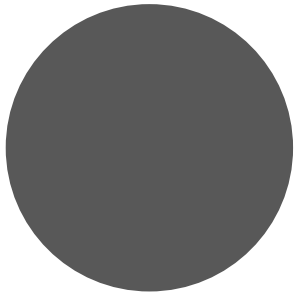
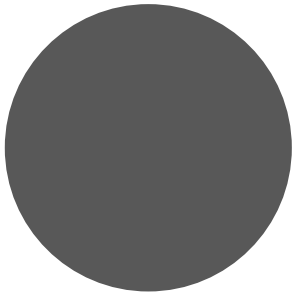


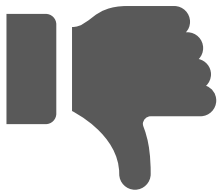


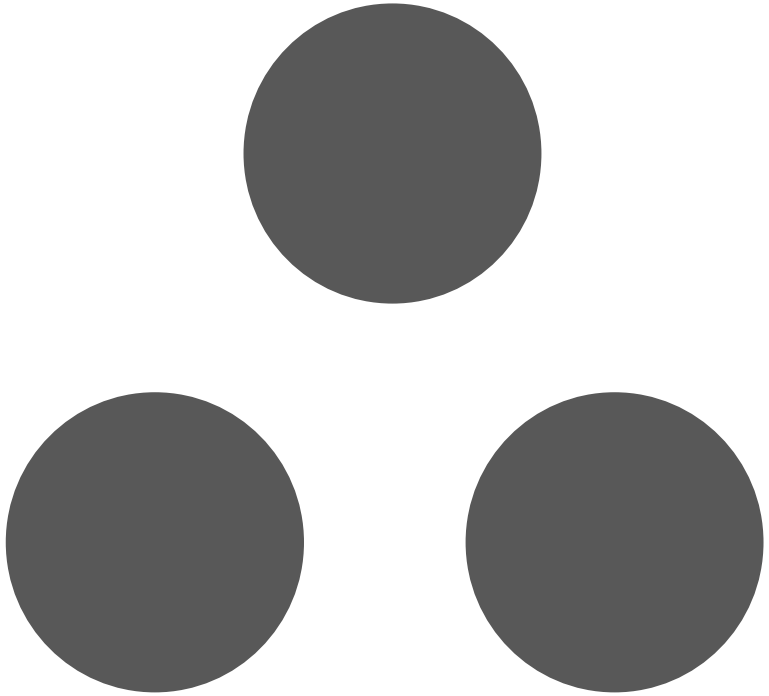


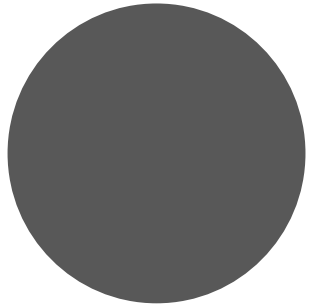


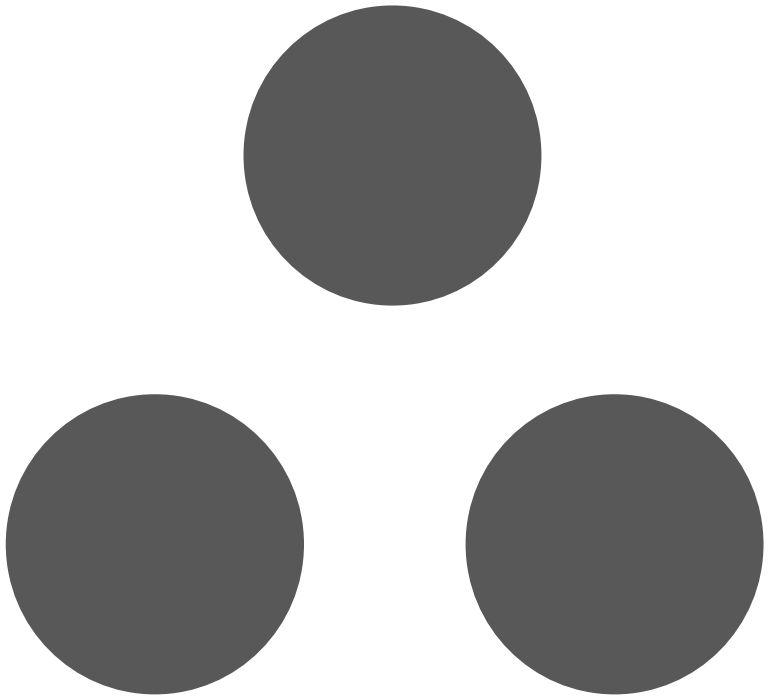


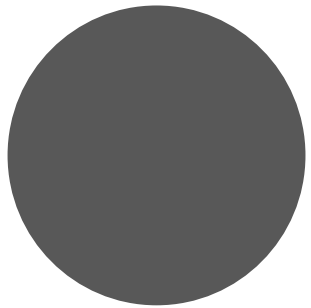


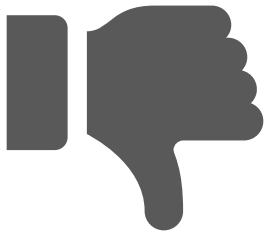


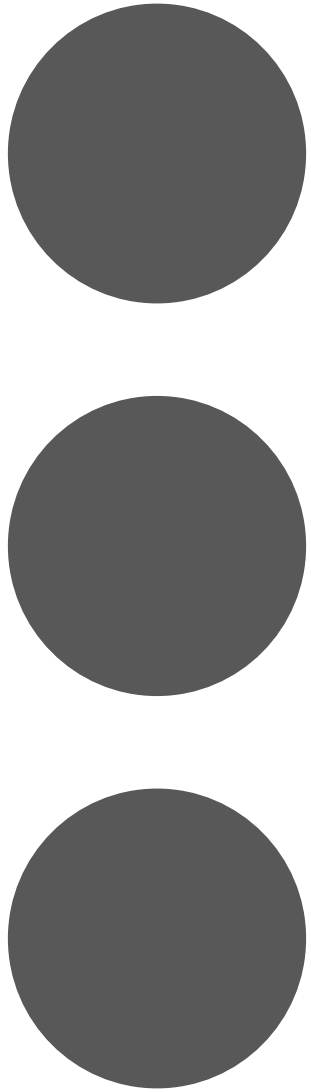


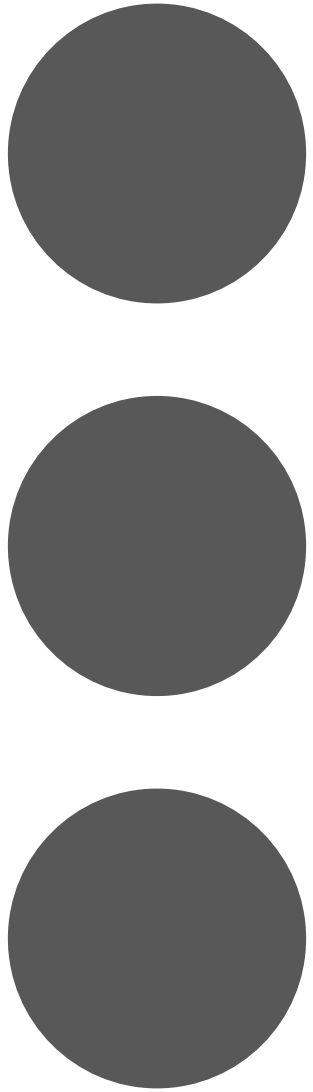






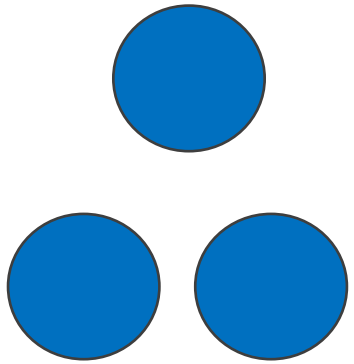


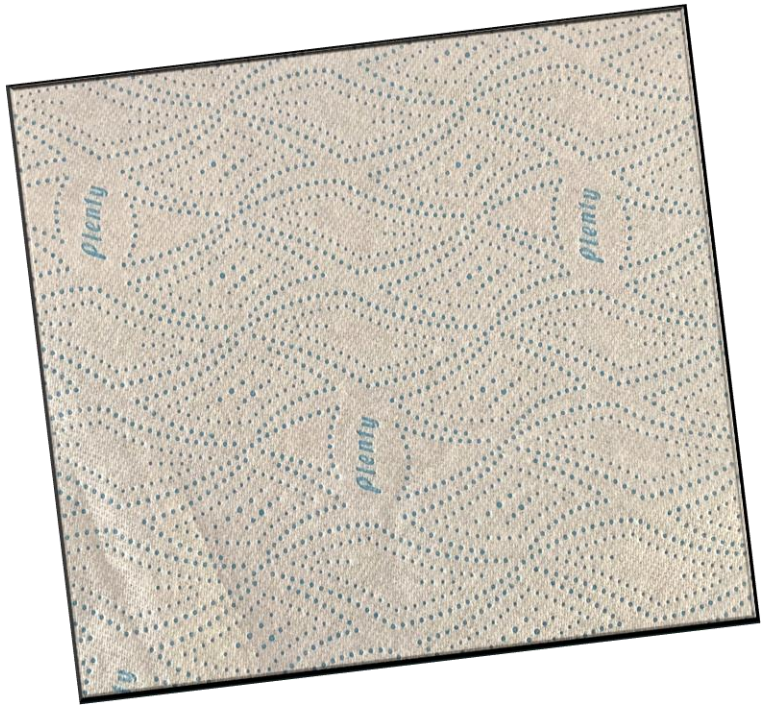




Play ‘3 or NOT 3?’ with counters

You will need 5 counters and something to cover them.





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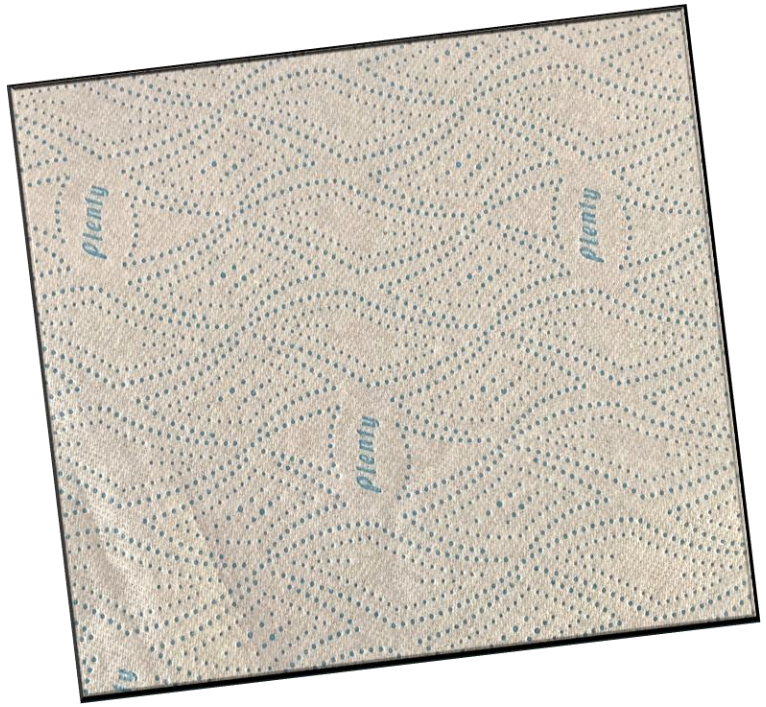
Hide some counters under the towel.



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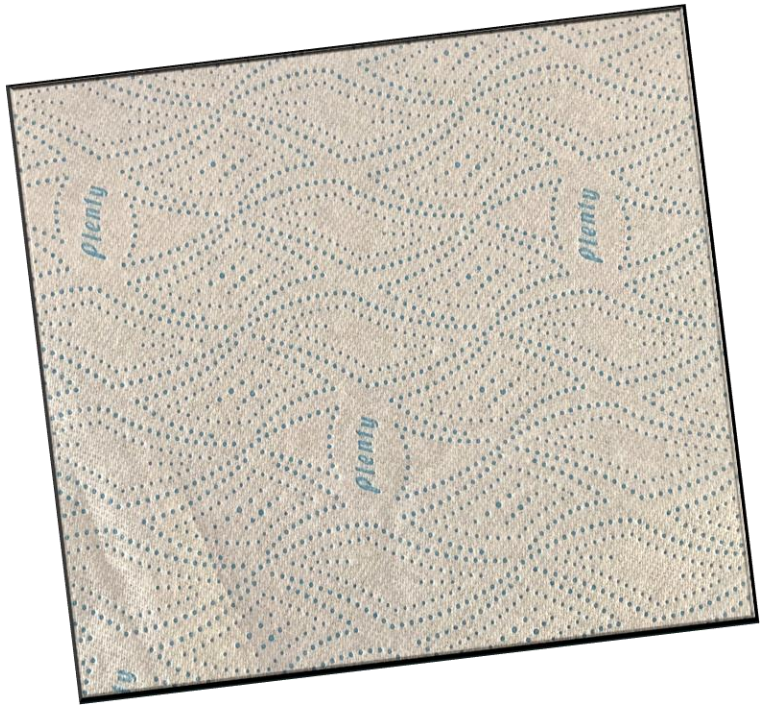
Reveal them quickly and ask your child…



3 or not 3?

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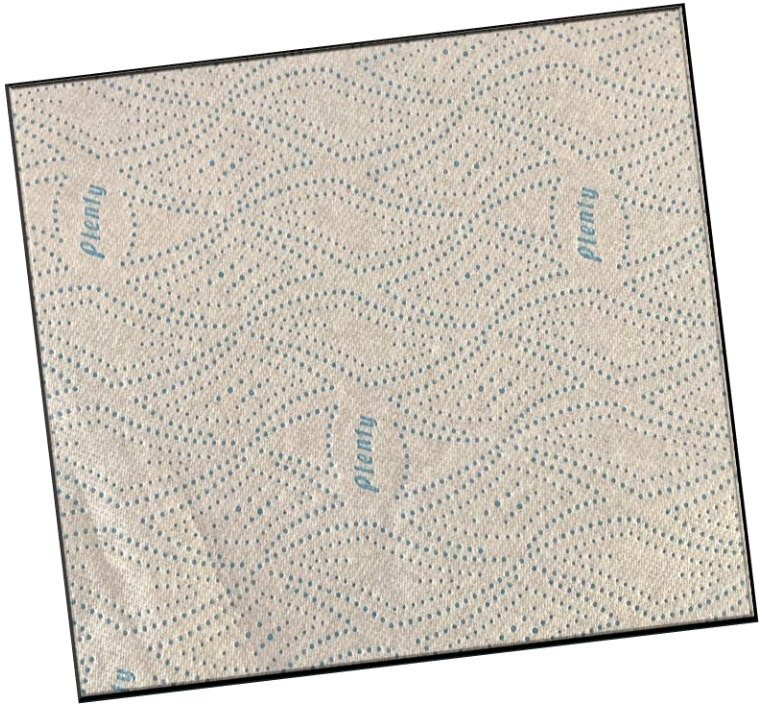
In Week 4, you will try this with different numbers…



4 or not 4?

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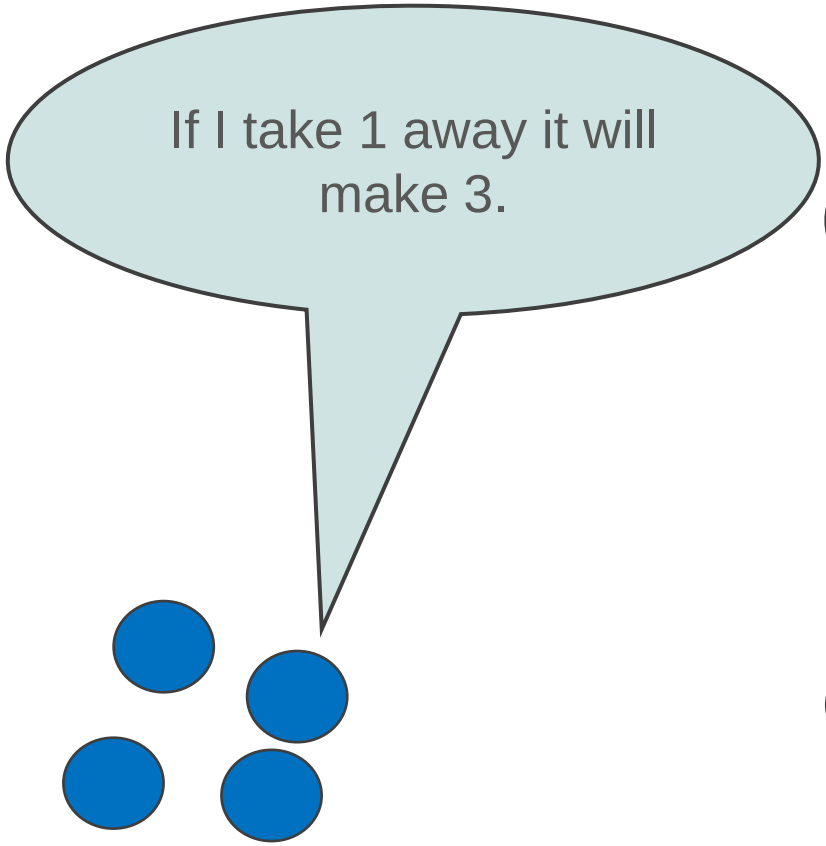
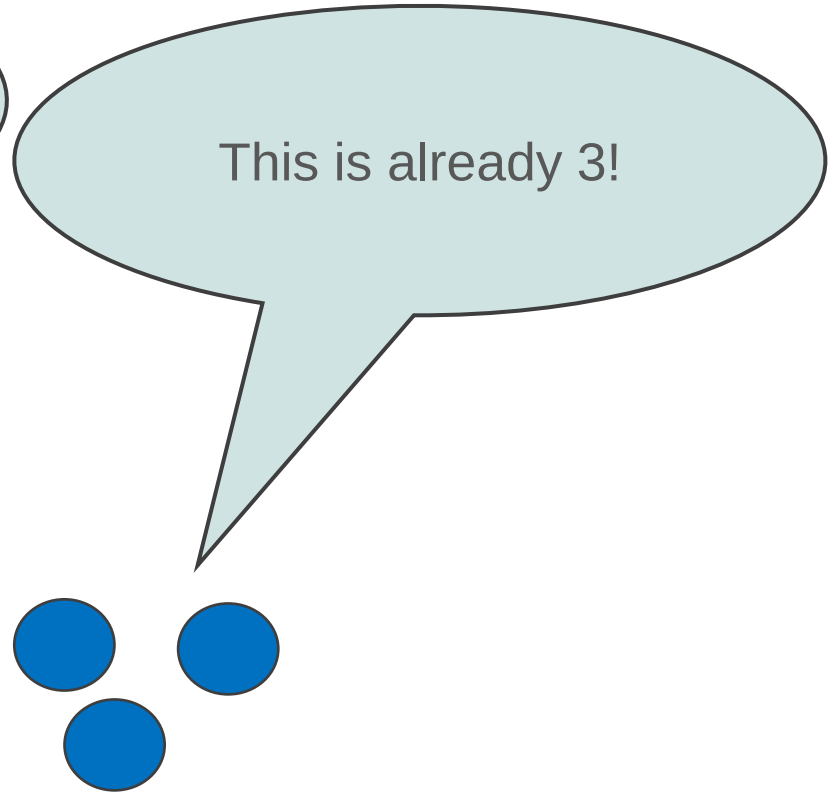
Now ask: ‘What do you need to do to make it 3?’





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Home Learning

You will be given the games you need for the home learning and some counters.

The home learning for each week is set out on a sheet with instructions. You will receive one week of activities at a time.

Please make sure your child's Home Learning pack is in school at the start of each week, so that we can put the new learning in for them to take home.

We will put the new week's learning into their packs each Monday. Remember to save your resources!

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Mastering Number at Home

Reception – Week 1

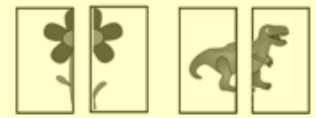
Play 'Subitising to 3 Snap'

(Monday, Wednesday and Friday)

How to play

- Cut out the subitising cards on the worksheet **'Subitising to 3 Snap'**.
- Place the cards face-down on a flat surface.
- Take it in turns to turn over 2 cards at a time. Say the numbers you see on each card.
- If the numbers are the same, the player taking the turn wins the cards. If the numbers are different, the player must turn the cards face-down again.
- The winner is the player with the most cards at the end of the game.

Play the 'Part–part–whole game'



(Tuesday and Thursday)

How to play

- Cut out the image cards on the worksheet **'Part–part–whole game'**.
- Place the cards face-up on a flat surface.
- Take it in turns to pick 2 cards that make a whole.
- Say, *"part, part"*, as you pick up the cards, and *"whole"* as you put them together to make the complete image.

Other things to try at home

Hiding games

Hide up to 3 objects, such as acorns, blocks or small toys, under a tea towel, or under your hand. Quickly reveal the objects, then hide them again, saying, *"How many?"* Can your child subitise the amount without counting?

Be '2-spotters'

Ask your child to spot things at home that there are 2 of. Some things are often found in 2s, such as shoes or socks, but we can have 2 of anything!

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We would love you to share your Home Learning with us!

Seesaw

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Early Learning Goal- Number

Children at the expected level of development will:

- Have a deep understanding of numbers 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 to 5 (including subtraction facts) and some number bonds to 10, including doubling facts

Early Learning Goal- Numerical patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the numerical pattern of the counting system
- Compare quantities up to ten in different contexts, recognising when one quantity is great 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

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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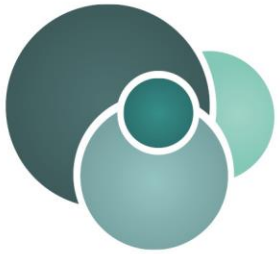
Thank you!



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