



# Numeracy in Reception

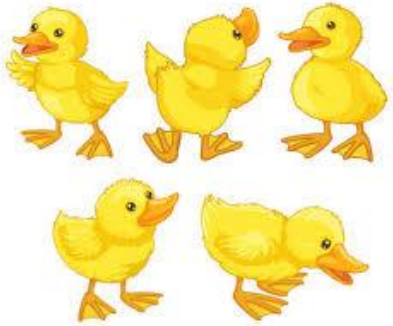
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DEVELOPMENT MATTERS

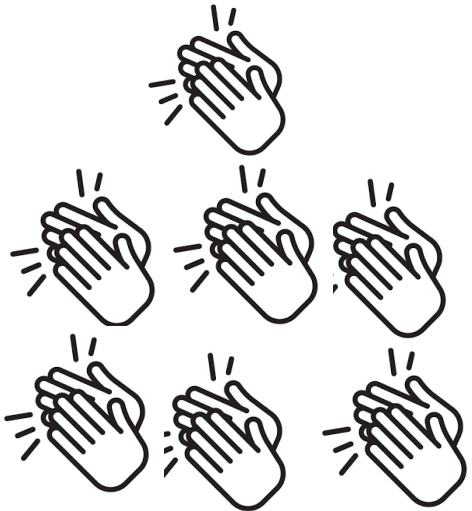
CLEVELAND ROAD PRIMARY SCHOOL'S PARENT WORKSHOP

# Count objects, actions and sounds

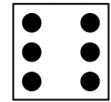
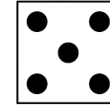
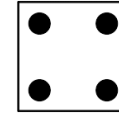
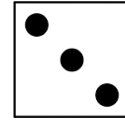
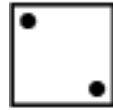
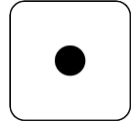
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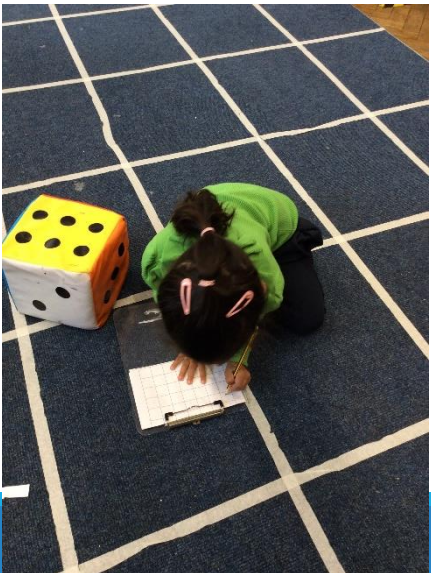
- Develop skills of counting and saying numbers in order and matching one number name to each item
- Before counting, say how many you think there will be; this gives a purpose to counting. “I think there are 6 ducks, shall we count and see?”
- After counting, say how many there are. For example, there are 5 ducks, that was 7 claps.
- Build counting into everyday routines such as: cleaning up, lining up, counting snacks etc.
- Sing counting songs and number rhymes, and read stories that involve counting.
- Play games which involve counting i.e. hide and seek
- Expose children to all forms of counting practice experiences



# Subitise – recognising numbers without counting



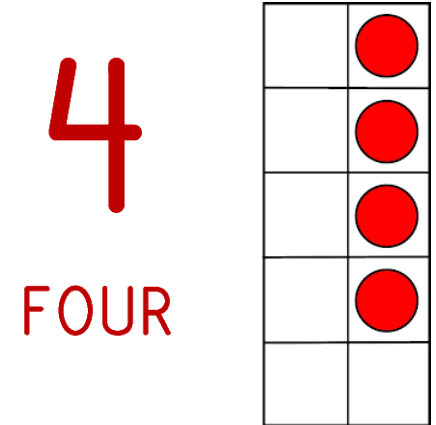
- Show small quantities in familiar patterns (for example, dice) and in random arrangements.
- Play games which involve quickly revealing and hiding numbers of objects.
- Put objects into five frames and then ten frames to begin to familiarise children with the tens structure of our number system.
- Ask children to subitise first: “I don’t think we need to count these because they are in a square shape, so there must be 4.”
- Encourage children to show a number on their fingers without counting it.



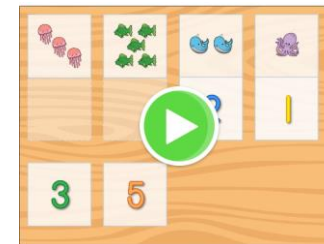
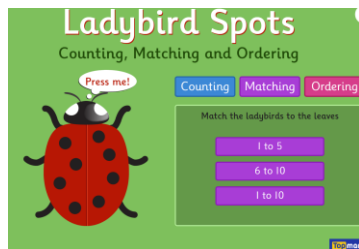
# Link the number symbol (numeral) with its cardinal number value



- Display numbers along side dot quantities or tens frame arrangements
- Play card games such as snap or matching pairs with cards, where some have numbers and some have a pictorial representation
- Discuss when we might record quantities i.e. scores in games, this could be done through tallies, dots and numbers



<https://www.education.com/game/number-pictures-matching/>



<https://www.topmarks.co.uk/learning-to-count/ladybird-spots>



# Count beyond ten

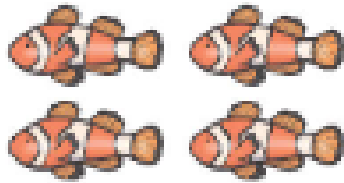
- Count verbally beyond ten, beyond twenty – pausing at each multiple of ten to draw out the structure. This could be done when for example when: walking up and down stairs, walking on the pavement, playing hide and seek.
- Provide images such as number tracks, calendars, hundred squares, so children become familiar with 2-digit numbers and can start to spot patterns within them.



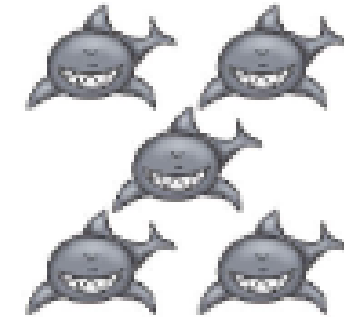
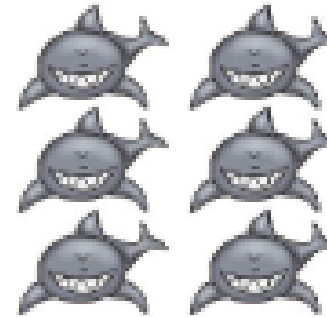
| OCTOBER 2022 |        |               |           |               |        |                            |
|--------------|--------|---------------|-----------|---------------|--------|----------------------------|
| Sunday       | Monday | Tuesday       | Wednesday | Thursday      | Friday | Saturday                   |
| 2            | 3      | 4             | 5         | 6             | 7      | 8                          |
| 9            | 10     | 11            | 12        | 13            | 14     | 15                         |
| 16           | 17     | 18            | 19        | 20            | 21     | 22                         |
| 23           | 24     | 25            | 26        | 27            | 28     | 29                         |
| 30           | 31     | November 2022 |           | November 2022 |        | Calendar by: workbooks.com |



# Compare numbers



4 is more than 2



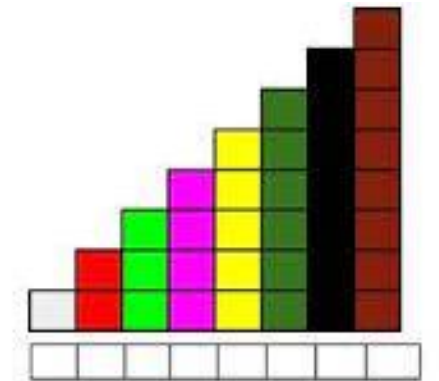
is

- Use vocabulary such as: more than, greater than, less than, fewer than, the same as, equal to and encourage children to use them too.
- This could also lead to discussion about fairness, for example hand out snacks whilst counting and make deliberate mistakes. Encourage the children to correct you and ensure the snacks are handed out fairly.

# Understand the relationship between consecutive numbers: $1+ / 1-$

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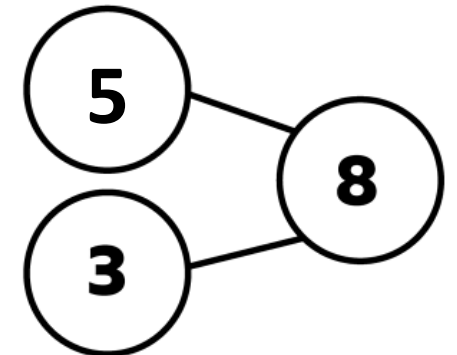
- Discuss outcomes if one more is added, one is taken away. This could be done during counting songs i.e. five little ducks.
- Show how one more increases the value of a number using dots, staircase patterns.



# Composition of numbers to 10

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- Focus on composition of 2, 3, 4 and 5 before moving onto larger numbers
- Share visual models of numbers: for example, six as double three, the fingers on one hand and one more or as four and two with ten frames images.
- This helps with subitising i.e. there are three here and three there, this must be six.
- Emphasise parts of a whole: Part, Part, Whole. There are 8 eggs. 3 have hatched and 5 have not hatched.
- Plan games which involve partitioning and recombining. For example: throw 5 beanbags, aiming for a hoop. How many go in and how many do not?

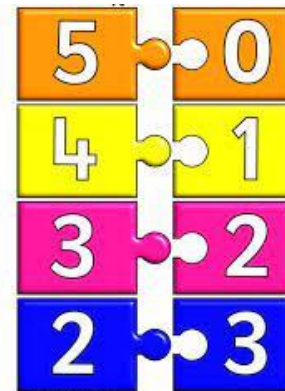
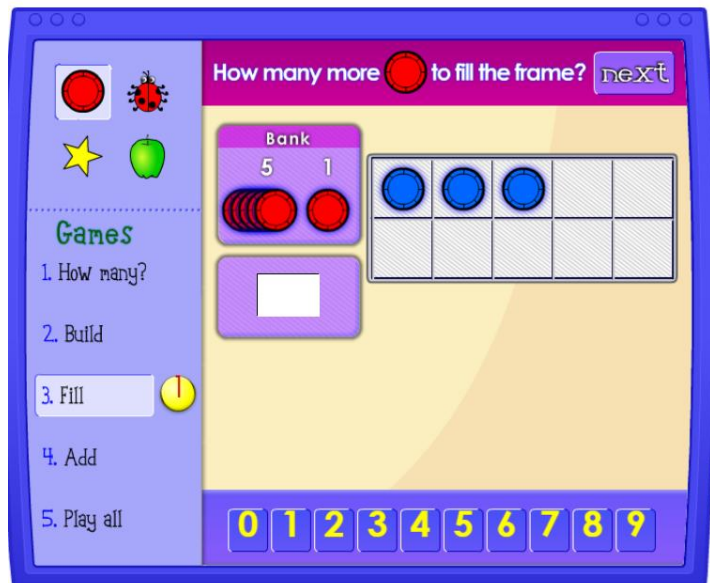


# Number bonds 0-5 and then to 10



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## Ten Frame



# Develop spatial reasoning: select, rotate and manipulate shapes

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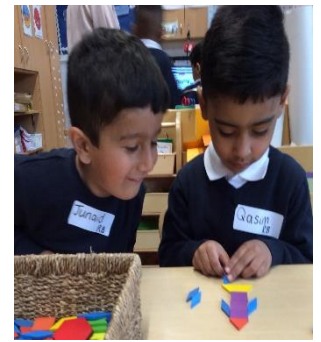
- Challenge children to copy increasingly complex patterns and pictures, 2D and 3D. Ask: “Can you add a staircase to that?” “Try adding an arch to this,” “What would happen if I turned this around?”



- Teach children how to solve a range of jigsaws of increasing challenge

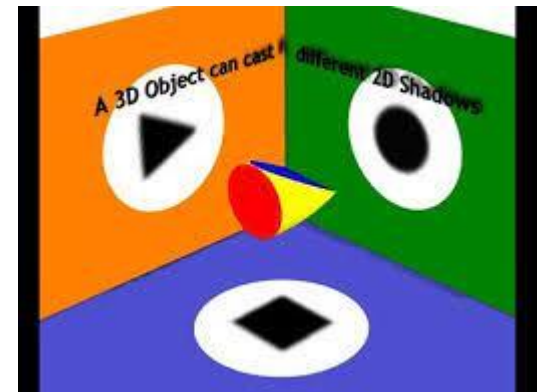


# Compose and decompose shapes



This helps children see that shapes are built just like numbers, with more shapes within it.

- Investigate combination of shapes and how they make new shapes. “I wonder what will happen if I put this square and triangle together like this. What do you see now?”
- Encourage children to predict what shape will be made when paper is folded
- Wonder out loud to set challenges: “I wonder how many ways I can make a hexagon with pattern blocks...”
- Find 2D shapes within 3D shapes, including through printing and or shadow play



# Continue, copy and create repeating patterns

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- Make deliberate mistakes and encourage the children to correct them

# Compare length, weight and capacity

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Model comparative language using 'than' and encourage children to use this vocabulary. For example: "This is heavier than that." "He is taller than me." "The \_\_\_\_\_ is lighter than the book."

Ask children to make and test predictions. "What will happen if we pour all of the tea from the teapot into the cup? What will happen if we pour the tea in to the pot? Which one holds more? Which holds less?"

