

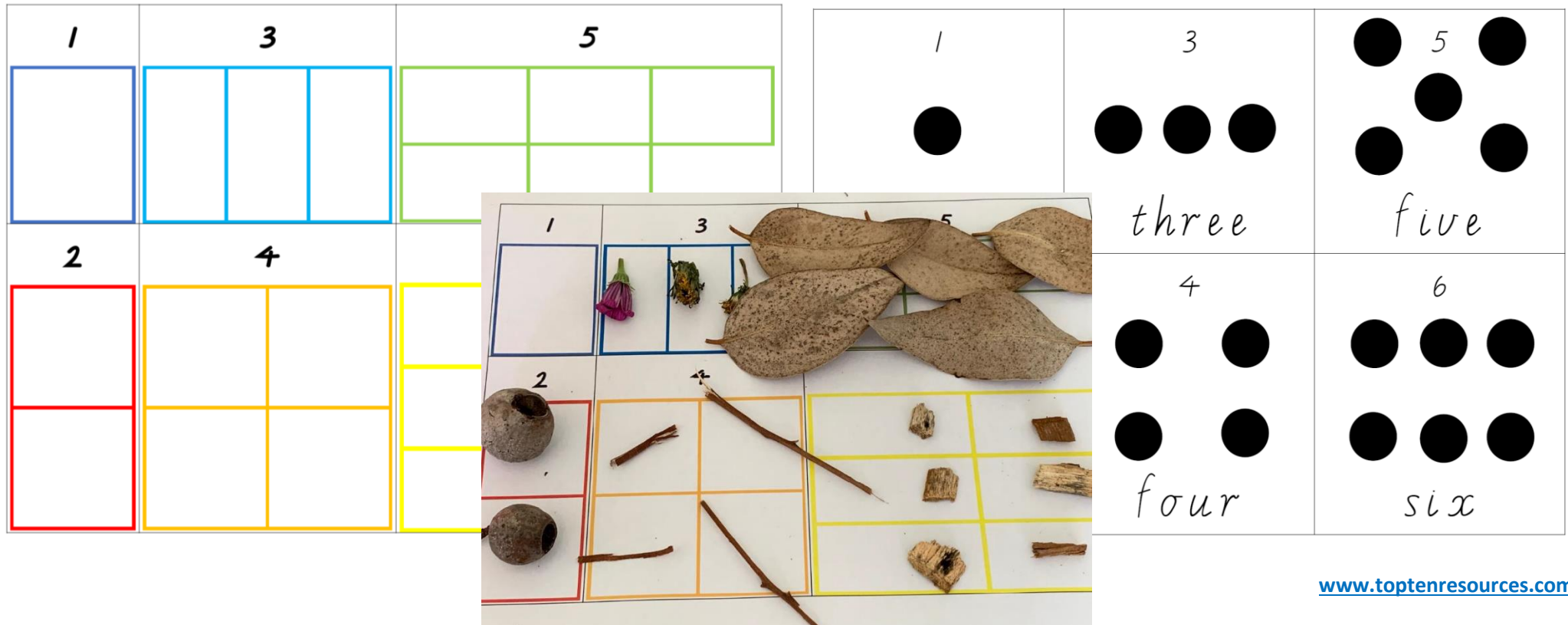
# Recommended sections of the New Early Years Pack to send home for Hands-on Maths Practice

## Home Learning for Students with Parents

### Kindergarten

Counting Frames 1 to 6 set from *Pack A – Unit 2 – Templates Folder*

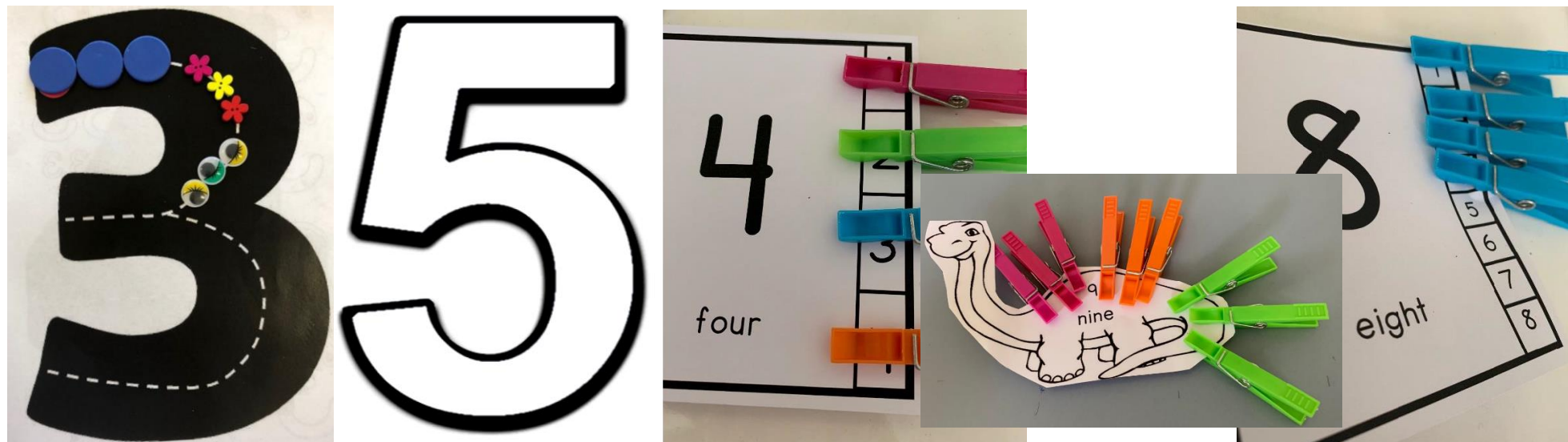
Also used for Nature Counting, *Pack A – Unit 3 – Lesson 11*



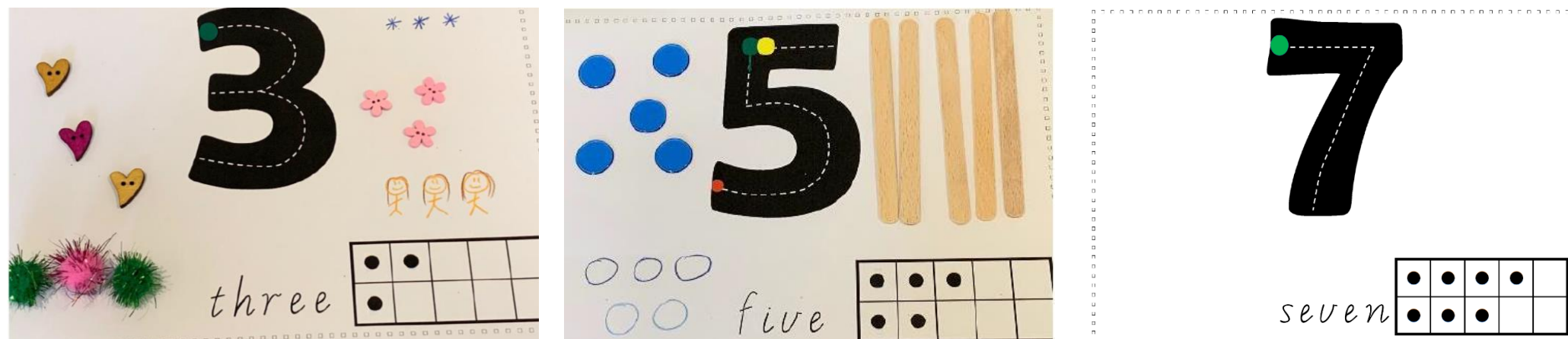
Digit Craft templates set, *Place Value Pack A – Unit 2 – Pages 16 to 28 (Templates on pages 22-28)*

Digit Roads set, *Place Value Pack A – Unit 4 – Lesson 1 and Digit Roads in Templates Folder*

Clip and Count Cards and Dinosaurs, *Place Value Pack A – Unit 3 –Pages 26 to 29 and Templates Folder*



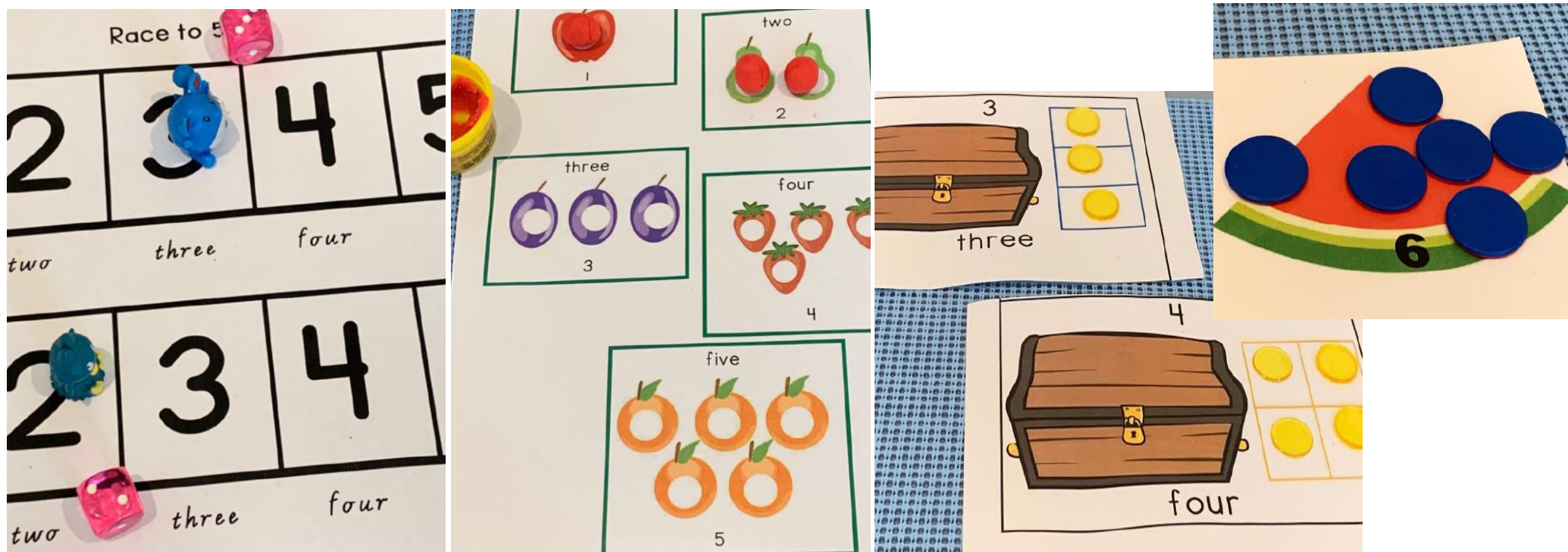
My Number Book – *Place Value Pack A – Unit 2 – Page 29 and My Number Book Templates Folder*



**Race to 5 template – Place Value Pack A – Unit 2 – Lesson 7 and Race to 5 Templates Folder**

**The Very Hungry Caterpillar – Place Value Pack A – Unit 2 – Lesson 8 and Caterpillar Templates Folder**

**Counting Mat Templates – 6 different sets in Place Value Pack A – Unit 2 – Counting Mat Templates**



For race to 5, students and parents could use scrunched up post-it notes in a cup that have '1,' '2' and '3' written on each, instead of dice.

For the counting mats, students can use Play-Doh, Lego pieces, mini figurines/shopkins, dry pasta, rice, sterilised coins – any everyday items from around the house.



# Home Learning Partnerships Mini Booklet – Place Value Pack A – Unit 2 – Templates Folder

## How to Help Your Child Learn to Count at Home

Dear Parents, Grandparents and Guardians,

During the first term, one of our major focuses for maths is counting. Even if your child may be able to recite the numbers up to 20 or even to 100, we will be focusing on developing your child's deep understanding of the numbers up to 10. For example, that 3 and 4 makes 7; 7 is one more than 6 and one less than 8; 7 and 3 more makes 10; and so on.

We have provided a short list of easy and fun crafts you can create and games to play with your child at home to support their learning in the classroom this term.



### Pipe cleaner counting

**Materials:** Pipe cleaners and beads (Officeworks, Spotlight).  
**How to use:** Use these to practise counting, with the numbers written at the top of each pipe cleaner.

Children can focus on one particular number, such as 5, figuring out all the ways to make it. For example, push 2 beads to the bottom and keep 3 at the top, "3 and 2 makes 5." Turn the pipe cleaner around. "2 and 3 makes 5." Push another bead to the bottom. "1 and 4 makes 5."

Also use these for subtraction. For example, start with the '4' pipe cleaner with all beads at the top. Show 4 take away 2 by pushing 2 beads down. "4 take away 2 leaves 2 at the top."



### Counting Jars

**Materials:** Glasses or jars of any type.  
**How to use:** Create collections of objects and count them. Put the glasses in order, as shown in the photo. As an extra challenge, combine two jars as an addition problem (the 4 jar with the 2 jar), what's the total?



### Secret Socks

**Materials:** Socks and marbles (or any small objects).  
**How to use:** Create a collection of mystery socks. First, ask your child to estimate how many are in the sock by feeling it. Then tip out the objects and count them. Use 'tap and say,' touching each marble as they say the next number. Finally, arrange that number so it is easy to see. We call this using 'super hero maths eyes,' so children start to see small collections without even needing to count them. This is shown in the photo, with four gem stones arranged in the exact same way four looks on a 6-sided die.



### Home Hopscotch

Children jump through a home hopscotch, counting as they land on each digit. To make the hopscotch more challenging, just draw dots on each landing spot (in the way the numbers are shown on dice) or write the names of the numbers in words (one, two, three). The hopscotch squares can be made from cardboard inside or chalk outside.



### Feed the Frog!

Children feed frogs or any other bug made using craft materials. This can include a shark made from a cardboard box or a rock monster (a big box with googly eyes) that eats pebbles from the backyard. Children can be asked to feed a number to their creature or roll a 6-sided die to decide their creature's dinner.

### Clothespeg Counting

Clip the matching number of pegs to Uno or playing cards that show each digit. This may seem simple; however, it is a critical foundational skill for the first year of school – matching digits to quantities. As an extra challenge, make your own cards that just show the names of the words (one, two, three). Assist your child to count the matching number of pegs and write the matching digit onto each card.



We have also attached a set of our digit roads, which use a traffic light system (green for go) to show where to start each digit and its correct formation. All digits start from the top and go down (not from the bottom). This is the same for the letters of the alphabet. One exception is 5, where students start with the neck, make its belly then add on its hat. It is common for students to reverse their numbers during the first year of school, but with practice we aim for all students to be correctly forming all digits as soon as possible. This ensures students have the best chance to create excellent muscle memories and foundational skills.

Our classroom digit songs are copied here:

- 0: Around and around we go to make zero!
- 1: Start at the top and down you run for one!
- 2: Curve around and slide to the right.
- 3: Around the tree and around the tree, just like a 'B' for three!
- 4: Make an 'L,' then cut in half!
- 5: Neck, belly, hat!
- 6: Curve it down like 'C' and curl it up.
- 7: Slide to the ride and slant it down.
- 8: Make an 'S' and close the gate for eight.
- 9: A loop and a line to make nine.

We greatly appreciate your help and continued partnership in your child's learning journey.  
**Thank you!**

Written by Primary Mathematics Leaders (topenresources.com)

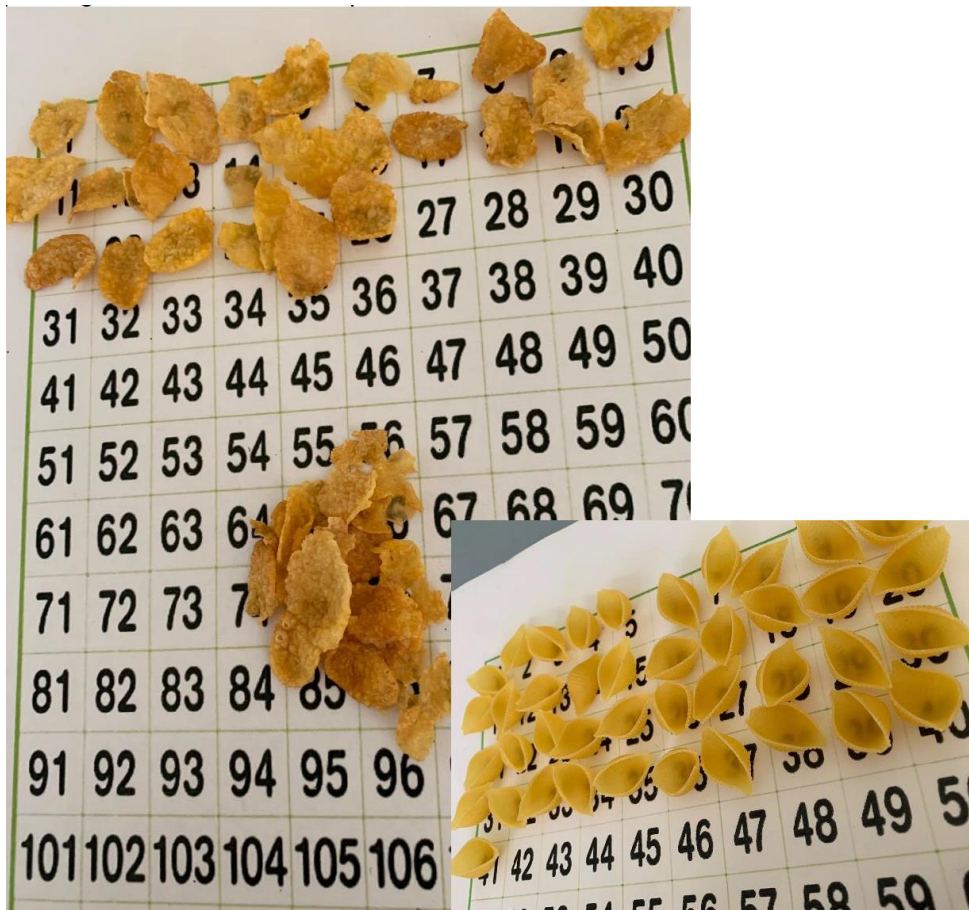
Written by Primary Mathematics Leaders (topenresources.com)



# Year 1

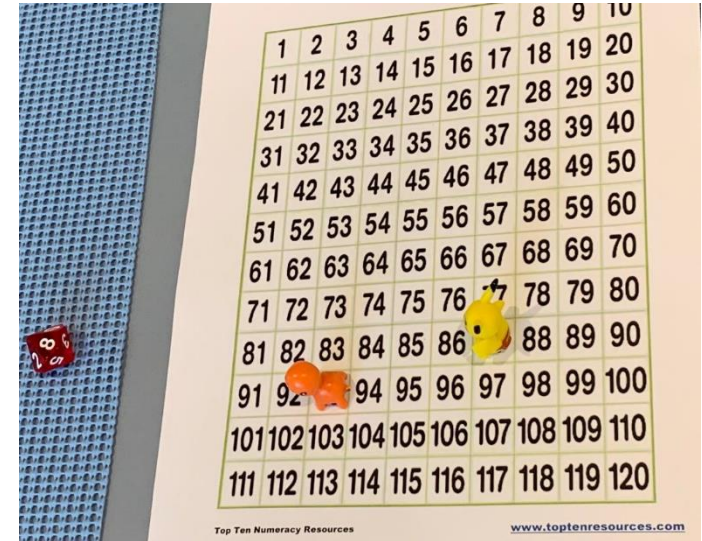
120 Chart and examples of counting at home – *Place Value Pack B – Unit 11 – Lesson 5* (Pages 23 to 29)

Race to 120 game with 2 characters (Lego figurines or similar) and a 10-sided die – *Place Value Pack B – Unit 11 – Lesson 7* (Pages 34 to 37)



For extension,  
multiply two rolled  
dice, then add that  
total to your  
current position.

Make 'what 100  
looks like' bags!



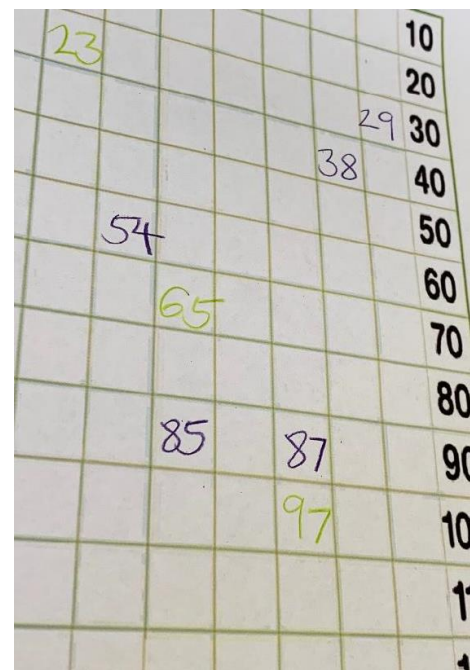
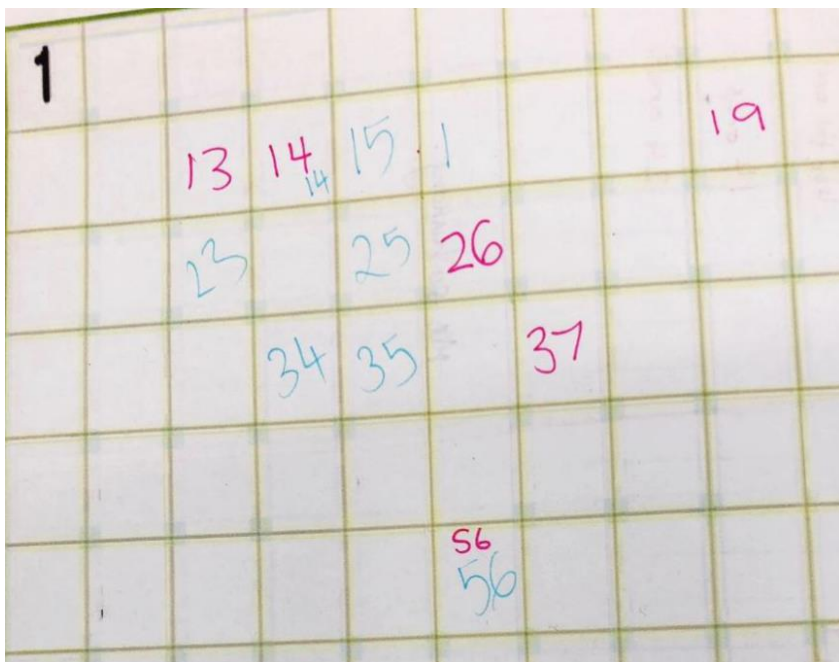
Estimate your collection before you count it on  
the 120 chart. Say and write the total in tens  
and ones, "4 tens 5 ones, forty-five!"



## Blank 120 Chart Connect 4

*Place Value Pack B – Unit 12 – Lesson 12*

*Templates follow the lesson plan (Pages 83 to 88)*



Roll two dice and make a tens-ones number. Then place your number in the correct position on the blank 120 chart, aiming to connect 4 numbers with your colour before your partner connects 4 of theirs. You can connect 4 vertically, horizontally or diagonally.

For extra support for the first few games, write the tens down the final column.

For extension, roll 4 dice and make a number sentence to create a total. For example,  $6 \times 4 \times 4 \div 3 = 32$

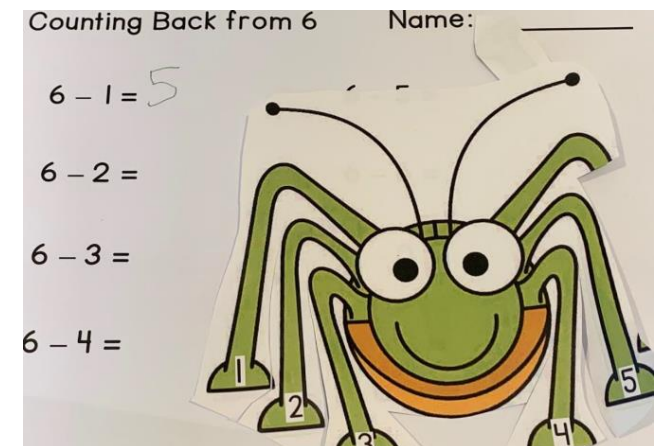
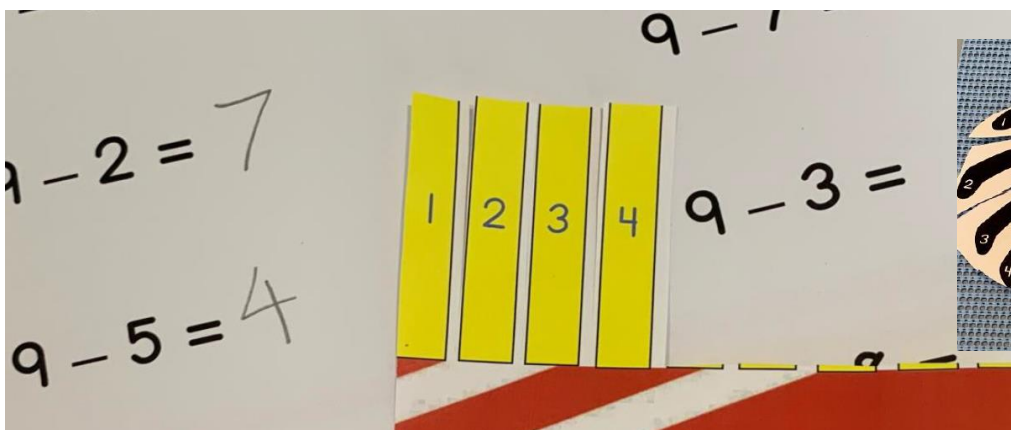
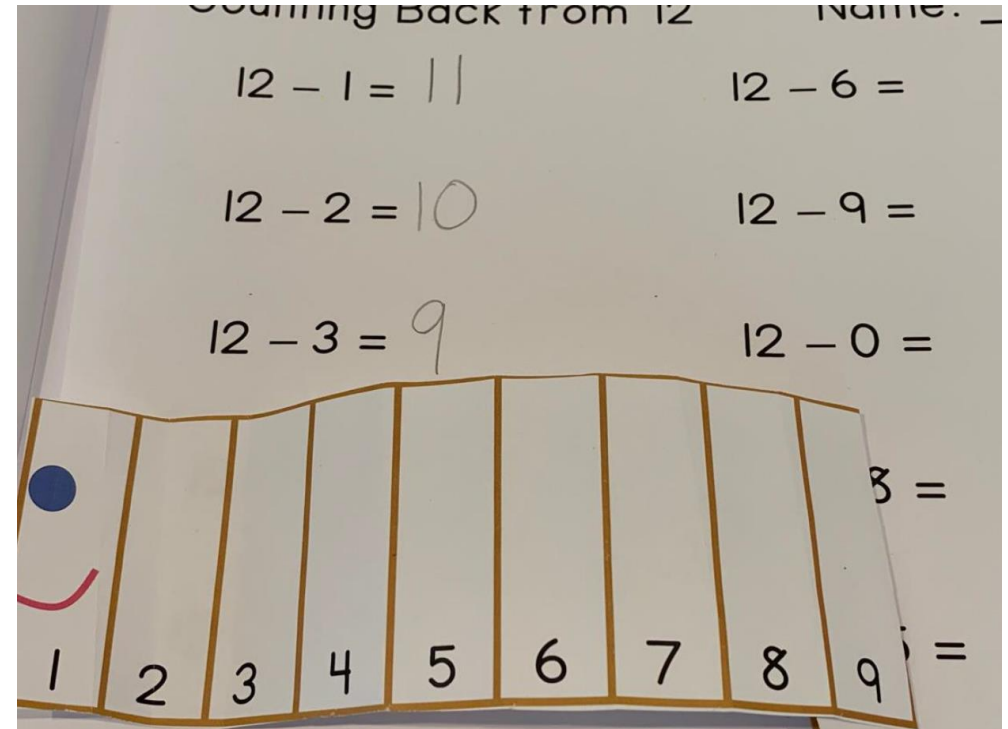
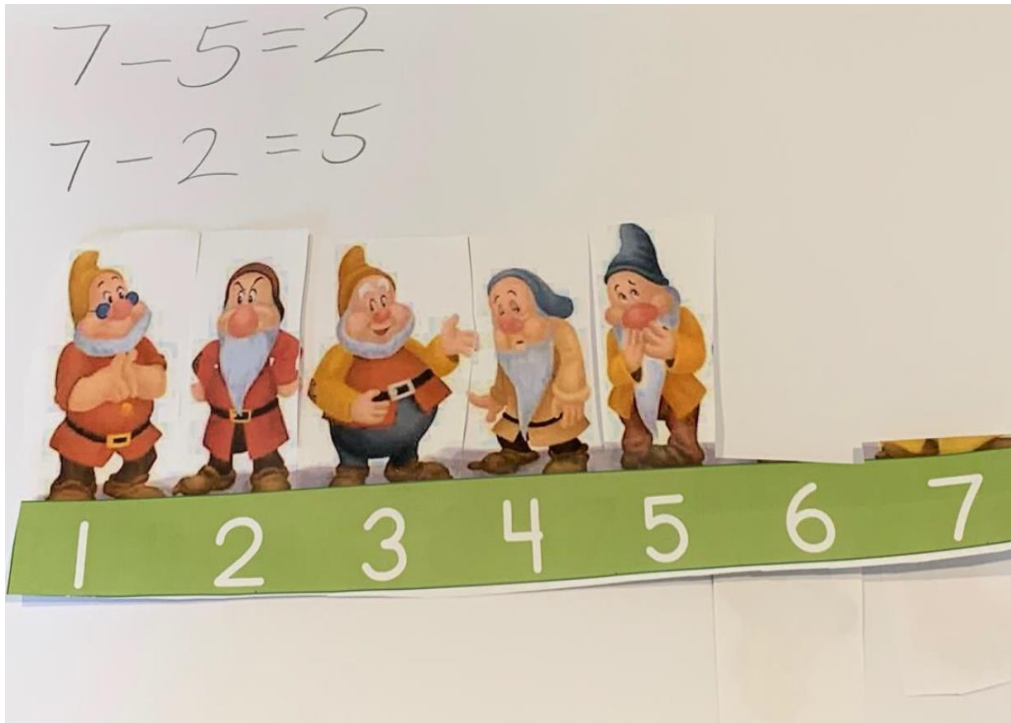
For extra extension, there is a larger version (421 to 540) and a decimal version (0 to 1.20) on the final pages of *Place Value – Pack B – Unit 12 (Pages 86 to 88)*.



## Counting Back Foldables and Recording Templates

### *Subtraction – Unit 2 – Pages 8 to 14 – Counting back foldable templates from Templates Folder*

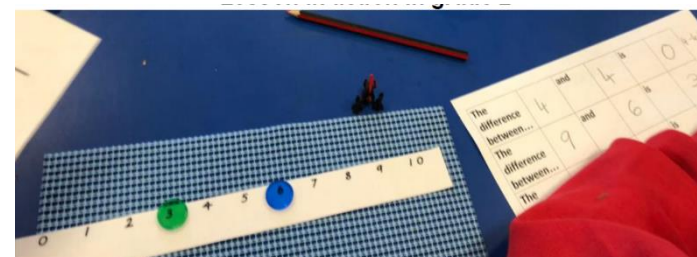
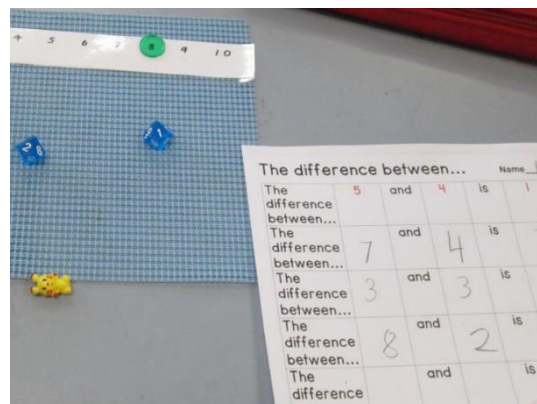
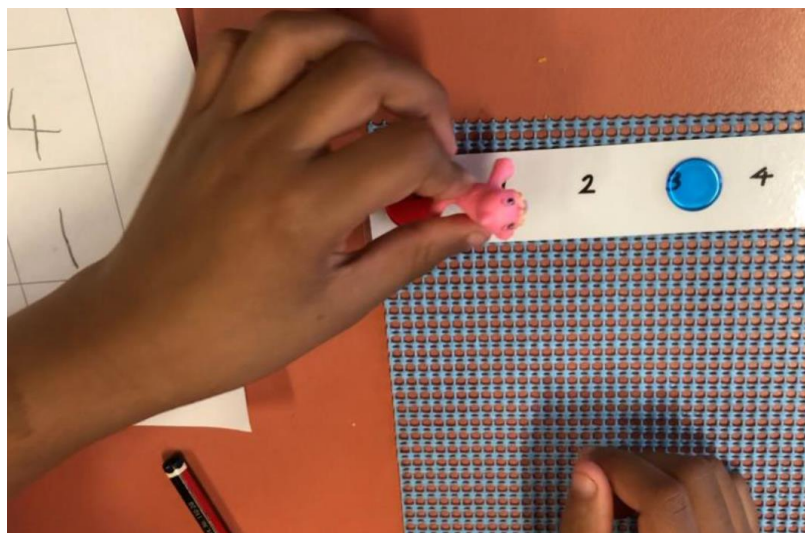
Series of 12 kinaesthetic foldable templates with recording sheets:



## Year 2

### Difference between platform jumps on a 0-10 number line

#### Subtraction Unit 4 Difference Between – Lesson 1 (Pages 11-19) and the 0-10 number line template



Put two counters or coins on the number line. Jump a character to figure out the difference between the two numbers. Record using the *difference between recording template*. Think of it as 'Mario' jumping from platform to platform – how far does he need to jump to reach the other number?

For extension, put counters on the 120 chart and figure out the difference between two 2-digit numbers by jumping the tens and stepping the ones. For example, for  $96 - 65$ , start from 65, jump forward 3 tens and step 1 forward, so the difference is 31! Often, a great strategy to solve a subtraction is to 'jump the difference.'

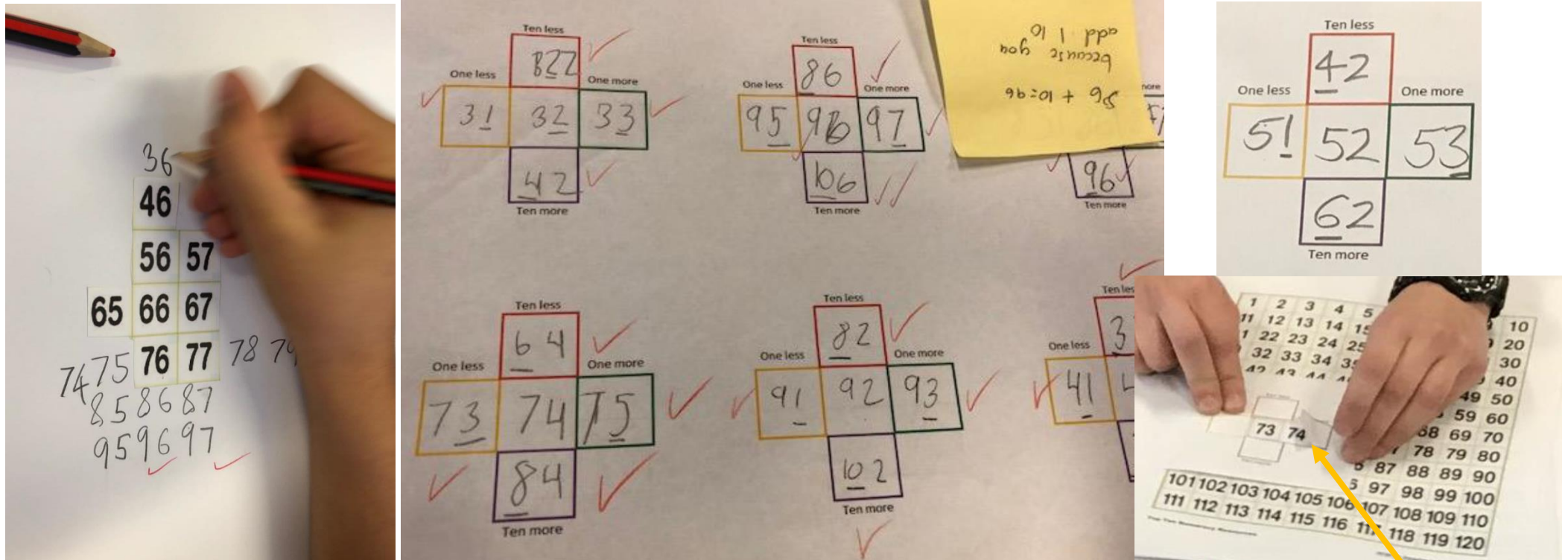




# Ten More and Ten Less

***Ten More, Ten Less Extension Templates from Pack A – Unit 8 – Templates Folder***

Cut out part of the 120 chart and write the numbers that would go around it (ten more, ten less):



Roll a two-digit number, then figure out ten more and ten less of it. You can cut out the template using scissors so that it pops up like a place value 'hide-and-seek flap' on top of the 120 chart (see photo).

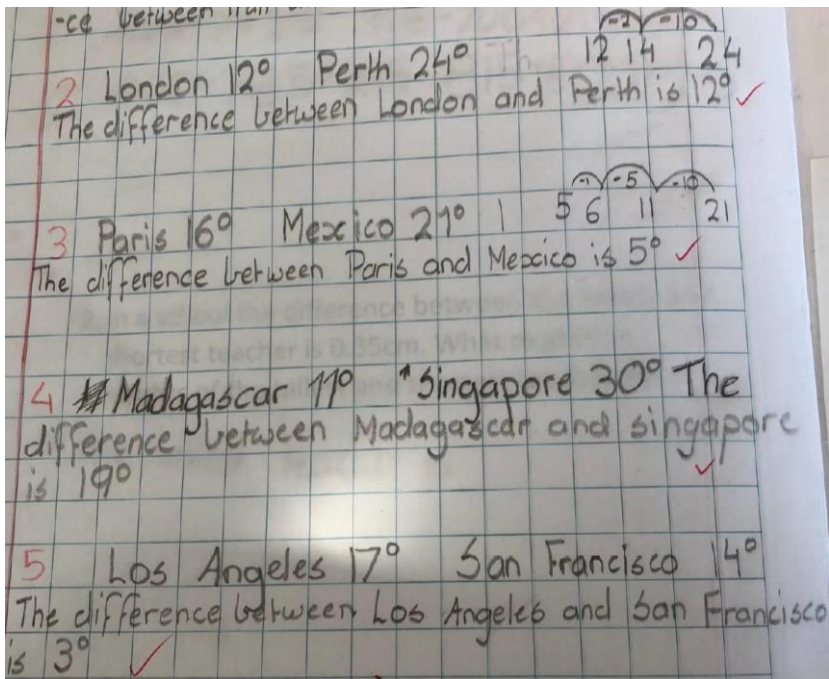
Focus on and underline which place value is changing when you add or subtract ten, and which place value stays the same. Do you notice a pattern?

## Difference Between Temperatures

### Subtraction Unit 4 Difference Between

#### Lesson 8 (Pages 37 to 41)

Use Google to research temperatures around Earth, plotting these on a map and also recording the difference between two cities at a time:

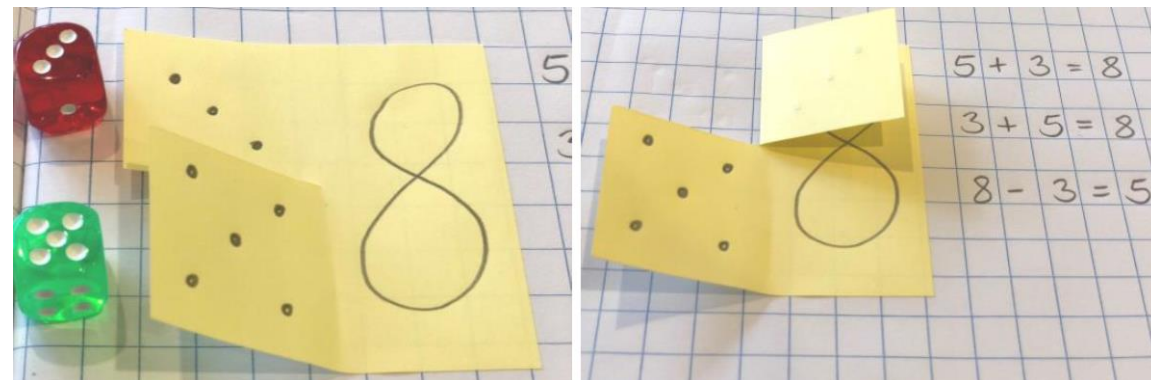
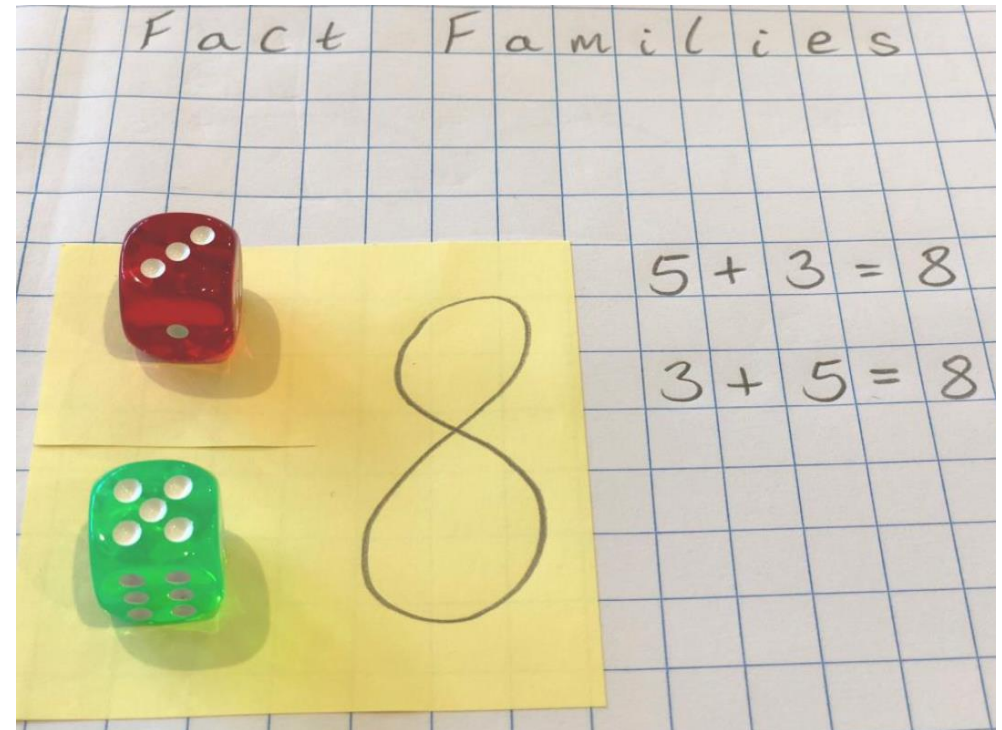


For extension, focus on parts of the world that have negative (below zero) temperatures.

## Post-It Note Fact Families

### Subtraction Unit 7 Fact Families

#### Lesson 2 (Pages 13 to 17)



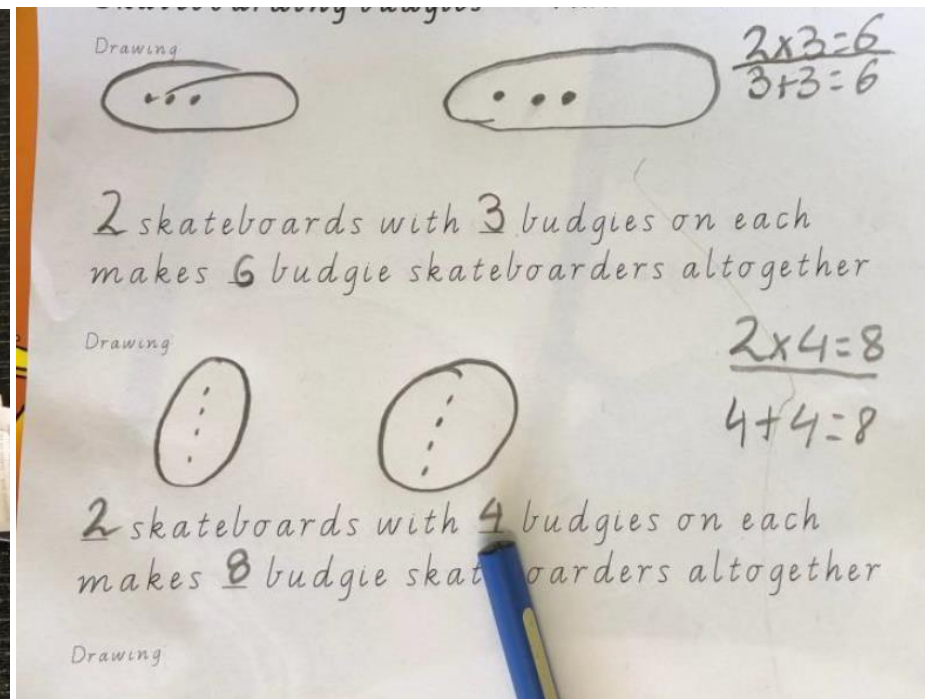


## Skateboarding Budgies and Surfing/Sledding Dogs, Multiplication Unit 1 Equal Groups – Pages 16 to 22

**Visual recording templates in Multiplication Unit 1 Templates Folder:** Make equal groups on skateboards, surfboards or snowboards using teddies. Draw and write these in number sentences on the templates. Search YouTube clips on 'surfing dogs,' 'skateboarding budgies' and 'snowboarding dogs' first.



Snowboard Dogs Equal Groups Name: \_\_\_\_\_



Skateboarding Budgies Equal Groups Name: \_\_\_\_\_



## Real-Life Arrays

### Multiplication Unit 4 Partitioning Arrays – Lesson 7 (Pages 34 to 38)

Make arrays using food items, recording the repeated addition and multiplication number sentences.

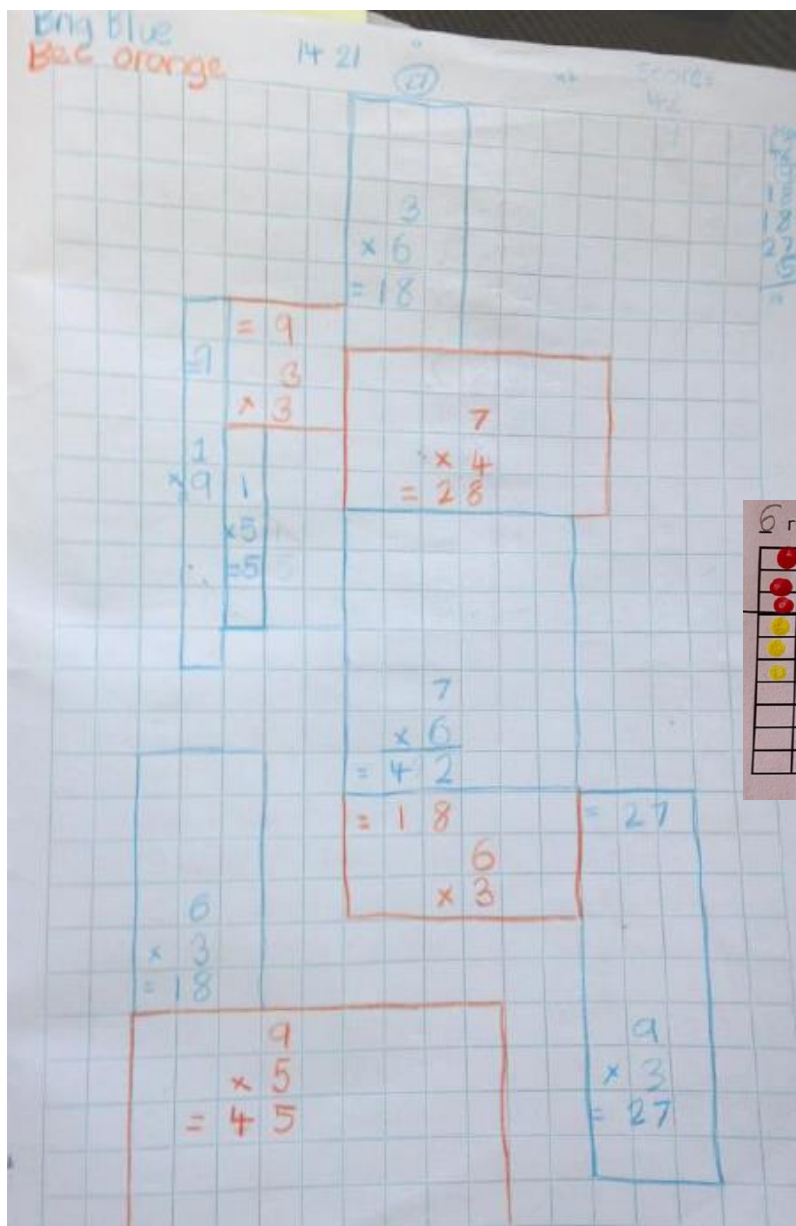
Always record the rows first:  
3 rows of 4,  $3 \times 4$

Brainstorm 5 different ways to solve this array.

Use string to break it into parts (partition it) lots of different ways.



## Array War, Multiplication Unit 4 Partitioning Arrays – Lesson 12 (Pages 52 to 53)

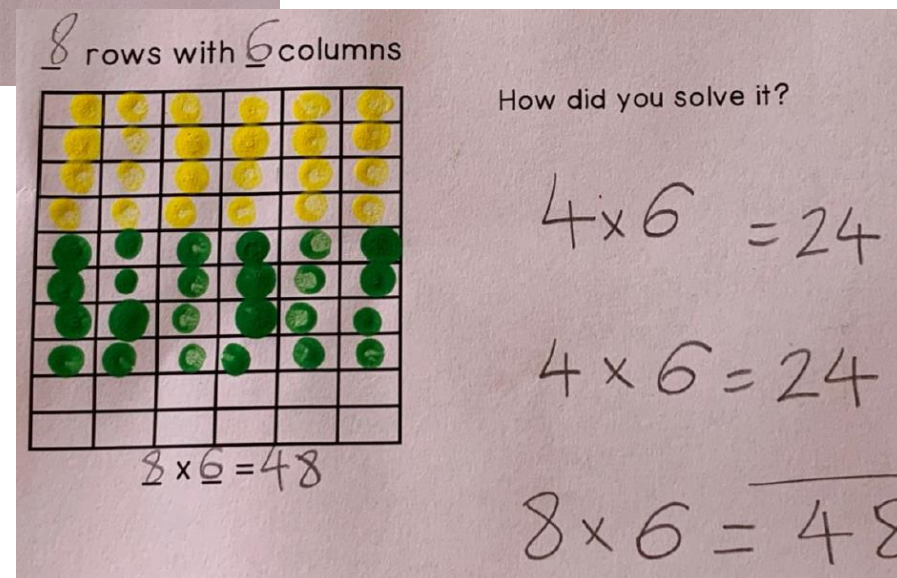
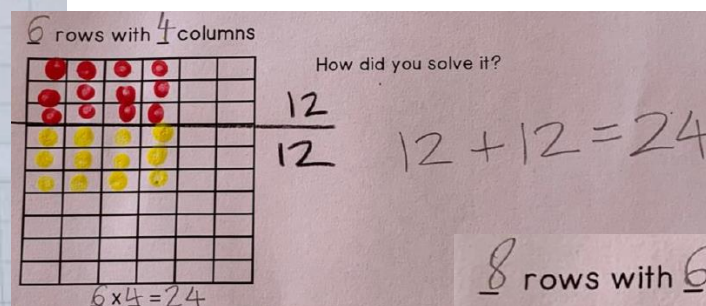


Send home grid paper or take home your maths 1x1cm grid book. Roll dice and draw that array. For example, if you rolled 5 and 6, draw an array of 5 rows of 6.

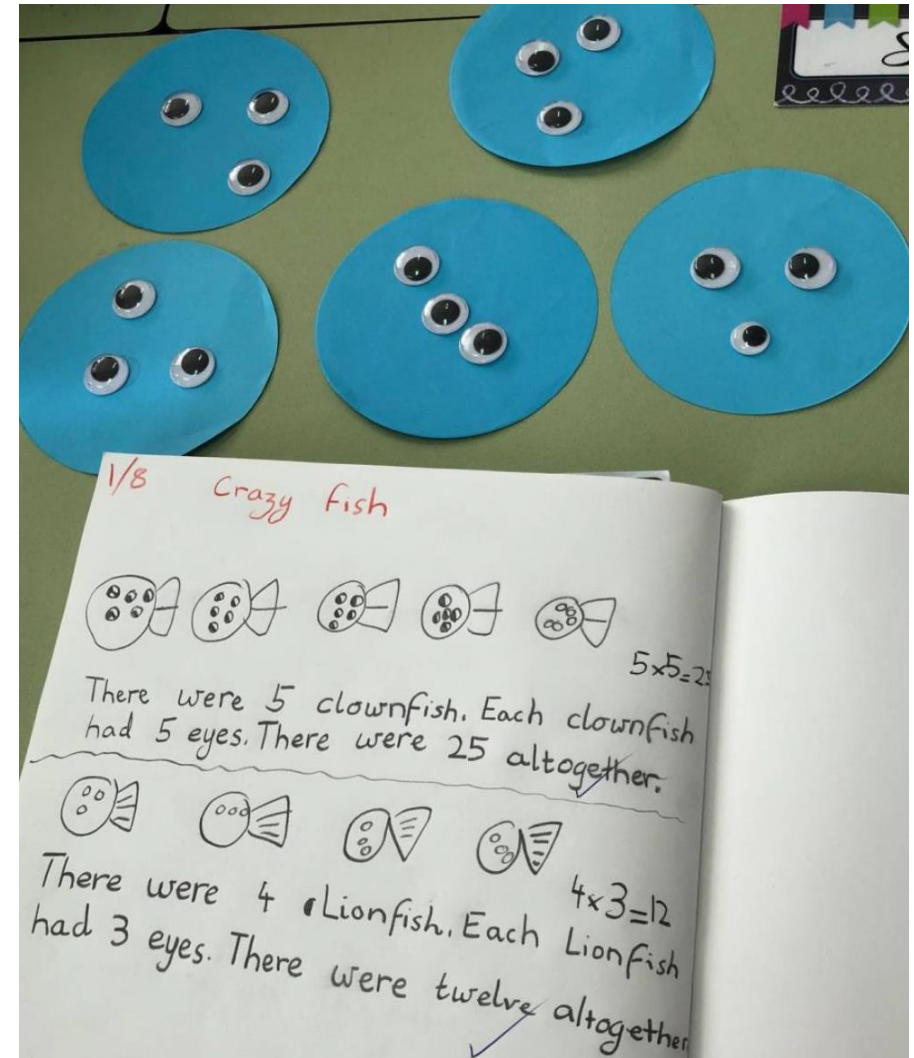
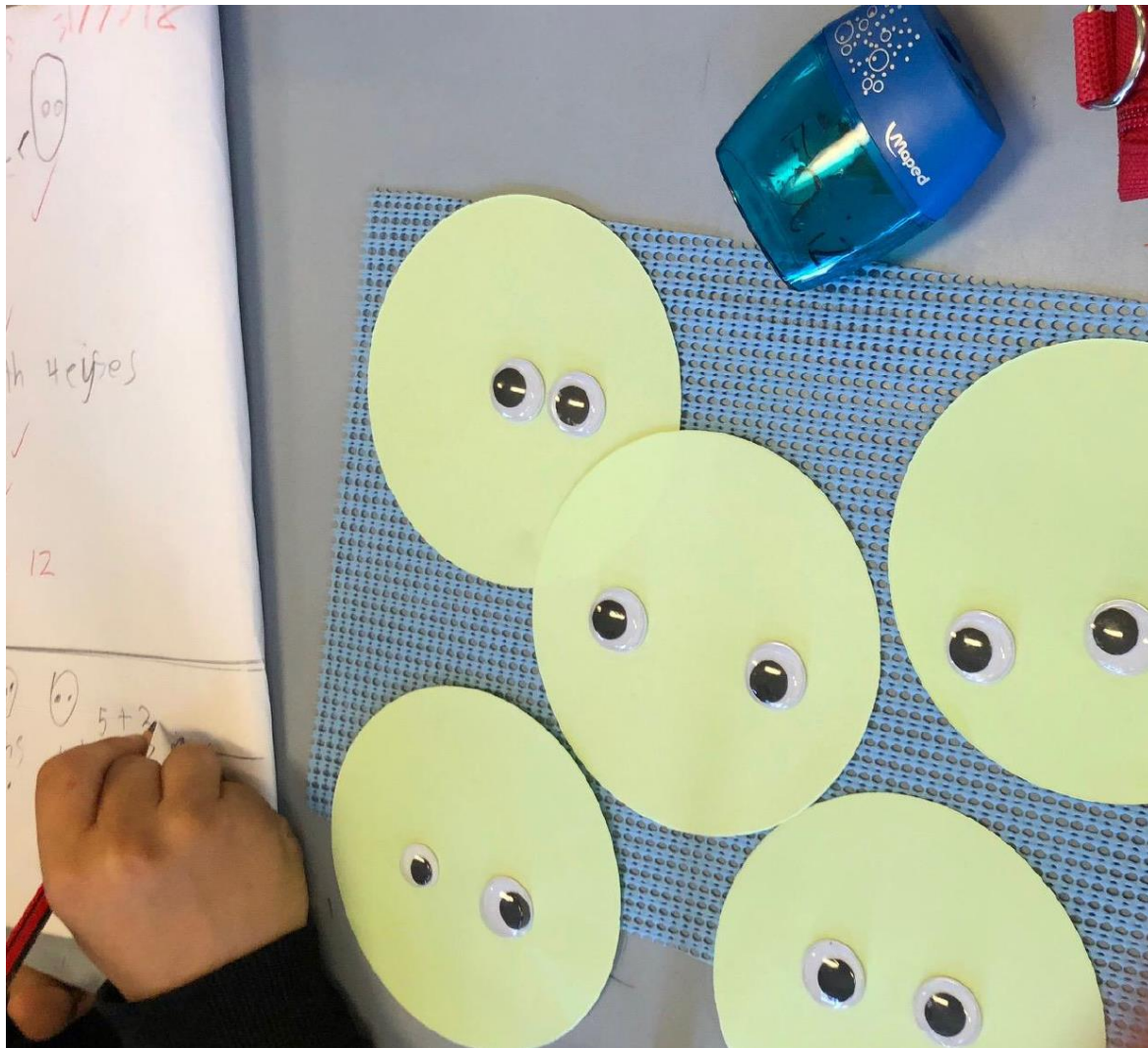
Use colour to show how you solved each array by chunking it into parts, or using your times tables strategy (double double for the 4s).

## Dot Painting Array Templates, Multiplication Unit 4 (Page 19)

### and Templates Folder



## Crazy-Eyed Fish – Multiplication Unit 1 – Lesson 7 (Pages 39 to 41)



Write a worded multiplication problem to represent the fish you made (shown on the right above).

Record the repeated addition number sentence:  $2 + 2 + 2 + 2 + 2 = 10$

Record the multiplication number sentence:  $5 \times 2 = 10$  (5 fish with 2 eyes each makes 10 eyes altogether).



## Echidna Spike Division

### Division Unit 2 – Lesson 7 (Pages 38 to 41) and Recording Templates



24 shared between 3 gives 8 to each  
 $24 \div 3 = 8$

Shared between

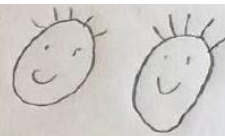
Name:

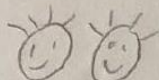
\_\_\_\_\_ shared between \_\_\_\_\_  makes \_\_\_\_\_ on each

\_\_\_\_\_ shared between \_\_\_\_\_  makes \_\_\_\_\_ on each


\_\_\_\_\_ shared between \_\_\_\_\_  makes \_\_\_\_\_ on each

\_\_\_\_\_ shared between \_\_\_\_\_  makes \_\_\_\_\_ on each


  
10 shared between 2 gives 5 to each

Drawing: 

8 shared between 2 gives 4 to each  
 $8 \div 2 = 4$

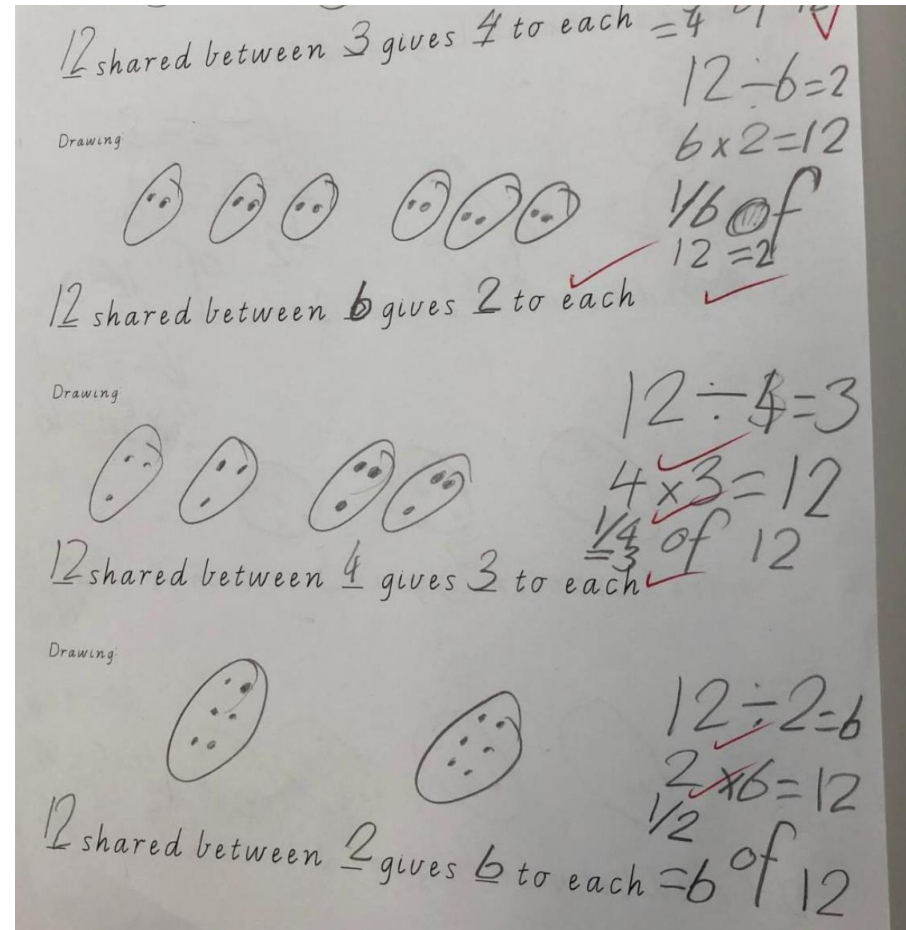
Drawing: 

16 shared between 4 gives 4 to each

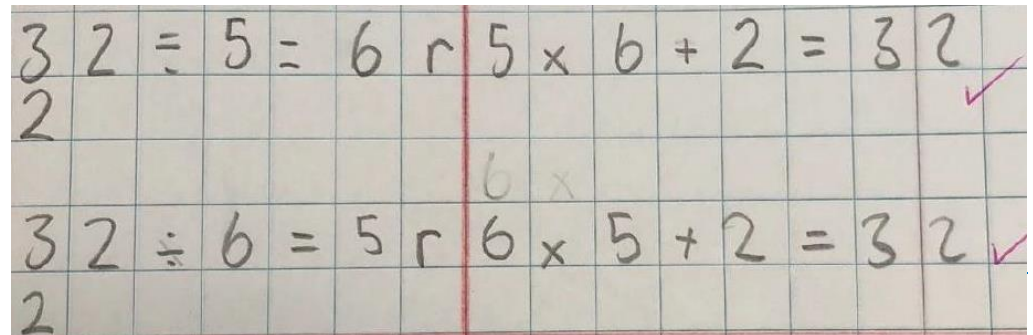
Drawing: 

## Pokeball Division, *Division Unit 2 – Lesson 6 (Pages 27 to 31)*

### Printable Pokeball templates in *Division Unit 2 Template Folder*



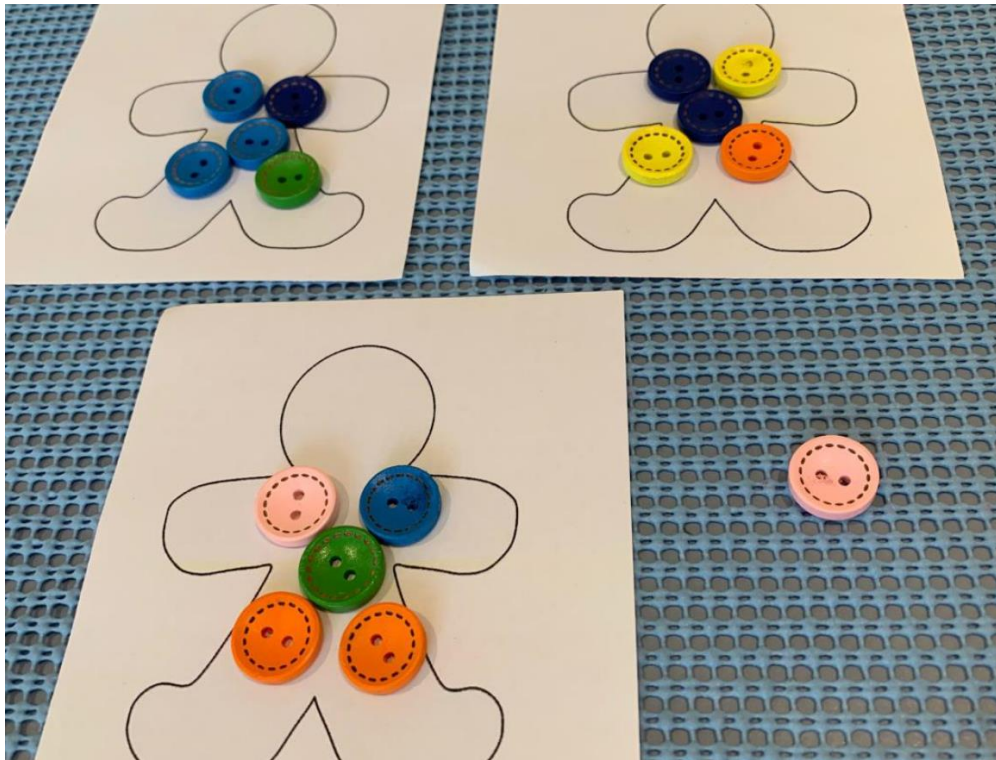
For extension, record both the division number sentence (12 Pokemon shared between 3 Pokeballs makes 4 in each,  $12 \div 3 = 4$ ) and the multiplication number sentence (3 Pokeballs with 4 Pokemon in each makes 12,  $3 \times 4 = 12$ ).



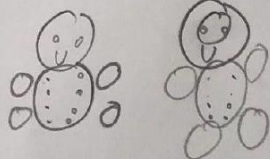


## Sharing Gingerbread Buttons, Division Unit 2 – Lesson 11 (Pages 46 to 54)

Share buttons equally between gingerbread people to practise creating equal shares (division).



Drawing:



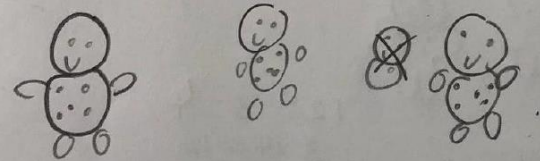
$\frac{1}{2}$  of 16 = 8

$16 \div 2 = 8$

$2 \times 8 = 16$

16 shared between 2 gives 8 to each

Drawing:

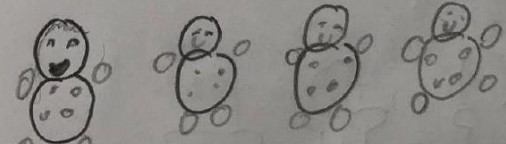


$16 \div 3 = 5 \text{ r } 1$

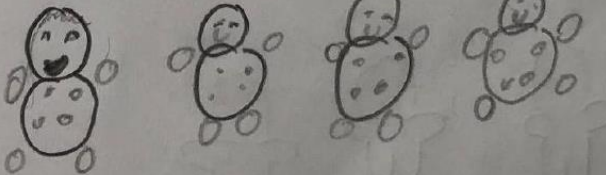
$3 \times 5 + 1 = 16$

16 shared between 3 gives 5 to each r1

Drawing:



Drawing:

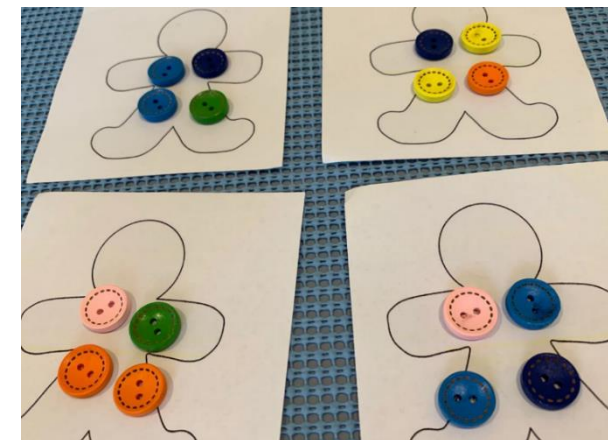


16 shared between 4 gives 4 to each

$16 \div 4 = 4$

$4 \times 4 = 16$  ✓

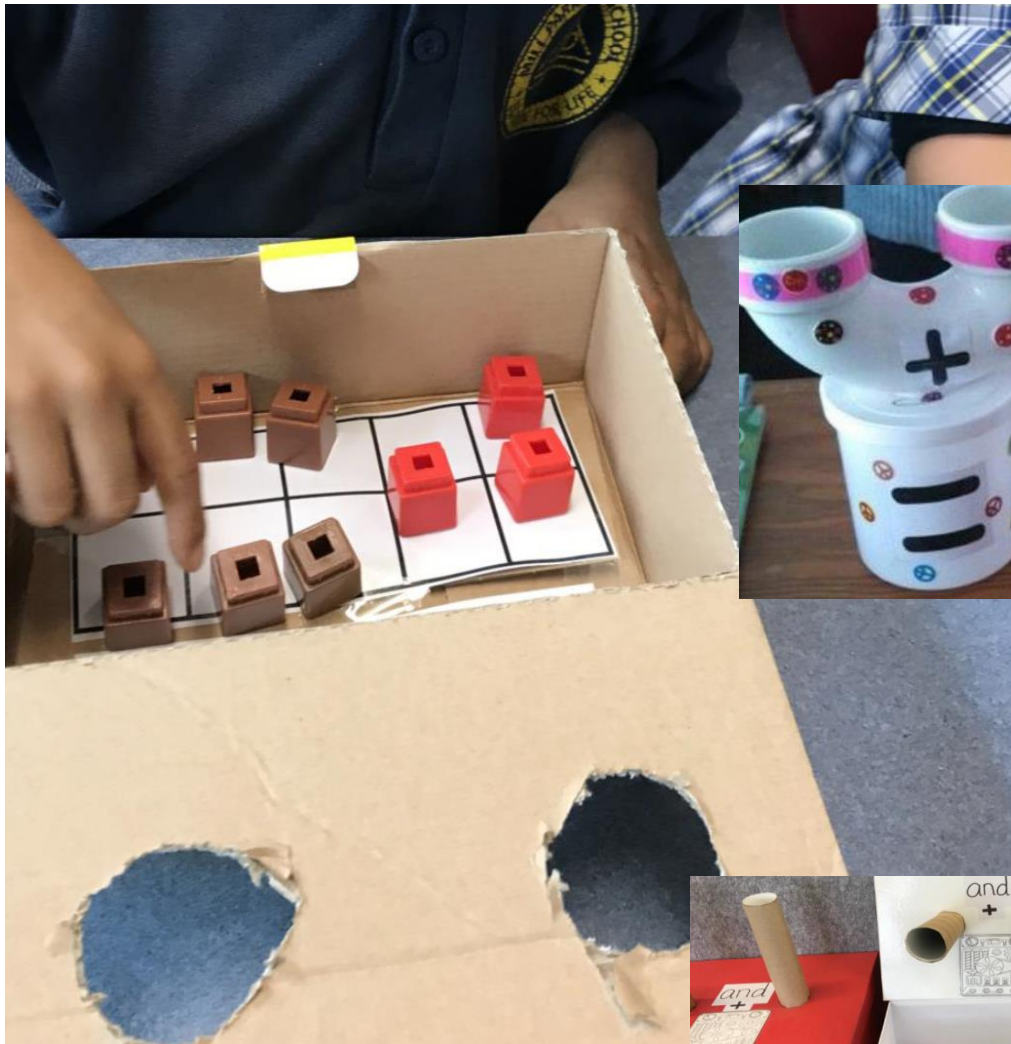
$\frac{1}{4}$  of 16 = 4



# More Mini Maths Projects for Kindergarten to Year 2 Students

## Make an Addition Machine!

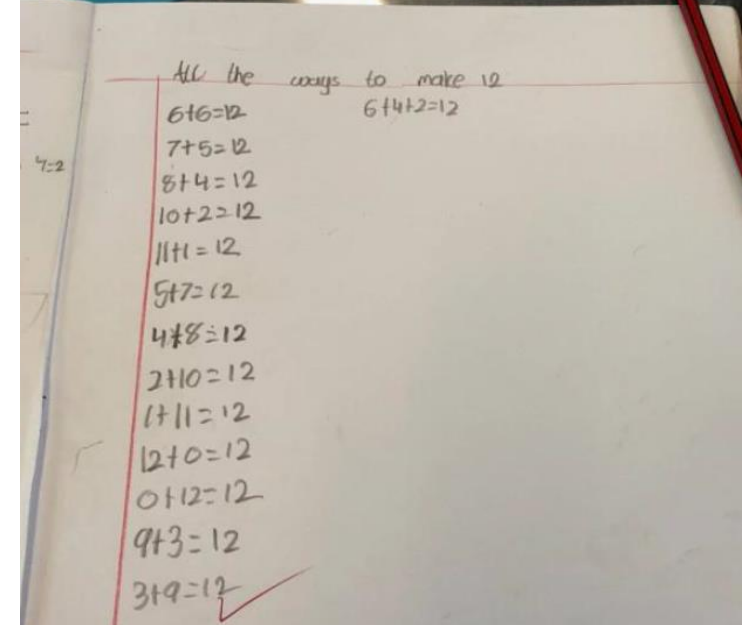
### *Addition Unit 1 – Lesson 1*



## Number Bonds

### *Addition Unit 1 – Lesson 6*

Create number bond air hockey mats to brainstorm all the ways to make a number.





## Sand Hands

***Addition Unit 1 Practical Addition – Lesson 9  
(Page 39)***

***Addition Unit 5 Ten Facts – Lesson 1 (Page 6)***

Use sand hands or tracings of your hands to brainstorm all the ways to make 10, or to add numbers together.



## Target Practice

***Addition Unit 4 – Lesson 15***

Play target practice to figure out all the ways to make a number (how many in + how many out = the total).



2 in and 7 out makes 9

## Counting on Piggybanks

***Addition Unit 3 Counting on – Lesson 2 (Page 9)  
and templates which follow that lesson plan.***

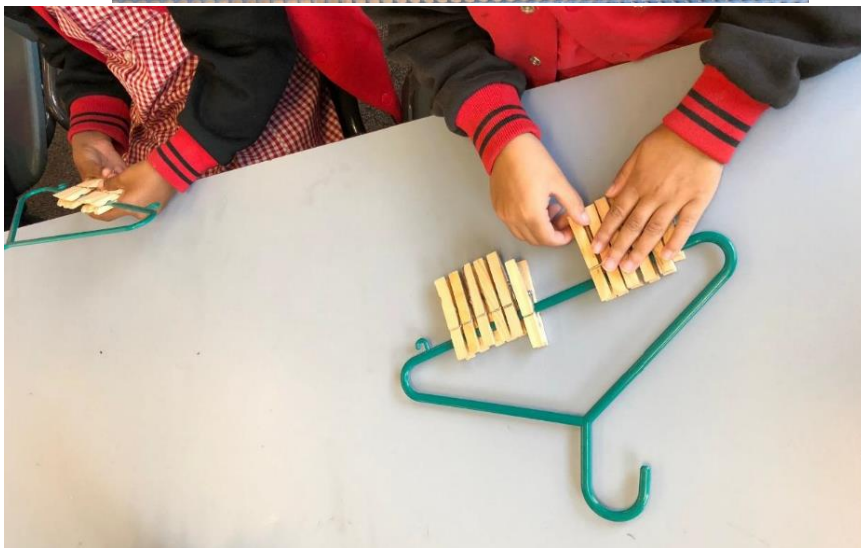
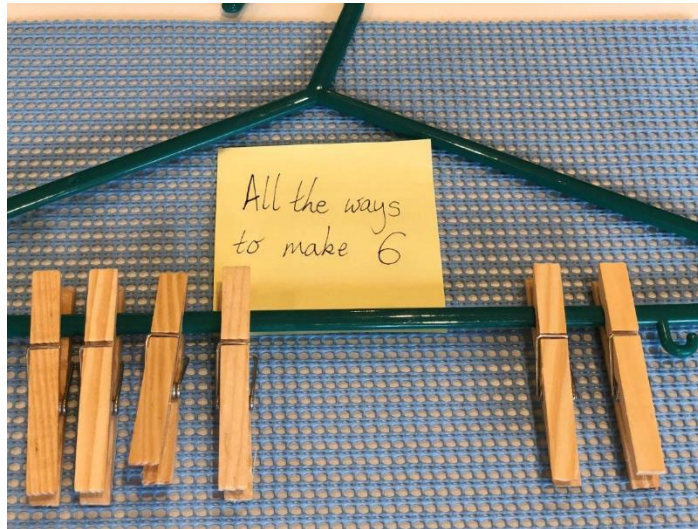


## Birds on the Wire

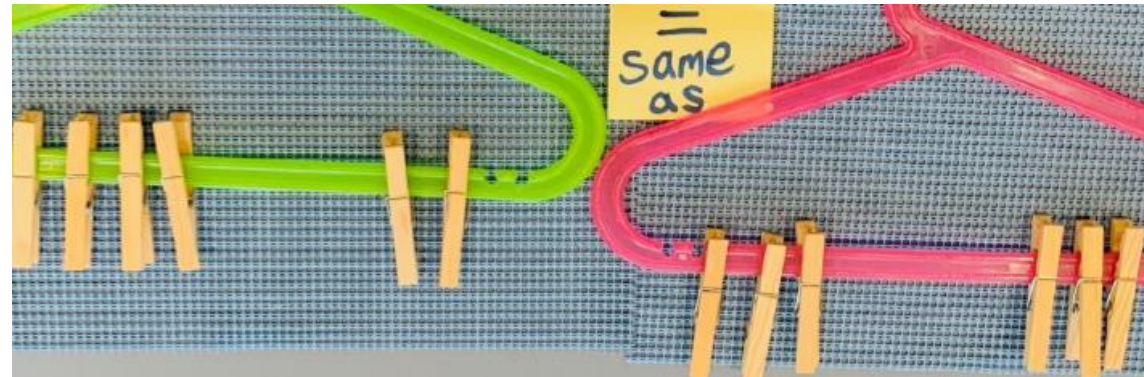
### Addition Unit 4 Partitioning – Lesson 7 (Page 24)

Watch the YouTube clip 'Birds on a wire.'

Use coat hangers and pegs to figure out all the ways to make a number (especially turnarounds):



For extension, balance equations using two coat hangers holding the same total of pegs:

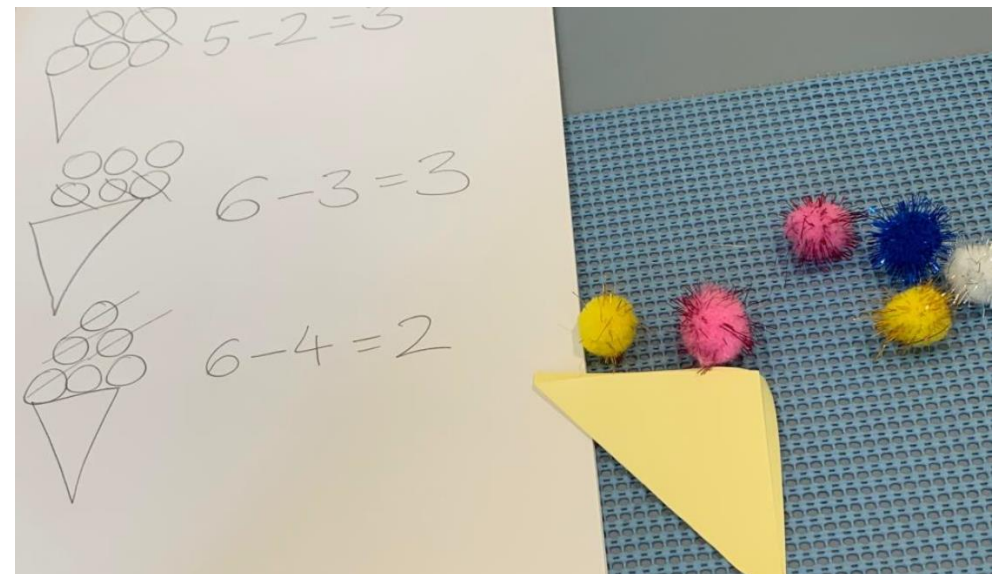


$$4 + 2 = (\text{is the same as}) 3 + 3$$

## Ice-Cream Scoop Subtraction

### Subtraction Unit 1 – Lesson 4 (Page 19)

Recording using drawings and number sentences.





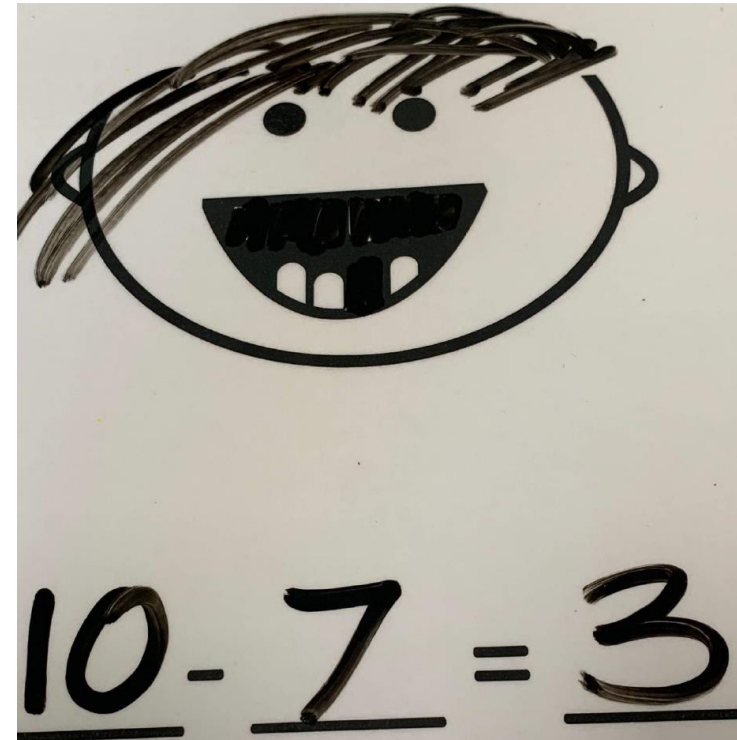
## Pete the Cat Subtraction T-Shirt

### Subtraction Unit 1 – Lesson 5 (Page 21)



## Take Away Teeth Templates

Subtraction Unit 1 – Lesson 7 (Page 29),  
particularly the version 2 open-ended template:



Teddy version of button subtraction:

## Cookie Monster Subtraction

*Subtraction Unit 1 – Lesson 10 (Page 37) and the Cookie Jar template from the Template Folder*

Use real cookies at home!



## Money Matching Piggybanks and Mini Shops

*Money Unit 1 and Unit 2 Templates*



Students in year 1 and 2 can then calculate the total of each piggybank.



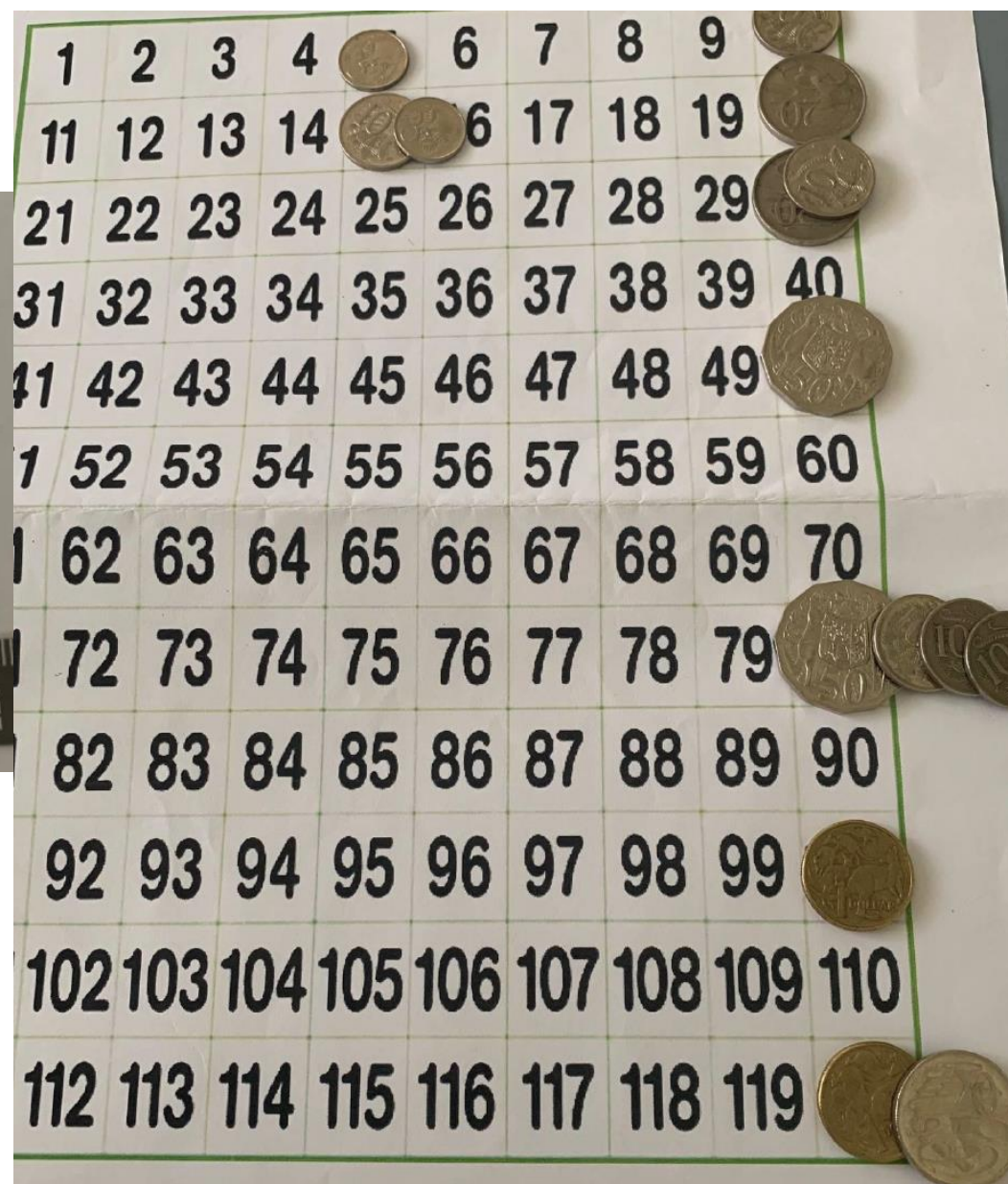
Make a mini shop and buy items from one another using coins and notes at home.



## Extension

### *Money Unit 1 – Lesson 2 – Pages 9 and 10*

Place coins along a number line (measuring tape) and on a 120 chart, reinforcing the different values of each coin and collections of coins.



## Skip-Counting Challenges

### Target 100 game, *Multiplication Unit 2 – Lesson 11 – Pages 59 to 62*

Choose a number to count by and a starting number anywhere between 0-20. Count in your head (using the 120 chart for support), aiming to reach as close to 100 as possible, hopefully closer than your partner. Your partner can use the calculator, during your turn, to check that you say each number in the sequence correctly. The closest player to 100 wins (if you are counting by 4s starting from different points, and you say 99, but your partner says 98 and 102, you win, because you were only 1 off). Pick a new number to start from and play again!



## Skip-Counting Patterns

### *Multiplication Unit 2 – Lesson 8 – Pages 44 to 50*



Use a skip-counting pattern you know to help learn a new one. For example, put a dot at each number you say when counting by 3, then use the dots to help you count by 6. Whisper the first dot (3), circle the second (6) and say it loudly. Whisper 9, say 12, whisper 15, say 18!