# Buy 1–Get 1

Teacher's Guide


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## Line Masters

This Teacher's Guide includes access to modifiable and PDF line masters.

To access these Mathology Little Book Line Masters, please log in at Pearson Places, www.pearsonplaces.com.au and select the Mathology Little Books icon. The Line Masters can be found in the 'Explore Resources' section.

If the icon doesn't appear or if you are new to Pearson Places, please contact our digital helpdesk at help@pearson.com.au and we will set up a teacher account for you.

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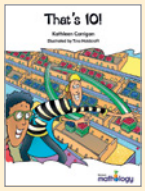
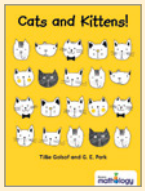
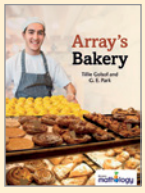
# *Mathology Little Books*

This series recognizes that children's understanding of maths concepts develops over time, and so the series allows you to choose the book that best matches a child's or group's level of mathematical understanding. The books engage children at just the right level in a wide range of mathematical ideas, thinking, and activities in a variety of real world and imaginary contexts.

***Buy 1—Get 1*** engages children in conversations, investigations, and activities that help to develop their understanding of the big maths idea that "Quantities and numbers can be added and subtracted to determine how many or how much."

**Big Idea: Quantities and numbers can be grouped by units or split into units**

(Skip counting, place value, fractions and decimals)

| TITLE | KEY MATHS FOCUS | MATHS SKILLS | STRATEGIES | ADDITIONAL FOCUS |
|---|---|---|---|---|
|  | Add and subtract to 10<br><br>Compose and decompose 10 | Connect addition and subtraction<br>Use +, −, = to symbolize addition and subtraction<br>Identify parts of a whole<br>Model and describe different ways to make numbers<br>Model add-on and take-from 10 | Subitize<br>Ten frames<br>Count on and back<br>1-1 matching | Positional language<br>Increasing/decreasing patterns |
|  | Add and subtract to 20<br><br>Compose and decompose to 20 | Model add-to and take-from situations to 20<br>Use +, −, = to symbolize parts-whole and addition and subtraction<br>Compose and decompose 2-digit numbers | Model<br>Count 3 times<br>Count on and back<br>1-1 matching | Make graphs from simple responses<br>Order numerals |
|  | Add and subtract to 20<br><br>Compare quantities to 20 | Model add-to and take-from to 20<br>Use +, −, = to symbolize parts–whole and addition and subtraction<br>Determine how many more/less | Know 1 or 2 more and 1 or 2 less<br>Compare quantities to 20 by matching or counting | Collect data<br>Describe appropriate events for times of the day<br>Use positional language to describe location |
|  | **Add and subtract to 20**<br><br>**Develop addition and subtraction strategies** | **Connect addition and subtraction**<br>**Use +, −, = to symbolize addition and subtraction**<br>**Identify parts of a whole** | **Count on and back**<br>**1-1 matching** | **Count by 5s**<br>**Develop financial literacy**<br>**Recognise 3-D shapes**<br>**Use tallies** |
|  | Solve addition/subtraction problems<br><br>Solve equal grouping/sharing problems | Estimate sums and differences<br>Model and symbolize repeated addition<br>Create and describe equal groups of objects<br>Model and solve equal grouping and sharing problems | Arrays<br>Equal grouping<br>Skip count<br>Repeated addition<br>Estimate<br>Share groups equally<br>Use number sentences | Equality<br>Model and write time<br>Features of 3-D objects |



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Sofia and Adam begin to shop.
Sofia finds the wood they need.
She puts 1 pack of 3 pieces
in the bottom of the cart.
Adam puts 1 free pack of 3 pieces in the top.
They check the cart and see…

3



**WATCH FOR...**

- How do children show they know 3 + 3 = 6? Do they use a known addition fact (e.g., 2 + 3), count on, or respond "I just know it"? Does a child listen to different strategies and seem prepared to try a different strategy?
- What strategies do children offer for 20 dollars take away 2? Do they count back? You might offer a number line as a tool for counting back, and listen to the count. Counting back can indicate a child is developing a good sense of number order.

## Adding and subtracting to 20

- Sofia and Adam find 1 pack of wood. How many packs will they have when they get 1 free? *(2)*
- Each pack has 3 pieces of wood. How many pieces of wood will Sofia and Adam have in their cart altogether? *(6; 3 plus 3 is 6)*
- How can we check to make sure that 3 plus 3 is 6? (Children might suggest counting the items, counting on, or doubling. You might offer counters to use throughout the story.)

## Developing addition and subtraction strategies

- How much money did Sofia and Adam bring for their shopping trip? *(20 dollars)* The wood costs 2 dollars. How much money do you think they will have left to spend? *(18 dollars)* How might we check to make sure?

  (You might choose to offer counters or plastic coins, a number line, or a hundred chart to demonstrate and model counting back.)

## Developing addition and subtraction strategies

- Sofia and Adam have wood that costs 2 dollars. Why do they have 2 packages of wood if 1 package costs 2 dollars? *(they get 1 free)*


6 pieces of wood.
They still need lots of stuff.

4



**CONNECTING TO GEOMETRY**

3-D Shapes: Where do you see cones like this used in the real world? What else can you think of that is shaped like a cone?

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# Large Group Options

If you read ***Buy 1—Get 1*** to a large group or whole class, you might project the book to facilitate reading aloud and better engage children in adding and subtracting. These activities engage children in exploring and communicating their addition and subtraction to 20 with a focus on developing addition and subtraction strategies; choose the activities that best address your children's learning needs. Children may share other strategies and when they do, focus attention on their reasoning and ask them to pay attention and restate the ideas of others.

## DOUBLES

### ENGAGE

Focus attention on the doubles in ***Buy 1—Get 1***. Model each purchase using the Maths Mat (inside back cover of the book or LM 3), a Double-Ten frame (LM 4), or a Rekenrek. Model recording as you proceed.

- **Let's list what Sofia and Adam bought. They bought a pack with 3 pieces of wood and get 1 free pack. How many pieces of wood did they get?** *(3 and 3 is 6)*

Demonstrate with concrete materials, and model each number sentence or have children use illustrations in the book. Encourage children to state the relationship as an addition sentence, and connect the term *double* (*e.g., 4 plus 4 equals 8; 4 doubled is 8*). Model other double facts promoting use of the terms *plus, equals, double*.

- **What if they decided to buy (1, 2, 9, or 10) cones?**

### WORK ON IT

Give each child 20 linking cubes, paper, and a pencil. Invite children to find and record doubles for the numbers 1 to 10 as they add cubes one at a time to form 2 towers.

- **Let's build 2 matching towers. Record how many cubes you use. Keeping track helps you make predictions and find patterns.**

They begin by placing 2 cubes as the base for 2 towers. Model recording the number of cubes as 1 + 1 = 2. Invite children to do the same. Have children add a cube to each tower and record the total number of cubes as 2 + 2 = 4. Children continue adding single cubes until they have made 2 towers of 10 cubes each.

### SHARE AND REFLECT

Draw a number line marked from 0 to 20. Have children tell the sums they found when they doubled numbers *(2, 4, 6, ...20)*. Volunteers circle these numbers on the number line.

- **What do you notice about the numbers that are circled?**
- **What do you notice about the numbers that are not circled? Why do you think some numbers are not circled?**
- **Look at the doubles you recorded. What patterns can you find?**

**MATHS FOCUS:** addition: develop fluency with doubles

***Buy 1—Get 1*;** drawing and writing materials; linking cubes; Maths Mat (inside back cover of the book or LM 3); Double Ten-Frame (LM 4) or Rekenreks (optional)

**Buy 1—Get 1**

| Item | Buy | Double It! |
|---|---|---|
| Wood | 3 | 3 + 3 = 6 |
| Cones | 6 | 6 + 6 = 12 |
| Blocks | 5 | 5 + 5 = 10 |
| Straws | 4 | 4 + 4 = 8 |
| Cubes | 7 | 7 + 7 = 14 |
| Balls | 8 | 8 + 8 = 16 |

## WATCH FOR...

- Doubles are often easy for children to remember. Children can use the double facts they know for near doubles (addends that differ by 1 or 2). Which doubles does the child know? Which double facts need review?
- Can the child describe the relationship of a double fact, (e.g., 4 plus 4 equals 8; 4 doubled is 8; 4 + 4 = 8)?



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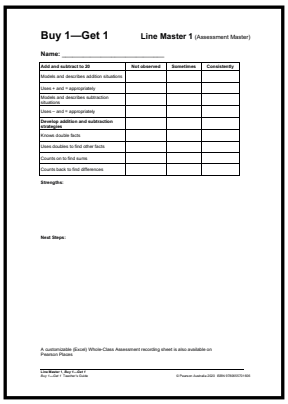
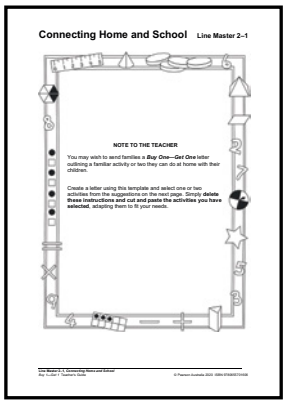
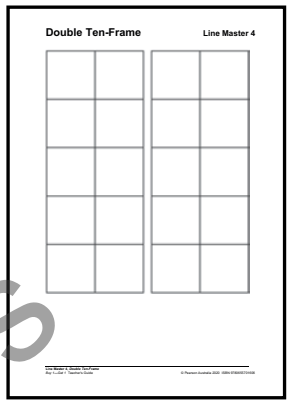



**Line Master 1**
Assessment Master

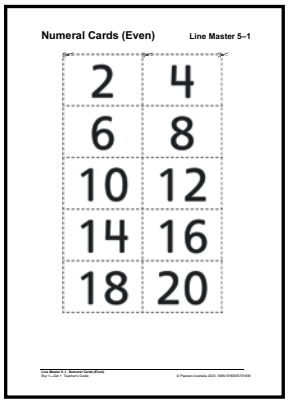



**Line Master 2**
Connecting Home and School Letter Template

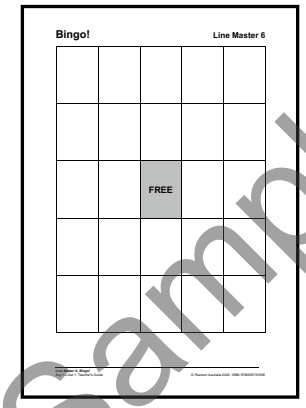

**Line Master 3**
*Buy 1—Get 1* Maths Mat



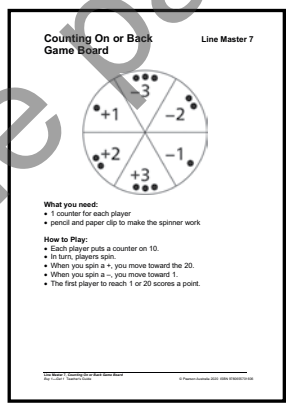

**Line Master 4**
Double Ten-Frame



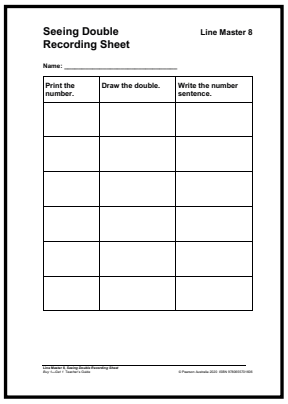

**Line Master 5**
Numeral Cards



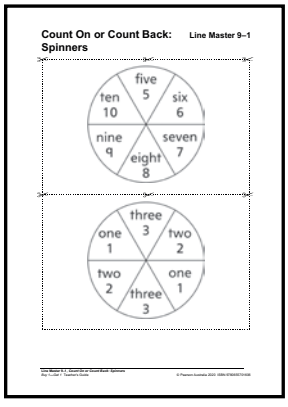

**Line Master 6**
Bingo!



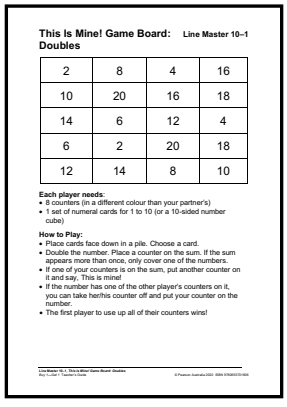

**Line Master 7**
Counting On or Back Game Board



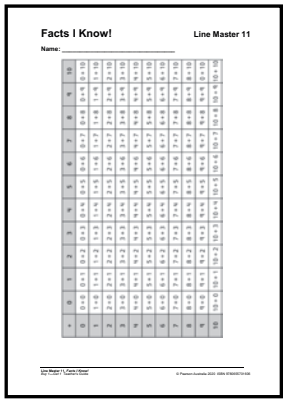

**Line Master 8**
Seeing Double Recording Sheet



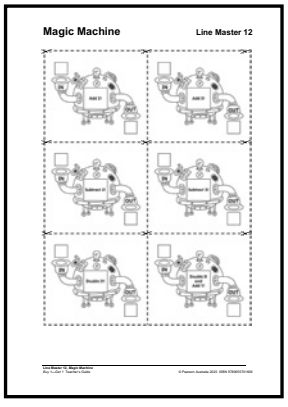

**Line Master 9**
Count On or Count Back




**Line Master 10**
This Is Mine!




**Line Master 11**
Facts I Know!




**Line Master 12**
Magic Machine