At the Corn Farm

Teacher's Guide

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Line Masters

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

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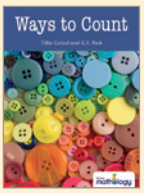
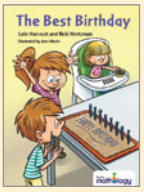
Mathology Little Books

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.

At the Corn Farm engages children in conversations, investigations, and activities that help to develop their understanding of the big maths idea that "Quantities and numbers can be grouped by units or split into units."*

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
	**Group quantities based on units of 10** **Connect number names, numerals and quantities to 20** **Compare and order sets/ quantities to 20**	**Compare quantities** **Use ordinal numbers** **Order 3 quantities using sets** **Compose and decompose teen numbers** **Group to 20**	**Use benchmarks to make mental comparisons and estimates** **Count on** **Count to compare**	**Add on from 10** **Informal units of measure** **Recognise 2-D shapes**
	Estimate and group to skip count to 50 Compare quantities to 50	Estimate, group, count, describe and compare sets of up to 50 Conservation of number Create sets with more, less or as many as a given number Compare a set to a referent using comparative language	Count on Count to compare Group (2, 5, 10) to determine how many Skip count by 5, 10 and 25	Sort collections
	Estimate and group to count to 100 Skip count to 100	Skip count by 2, 5 10 from a given number Estimate and compare quantities Count and group to recount a collection Name, write, and match numerals to quantities	Use benchmarks to estimate Recognise and use skip-counting patterns	Skip count 5c and 10c Identify pattern rules Odd and even numbers
	Split quantities into equal groups to count to 100 Compose/decompose to 100	Skip count using equal-sized units Keep track of number of sets and how many in each set Recognise patterns in repeated units related to 10 Share equally	Skip count to 100 Use benchmarks to make mental comparisons and estimate quantities Add and subtract Count in groups Count on for leftovers	Graph to show preferences Money combinations Describe and continue patterns Estimate area Estimate and calculate length Identify and describe 2-D shapes
	Split wholes into equal parts (fractions) Model equal grouping/sharing	Split a whole into equal parts Identify the relationship between the number of parts to the whole Share groups equally Create and solve grouping and sharing problems	Compare parts to whole to determine more/less/equal	Non-standard linear units Time: days, weeks, months 2-D shapes and their features

* This book can also be used to address the big idea "Numbers are related in many ways."

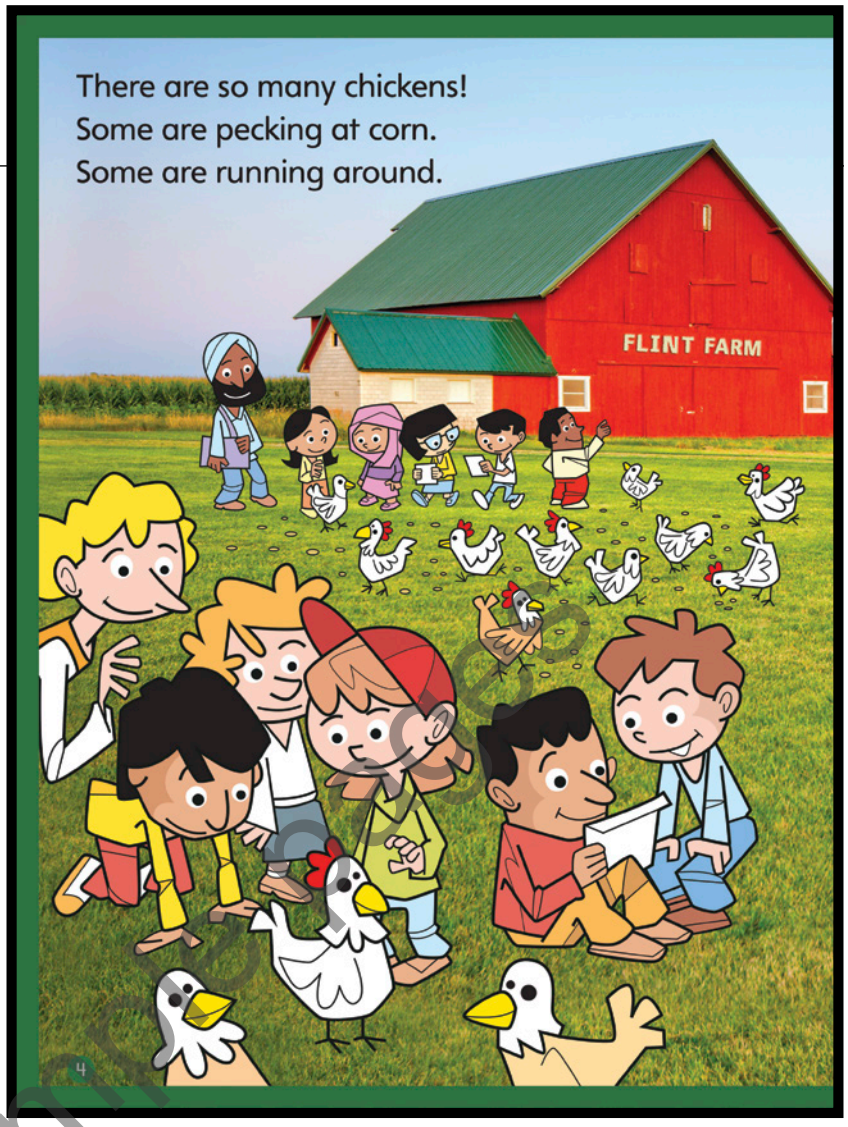
  ISBN 9780655701576

Comparing and ordering to 20

- Do you think there are more children or more chickens? *(more children)* How did you decide?
- How many chickens are white? *(10)* How many are brown? *(3)* How many have combs? *(7)* What is the order of these numbers, from least to greatest? *(3, 7, 10)* From greatest to least? *(10, 7, 3)*

Grouping based on units of 10

- How many chickens are at the bottom of the page? *(3)* How many chickens are in the middle of the page? *(10)* How many chickens are there altogether? *(13)*
- Are there more than 10 or fewer than 10 chickens? *(more than 10; 13)* How many groups of 10 are in 13? *(1)* How many 1s are left over? *(3)*



WATCH FOR...

- Does the child count every object before comparing quantities, or does he/she recognize how many without counting?
- To determine the leftover 1s in teen numbers, does the child count on from 10 or count back to 10, or does he/she know how many more than 10 a number is?

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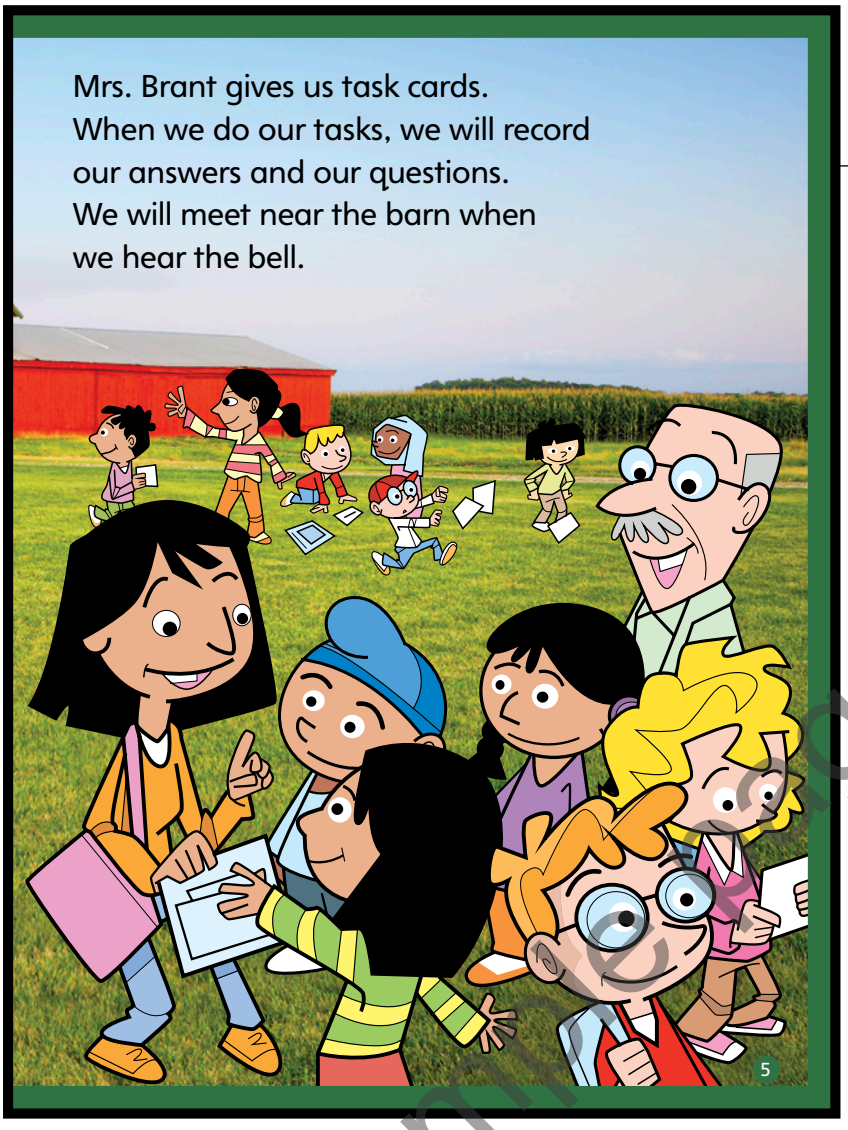

Comparing to 20

- How many white task cards do you see on pages 4 and 5? *(9)* Are there more chickens or more task cards? *(chickens)* How many more? *(4)*

CONNECTING TO GEOMETRY

2-D Shapes: What shape is the front of the barn? What other shapes can you find?

Large Group Options

If you read ***At the Corn Farm*** to a large group or whole class, you might project the book to facilitate reading aloud and better engage children in grouping, estimating, and comparing numbers. These activities engage children in exploring and communicating their understanding of grouping based on units of 10, and comparing and ordering numbers to 20; choose the activities that best address your children's learning needs.

GROUPS ON THE FARM

ENGAGE

Provide counters and copies of Sorting Mat (LM 3) and 10s and 1s Charts (LM 4). Point to the broken corn cobs on page 10 of ***At the Corn Farm***. Count the kernels on the left-hand cob aloud as a class. *(16)* Display the numeral card for 16 from Numeral Cards (11–20) (LM 5), and then say: **Let's show 16.** Count out 16 counters aloud while placing them on the 1s side of the sorting mat. Ask:

- **Is 16 more than 10 or less than 10?** *(more than)* **Can I make a group of 10?** *(yes, 1)* Move 10 counters, 1 at a time, to the 10s side while counting aloud with the class. **How many did I move over the line?** *(10)* **How many are left on the other side?** *(6)*

Create a large 10s and 1s chart (or enlarge LM 4). Ask: **How many groups of 10 do we have?** *(1)* In the 10s column, record 10 circles and the number 1. **How many 1s?** *(6)* Record 6 circles and the number 6 in the 1s column. **So, in 16, there is 1 ten and 6 ones.**

Repeat for the second corn cob.

WORK ON IT

Share number stories about animals that are found on a farm, using numbers from 11 to 19. Some examples of stories are:

- **There are 12 sheep on the farm. 10 are eating and the rest are sleeping. How many are sleeping?** *(2)*
- **There are 18 rabbits on the farm. 10 are eating carrots, and the rest are hopping. How many are hopping?** *(8)*

Display the appropriate numeral card for each story. Invite the children to use their counters to find an answer to the question in the story. Have them record their work on a 10s and 1s chart (LM 4). Encourage children to suggest animal stories of their own and record them on LM 4.

SHARE AND REFLECT

Invite children to share and explain their 10s and 1s charts. Prompt reflection by asking questions such as:

- **What is the same on your charts?** *(they all have 1 ten)* **What is different?** *(the number of 1s)*
- **Which number has the most 1s? Which has the fewest 1s? Which of these 2 numbers is greater? How do you know?**

MATHS FOCUS: decompose teen numbers into units, of a 10 and leftover 1s

MATERIALS: ***At the Corn Farm***, p. 10; counters; Sorting Mat (LM 3); 10s and 1s Charts (LM 4); Numeral Cards (11–20) (LM 5); Double Ten-Frame (LM 6—optional); Rekenreks (optional)

WATCH FOR...

- Does the child arrange counters into groups that can be easily recognized?
- Does the child recognize 10 counters as 1 unit of 10 or 10 units of 1 (place value concept)?
- Does the child use numbers accurately to describe his/her work?

DIFFERENTIATE: Provide counting support, such as Double Ten-Frame (LM 6) or Rekenreks.

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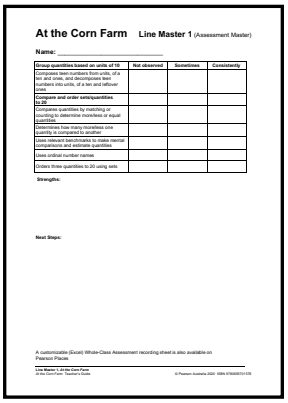
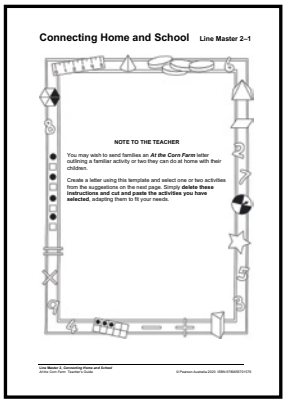
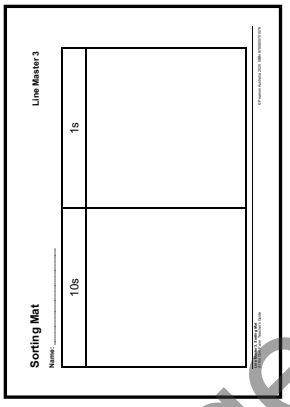


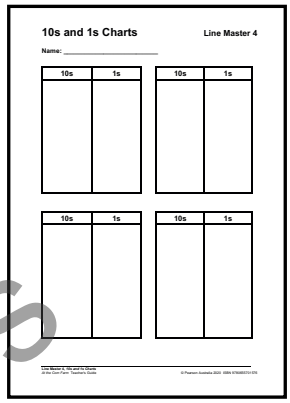
Line Master 1
Assessment Master



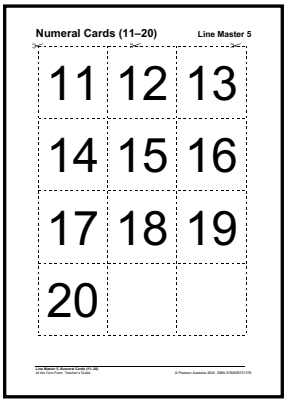
Line Master 2
Connecting Home and School Letter Template



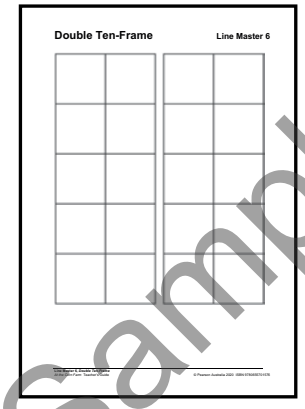
Line Master 3
Sorting Mat



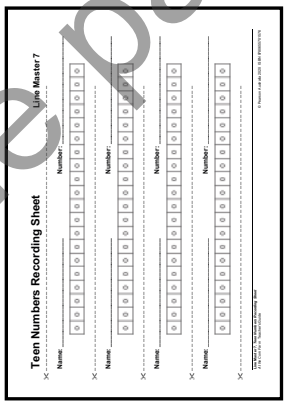
Line Master 4
10s and 1s Charts



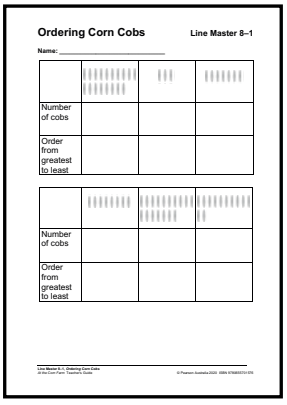
Line Master 5
Numeral Cards (11–20)



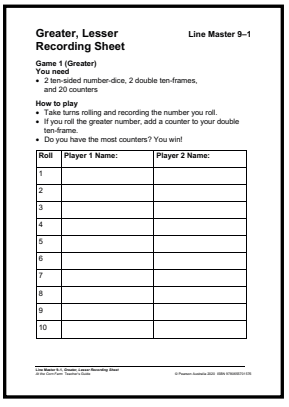
Line Master 6
Double Ten-Frame



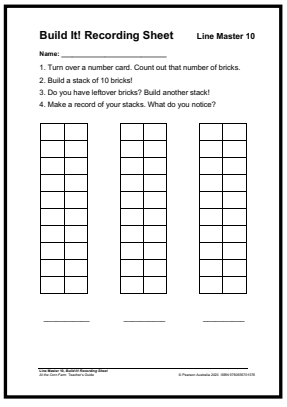
Line Master 7
Teen Numbers Recording Sheet



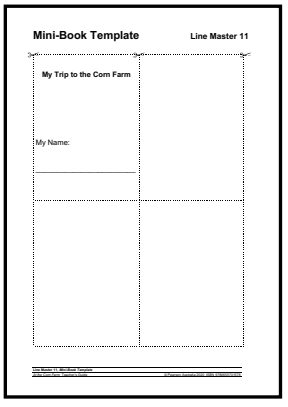
Line Master 8
Ordering Corn Cobs



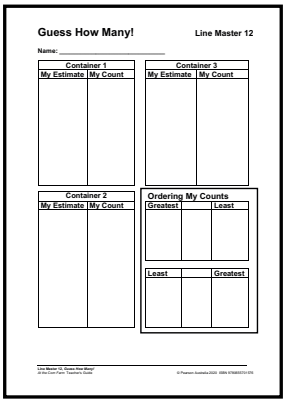
Line Master 9
Greater, Lesser Recording Sheet



Line Master 10
Build It! Recording Sheet



Line Master 11
Mini-Book Template



Line Master 12
Guess How Many!