DEVELOPING MATHEMATICAL INQUIRY COMMUNITIES

Number: Multiplication and

Division

Level 1 (Year 0/NE)

Copy Masters Booklet

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Task 1

Amanda Bean loves to count.

Can you help her count how many cakes she has altogether in the quickest way you can?

What about if she sees more? Can you help her count how many she sees this time?

Martha and Milli are playing with pinecones.

What is the quickest way they could count all of the pinecones?

What if they see more?

Can you help them count how many they see now?

Task 2

Amanda Bean decides that she is going to find out how many sheep she can see?

Can you help her?

Task 2 (independent)

Jason and Nu are sorting their cards.

What is the quickest way they could count all of their cards?

What if they find 2 more?

Can you help them count how many they have now?

Nola and Shaz are counting their shells.

What is the quickest way they could count all of the shells?

What if they find 4 more?

Can you help them count how many they have now?

Task 3

Amanda Bean cannot get to sleep and so she decides that she will count sheep. She sees a flock of 6 sheep, so she decides to put them into chunks (groups) of 2.

How many groups of 2 will she have?

What about if she sees a flock of 8 sheep? How many groups of 2 will she have now?

Task 3 (independent)

Ocean has some stickers. She wants to know how many stickers she has.

Can you help her count the stickers?

Can you arrange the stickers into an easy way to count them?

Draw your pattern and write the numbers to match.

Task 4

In Amanda Bean's dream all the sheep are riding bicycles. Amanda is tired of counting sheep, so she decides to count the wheels on the bicycles. She counts 3 sheep. How many wheels are there altogether?

In Amanda Bean's dream all the sheep are riding bicycles. Amanda is tired of counting sheep, so she decides to count the wheels on the bicycles. She counts 5 sheep. How many wheels are there altogether?

Task 4 (independent)

Ronaldo has been collecting cicada shells. He wants to tell his mum how many he has. Can you help him count them?

Can you arrange the cicada shells in different ways to find out how many of them he has?

Make sure you show the groups that you used and write the numbers to match them.

Task 5

Amanda Bean is at school, and she decides she wants to count all the books in her library corner.

She takes down these books, but she knows it will take her forever if she counts all the books one by one.

Can you help her to use groups to count the books she has started with?

How many are there?

Task 5 (independent)

Lasi has 12 grapes and two bowls.

What are all the ways she could put the grapes into the bowls?

Record your ideas using drawings and number sentences.

Task 6

Amanda Bean has got herself in a muddle. She wants to make up pairs of counters and she has 5 counters. She puts her counters into pairs but there is one left over. So, she gets another counter and tries again.

Is she able to make up pairs of counters this time?

Can you find out which groups of counters (from 7-12) can be put into pairs without any left over?

Task 6 (independent)

Lasi has some grapes and two bowls.

What are all the ways she could put the grapes into the bowls?

Record your ideas using drawings and number sentences.

Task 7

Amanda Bean is thinking about all the grandma's knitting jumpers. If each grandma has three balls of wool and there are two grandmas, how many balls of wool are there altogether?

Amanda Bean is thinking about all the grandma's knitting jumpers. If each grandma has three balls of wool and there are five grandmas, how many balls of wool are there altogether?

Task 7 (independent)

Sepi has 12 marbles.

Can you help her arrange them into rows that have the same amount in each?

How many rows can you make?

How many marbles are in each row?

Record your ideas using drawings and write the numbers to match.

Task 8

Amanda Bean has decided that it is quicker to put the sheep in groups of three instead of two to count them. If she has 9 sheep how many groups of sheep will she have?

Amanda Bean has decided that it is quicker to put the sheep in groups of three instead of two to count them. If she has 12 sheep how many groups of sheep will she have?

Task 8 (independent)

Joshua has 16 marbles.

Can you help him arrange them into rows that have the same amount in each?

How many rows can you make?

How many marbles are in each row?

Record your ideas using drawings and write the numbers to match.

Task 9

On the way to school Amanda Bean saw 5 lots of 2 cupcakes in the cakeshop window. She counted how many cupcakes there were altogether. How many were there?

On the way to school Amanda Bean saw 3 lots of 3 cupcakes in the cakeshop window. She counted how many cupcakes there were altogether. How many were there?

Task 9 (independent task)

Can you make these arrays using counters and draw them? Record a matching number sentence.

- 3 by 2
- 3 by 3
- 4 by 2
- 2 by 5
- 3 by 5
- 4 by 5

Task 10

Amanda Bean is counting all sorts of different things on her way to school.

She sees 7 lots 2 wheels on bicycles. How many wheels are there altogether?

Amanda Bean is counting all sorts of different things on her way to school.

She sees 3 lots of 4 wheels on cars. How many wheels are there altogether?

Task 10 (independent task)

Lim's soccer team scored 9 goals in one game and 4 goals in another game. How many goals did his team score altogether?

Lisa's soccer team scored 8 goals in one game and 6 goals in another game. How many goals did her team score altogether?

$$7 + 5 =$$

$$6 + 8 =$$

$$5 + 9 =$$

$$2 + 2 + 2 =$$

$$6 - 3 =$$

$$8 - 4 =$$

Task 11 (optional task)

Amanda Bean is puzzled.

She has seen a pattern with her groupings of things in twos and threes. She says that 2 lots of 3 is the same as 3 lots of 2.

Use your counters to explore whether she is right.

Task 11 (independent - optional task)

Mere had 5 shells and gave her mum 4 shells. How many shells does Mere have let?

Coco had 10 shells and gave her mum 5 shells. How many shells does Coco have left?

Daisy had 12 shells and gave her mum 6 shells. How many shells does Daisy have left?

$$7 - 3 =$$

$$9 - 3 =$$

$$10 - 4 =$$

$$12 - 4 =$$

Task 12 (optional task)

Amanda Bean is still puzzled. She has seen other patterns with her groupings of things in twos and threes. She says that 5 lots of 3 is the same as 3 lots of 5.

Use your counters to explore whether she is right.

Task 12 (independent – optional task)

Can you make these arrays using counters and draw them?

3 by 2

2 by 3

4 by 5

5 by 4

3 by 6

6 by 3

What do you notice? Record your ideas.