



RICH MATHEMATICAL TASK BOOKLET

NUMBER. Multiplication & Division

YEAR 0

Copy Masters

Level 1 Year 0 Copy Masters: Multiplication and Division

Task 1

Sunlou and Amaya are playing with tiles. They have two square tiles that are the same. They make a pattern, so the tiles join together.

Can you make a pattern with your tiles the same as they have?

Can you draw your pattern?

Now Sunlou and Amaya have 4 squares. Can you make a pattern out of the four squares so that each tile joins on two sides?

Can you draw your pattern?

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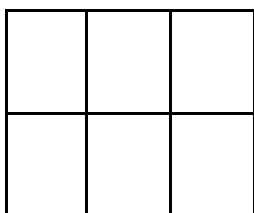
Task 1 (independent)

Choose each bag and count in groups how many objects are in the bag.

Record how you counted the objects.

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 2**

I have made a large grid:

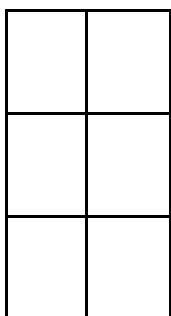


How did I make this? What could we call it?

Make the grid using the square tiles.

How many tiles did you need? Record this.

I have made another grid:



How many squares in this grid?

How is it related to the first grid?

Make the grid using the square tiles.

Copy both grids and draw these.

Task 2 (independent)

Sunlou and Amaya are playing with tiles. They have four square tiles that are the same. They make a pattern so the tiles join together on two sides.

Make the pattern with your tiles.

Use the ice-block sticks to make the pattern.

Draw what the pattern looks like.

Make your own pattern with 4 tiles.

Use the ice-block sticks to make the pattern.

Draw what the pattern looks like.

Task 3

Bobbi and Leesa are playing with tiles. They have six square tiles that are the same. They make a grid so the tiles join together, can you make a grid with your tiles so that they are joined together?

Can you draw the pattern you have made with your tiles?

Have a go at drawing these grids:

A grid that is 3 by 3

A grid that is 2 by 4

A grid that is 4 by 3

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Task 3 (independent)

Draw these grids first and then make them with the ice-block sticks.

A grid that is 2 by 5

A grid that is 4 by 2

A grid that is 3 by 3

A grid that is 5 by 2

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Task 4

How many dots are there?

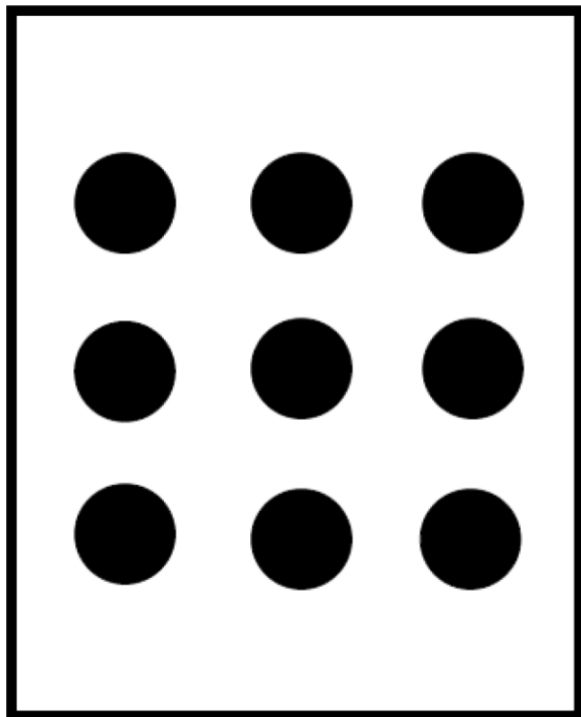
Draw a picture of the array and record the numbers you used to find the number of dots.

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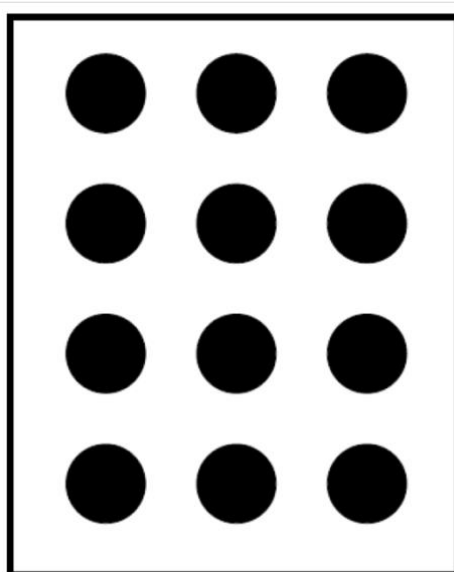
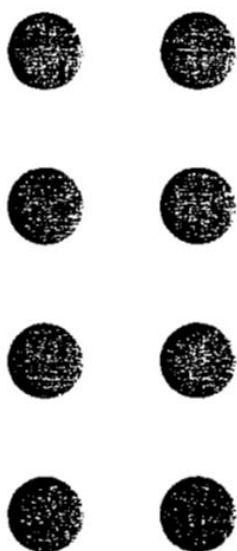
Task 4 (dot examples)

Examples of dot cards:

Three by three array



Other dot examples:



*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 4 (independent)**

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

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Task 5

Talia 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?

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Task 5 (independent)

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?

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 6**

Iosefa collects marbles. He decides that he wants to see how many marbles he has collected. Can you help him?

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Task 6 (independent)

Jason and Niu 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?

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Task 7

Hana and Sima are sharing a bag of 12 jellybeans. If they shared them fairly, how many would they each get?

Show how you can solve the task in different ways.

If Leon joined them as well, how many would they each get?

Show how you can solve the task in different ways.

If there were four friends in total, how many would they each get?

Show how you can solve the task in different ways.

Task 7 (independent)

Hana and Sima are sharing a bag of 8 jellybeans. If they shared them fairly, how many would they each get?

Draw how you solved the task using an array.

If there were 4 friends to share the 8 jellybeans, how many would they each get?

Draw how you solved the task using an array.

Hana and Sima are sharing a bag of 6 jellybeans. If they shared them fairly, how many would they each get?

Draw how you solved the task using an array.

If there were 3 friends to share the 6 jellybeans, how many would they each get?

Draw how you solved the task using an array.

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 8**

There are 10 tama in the sasa group. The faiaoga wants them to sit in five equal groups. How many tama will be in each group?

What if the faiaoga only wanted them to sit in two equal groups? How many tama would be in each group?

There are 9 tama in the drumming group.

Each tama plays one instrument – a large drum, a shaker, or a small drum. The same number of tama play each instrument.

How many tama play each instrument?

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 8 (independent)**

There are 14 tama in the sasa group. The faiaoga wants them to sit in two equal groups. How many tama will be in each group?

What if the faiaoga only wanted them to sit in two equal groups? How many tama would be in each group?

There are 12 tama in drumming group. Each tama plays one instrument – a large drum, a shaker, or a small drum. The same number of tama play each instrument.

How many tama play each instrument?

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 9**

Teejay has 12 jellybeans. He wants to share them with his friends and give them 2 each. How many friends can he share them with?

How many friends could Teejay share his jellybeans with if he decides to give them 3 each instead?

How many friends could Teejay share his jellybeans with if he decides to give them 4 each instead?

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 9 (independent)**

Teejay has 6 jellybeans. He wants to share them with his friends and give them 2 each. How many friends can he share them with?

How many friends could Teejay share his jellybeans with if he decides to give them 3 each instead?

Teejay has 8 jellybeans. He wants to share them with his friends and give them 2 each. How many friends can he share them with?

How many friends could Teejay share his jellybeans with if he decides to give them 4 each instead?

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 10**

Lotu has \$10 in two dollar coins. How many coins does she have?

Draw how you solved the problem.

Lotu has 9 marbles. She wants to give her friends 3 marbles each.
How many friends can she give marbles to?

Draw how you solved the problem.

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 10 (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, arrays and number sentences.

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 11 (optional task)**

Can you make these arrays using counters and draw them?

3 by 2

3 by 3

4 by 2

2 by 5

Record number sentences that use multiplication and division to match each one.

*Level 1 Year 0 Copy Masters: Multiplication and Division***Task 11 (independent)**

Sepi has 12 marbles.

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 number sentences to match.

Task 12 (optional task)

Timo is playing with his shell collection. He wants to make up pairs of shells. He has 5 shells. When he puts them into pairs, he has one left over.

If he has 6 shells, how many pairs can he make?

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

Record your solutions using drawing and number sentences.