Varied Fluency
Step 9: How Many Ways?

National Curriculum Objectives:

Mathematics Year 3: (3C8) Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Differentiation:

Developing Questions to support finding different ways to solve correspondence problems involving two groups. Questions include pictorial representations or completed tables.
Expected Questions to support finding different ways to solve correspondence problems involving two groups. Questions include some pictorial representations or tables.
Greater Depth Questions to support finding different ways to solve correspondence problems involving two or three groups. No pictorial representations included.

More Year 3 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

How Many Ways?

1a. Olivia is making breakfast. Complete the table to show how many possible breakfasts she can make.

Bakery goods	Spread
Bread	Honey
Bread	Jam
Croissant	
Croissant	

D VF

How Many Ways?

1b. Kim is making ice creams. Complete the table to show how many possible ice creams he can make.

Cone	Topping
Pointed	Cherry
Pointed	Sprinkles
Pointed	Sauce
Squared	
Squared	
Squared	

D VF

2a. Find the odd one out by finding how many combinations there could be.

A. 

B. 

C. 

D VF

2b. Find the odd one out by finding how many combinations there could be.

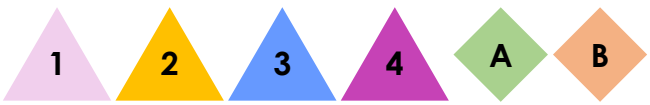
A. 

B. 

C. 

D VF

3a. Find the calculation that shows the number of ways the shapes could be combined.



A. 2 + 4 = 6 ☐

B. 4 x 2 = 8 ☐

C. 3 x 4 = 12 ☐

D VF

3b. Find the calculation that shows the number of ways the dogs and toys could be combined.

A. 2 + 3 = 5 ☐

B. 4 + 2 = 6 ☐

C. 3 x 2 = 6 ☐

D VF

How Many Ways?

4a. Pia is making sandwiches. Complete the table to show how many possible sandwiches she can make.

Sandwich	Filling
Square	Lettuce
Square	Tomato
Square	Cucumber
Triangle	
Wrap	

E VF

4b. Lucy is making party bags. Complete the table to show how many possible party bags she can make.

Hat	Glasses
Zigzag	Heart
Zigzag	Star
Circle	Heart
Circle	

E VF

5a. Which representation shows 4 x 3 combinations?

A. 

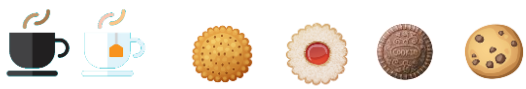
B. 

C. 

E VF

5b. Which representation shows 2 x 5 combinations?

A. 

B. 

C. 

E VF

6a. Find the calculation that shows the number of ways the shapes could be combined.

A. 3 + 4 = ☐

B. 4 x 2 = ☐

C. 3 x 4 = ☐

List all the possible combinations.

E VF

6b. Find the calculation that shows the number of ways the shells and lollies could be combined.

A. 3 + 5 = ☐

B. 5 x 3 = ☐

C. 6 x 2 = ☐

List all the possible combinations.

E VF

How Many Ways?

7a. William has red, blue and green scarfs, and red, blue and green hats. Complete the table to show the combinations William could wear.

Hat	Scarf

GD VF

How Many Ways?

7b. Tim can play with 1 car and 1 bike. He has yellow, red and black toy cars, and grey and orange toy bikes. Complete the table to show the combinations Tim could play with.

Toy Car	Toy Bike

GD VF

8a. Complete the combinations so they all have 16 possibilities.

A. ☐ plates and 8 bowls

B. ☐ cups, 2 mugs and 2 glasses

C. ☐ knives and 4 forks

GD VF

8b. Complete the combinations so they all have 24 possibilities.

A. ☐ fish and 2 dogs

B. ☐ spiders, 2 cats and 1 mouse

C. ☐ rabbits and 6 gerbils

GD VF

9a. Write the calculation for the different combinations of fruits and sweets.

apple, grapes, banana, plum, mints, chews, gums

List all the possible combinations.

GD VF

9b. Write the calculation for the different combinations of games and medals.

Hide and Seek, gold, Tag, silver, Cops and Robbers, bronze

List all the possible combinations.

GD VF

Varied Fluency
How Many Ways?

Developing

1a. croissant, honey; croissant, jam
2a. B
3a. B

Expected

4a. triangle, lettuce; triangle, tomato; triangle, cucumber; wrap, lettuce; wrap, tomato; wrap, cucumber
5a. B
6a. C. 3 x 4 = 12: 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D, 3A, 3B, 3C, 3D

Greater Depth

7a. 9 combinations: red hat, red scarf; red hat, blue scarf; red hat, green scarf; blue hat, red scarf; blue hat, blue scarf; blue hat, green scarf; green hat, red scarf; green hat, blue scarf; green hat, green scarf
8a. 2 plates; 4 cups; 4 knives
9a. 3 x 4 = 12; apple, chews; apple, mints; apply, gums; grapes and chews; grapes and mints; grapes and gums; banana and chews; banana and mints; banana and gums; plum and chews; plum and mints; plum and gums

Varied Fluency
How Many Ways?

Developing

1b. squared, cherry; squared, sprinkles; squared, sauce
2b. A
3b. C

Expected

4b. circle, star; stripy, heart; stripy, star
5b. C
6b. B. 5 x 3 = 15: 1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, 5B, 5C

Greater Depth

7b. 6 combinations; yellow car, grey bike; yellow car, orange bike; red car, grey bike; red car, orange bike; black car, grey bike; black car, orange bike
8b. 12 fish; 12 spiders; 4 rabbits
9b. 3 x 3 = 9: hide and seek, gold; hide and seek, silver; hide and seek, bronze; tag, gold; tag, silver; tag, bronze; cops and robbers, gold; cops and robbers, silver; cops and robbers, bronze