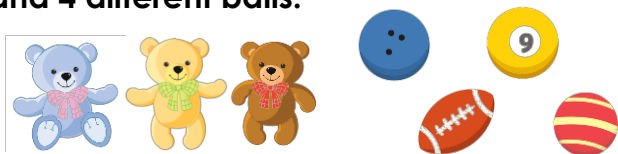# Correspondence Problems

1a. One box contains 3 types of teddy and 4 different balls.

How many combinations of teddy and ball are there? Circle the correct answer.

| 12 | 15 | 20 |

VF

1b. One box contains 4 different sizes of fish cans and 2 different flavours of soup.

How many combinations of fish and soup are there? Circle the correct answer.

| 8 | 10 | 12 |

VF

2a. True or false? There are 10 combinations of cake flavours and toppings. Show your working.

| Cake flavour	Toppings
1. vanilla 2. chocolate	1. milk chocolate chips 2. white chocolate chips 3. banana flakes 4. sprinkles 5. cherry

VF

2b. True or false? There are 30 combinations of books between Box 1 and Box 2. Show your working.

Box 1	Box 2
1. adventure story 2. comic 3. thriller 4. newspaper 5. fantasy story 6. information book	1. magazine 2. warning story 3. fairy tale 4. atlas

VF

3a. There are two boxes of blocks.

A.   B.

5 blocks   4 blocks
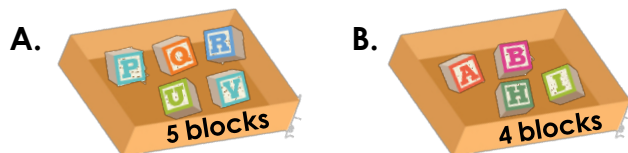
How many combinations of letters can be made?

Complete the calculation below to show the total number of combinations.

☐ x ☐ = ☐

VF

3b. There are two plates of fruit.

A.   B.
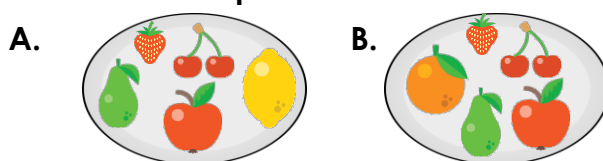
How many combinations of fruits can be made?

Complete the calculation below to show the total number of combinations.

☐ x ☐ = ☐

VF

4a. Tick the correct number of possible combinations.

Flowers	Dress
1. rose 2. sunflower 3. daisy 4. poppy	

| 7 | 12 | 15 |

VF

4b. Tick the correct number of possible combinations.

Pizza size	Pizza topping
small medium large	1. onion 2. sweetcorn 3. peppers 4. olives 5. chicken 6. spicy beef 7. Tuna

| 14 | 21 | 28 |

VF

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Varied Fluency – Correspondence Problems – Year 4 Developing

Correspondence Problems

Correspondence Problems

5a. A case contains 3 pencils and some pens. There are 21 possible combinations of pens and pencils.
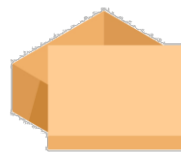
Circle the number of pens in the box.

| 7 | 8 | 9 |

VF

5b. One box contains 3 dresses and some scarves. There are 36 possible combinations of dresses and scarves.

Circle the number of scarves in the box.

| 11 | 12 | 13 |

VF

6a. True or false? There are 12 combinations of pizza bases and toppings. Show your working.

Bases	Toppings
deep pan thin and crispy stuffed crust	pepperoni onion sweetcorn chicken pepper mushroom

VF

6b. True or false? There are 32 combinations of toys between Box 1 and Box 2. Show your working.

Box 1	Box 2
doll teddy bear football jigsaw car rubber duck	board game robot train boat rattle building blocks

VF

7a. There are two boxes of marbles.

A.   B.

How many combinations of colours can be made?

Complete the calculation below to show the total number of combinations.

☐ x ☐ = ☐

VF

7b. There are two jars of sweets.

A.   B.

How many combinations of sweets can be made?

Complete the calculation below to show the total number of combinations.

☐ x ☐ = ☐

VF

8a. Tick the correct number of possible combinations.

shoes	socks
trainers boots sandals wellies slippers	spotty stripy pink green yellow silver

| 29 | 33 | 30 |

VF

8b. Tick the correct number of possible combinations.

curtain length	curtain colour
137 cm 182 cm 228 cm 274 cm	grey blue green purple orange cream white

| 11 | 21 | 28 |

VF

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Varied Fluency – Correspondence Problems – Year 4 Expected

Correspondence Problems

9a. One box contains 4 flavours of lollies and 5 different toffees.

Circle the combinations that can be made if 6 types of sweets are added.
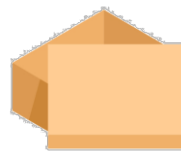
| 110 | 100 | 120 |

10a. True or false? There are more than 90 combinations of pizza bases and toppings. Show your working.

Bases	1st Topping	2nd Topping
deep pan thin and crispy stuffed crust	pepperoni chicken spicy beef tuna	onion sweetcorn peppers mushroom olives basil

11a. There are three boxes of toys.

A. train B. teddy C. train
   ball   robot   teddy
   doll   doll
   car   car
   boat   boat

How many combinations of toys can be made?

[ ] x [ ] x [ ] = [ ]

12a. Complete the table and tick the correct number of possible combinations.

Fish 1	Fish 2	Fish 3
tetra guppy catfish angel fish	?	snail minnow barb

| 15 | 48 | 54 |

Correspondence Problems

9b. One box contains 4 types of balls and 7 different rackets.

Circle the combinations that can be made if 5 coloured T-shirts are added.

| 140 | 130 | 150 |

10b. True or false? There are less than 100 combinations of sandwiches. Show your working.

Bread	Filling 1	Filling 2
brown white baguette seeded	ham cheese tuna beef turkey	tomato lettuce cheese cucumber onion

11b. There are three packets of stickers.

A. blue   B. silver C. silver
   green   gold   green
   yellow   orange   yellow
   purple
   orange

How many combinations of colours can be made?

[ ] x [ ] x [ ] = [ ]

12b. Complete the table and tick the correct number of possible combinations.

Fruit 1	Fruit 2	Fruit 3
?	apple banana pear mango grape orange	kiwi melon peach

| 34 | 36 | 42 |

Varied Fluency – Correspondence Problems – Year 4 Greater Depth

Varied Fluency
Correspondence Problems

Developing
1a. 12 combinations
2a. True: 2 x 5 = 10 combinations
3a. 5 x 4 = 20 combinations
4a. 12 combinations

Expected
5a. 7 pens
6a. False: 3 x 6 = 18 combinations, not 12
7a. 5 x 8 = 40 combinations
8a. 30 combinations

Greater Depth
9a. 120 combinations
10a. True: 4 x 4 x 6 = 96 combinations
11a. 5 x 2 x 5 = 50 combinations
12a. There are 4 fish missing from column 2. The correct number of combinations is 48.

Varied Fluency
Correspondence Problems

Developing
1b. 8 combinations
2b. False: 4 x 6 = 24 combinations, not 30
3b. 5 x 5 = 25 combinations
4b. 21 combinations

Expected
5b. 12 scarves
6b. False: 6 x 6 = 36 combinations, not 32
7b. 9 x 7 = 63 combinations
8b. 28 combinations

Greater Depth
9b. 140 combinations
10b. False: 4 x 5 x 5 = 100 combinations
11b. 5 x 3 x 3 = 45 combinations
12b. There are 2 fruits missing from column 2. The correct number of combinations is 36.