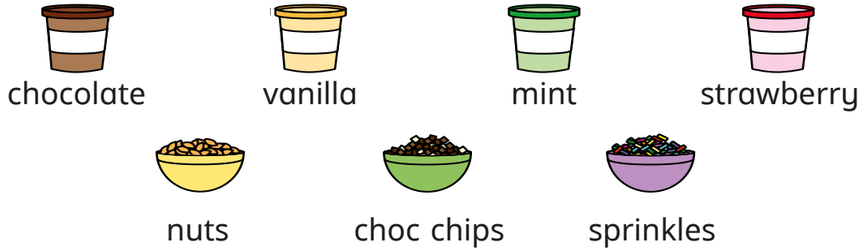
How many ways?

1 Dora is making ice creams.

She has four flavours and three toppings.



Dora chooses a flavour and a topping.

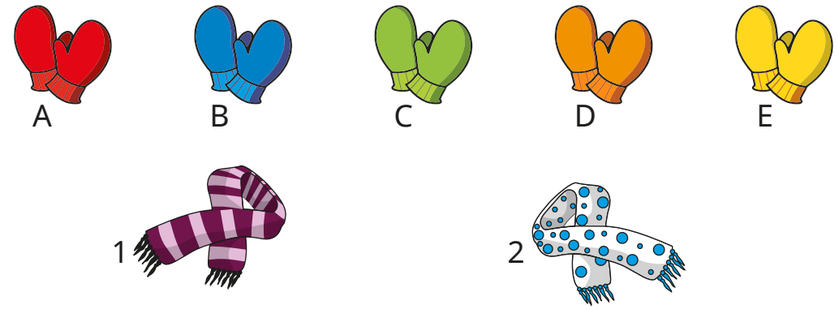
a) Complete the table to show the different combinations she could make.

Ice cream flavour	Topping
chocolate	nuts
chocolate	choc chips
chocolate	sprinkles

b) How did you work out the different combinations?

How do you know you have found them all?

2 There are five pairs of mittens and two scarfs.



Amir chooses a pair of mittens and a scarf.

a) List all the possible combinations.

Mittens	Scarfs

b) How many different combinations of mittens and scarfs are there? ☐

c) Are you sure you have found them all?
Compare with a partner.

d) What multiplication works out the number of combinations?

☐ × ☐ = ☐

3 Whitney buys a snack and a drink.

chocolate


muffin


cookie


apple


juice

fizzy drink


milk

water

She says there are eight combinations she could choose.

Is Whitney correct? _____

Show how you know.

4 Teddy has five pairs of trousers.

He also has four shirts.

Each day he wears a shirt and a pair of trousers.

a) How many possible combinations does he have?

☐ × ☐ = ☐

b) Teddy buys two more pairs of trousers.

How many possible combinations does he have now?

☐ × ☐ = ☐

5 Jack and Alex are choosing food from a menu.

Starter	Main	Dessert
Soup	Burger	Ice cream
Cheese	Pizza	Brownie
Bread	Roast chicken	Fruit salad
	Egg and chips	
	Salad	
	Pie	

a) Jack chooses a starter and a main.

How many different combinations are there?

☐

b) Alex chooses a starter, main and dessert.

How many different combinations are there?

☐

6 Rosie is making a birthday card.

She uses a sheet of coloured card and sticks a shape on it.

She has 5 different shapes she can choose from.

She can make 40 different birthday cards in total.

How many different sheets of card does Rosie have?

☐