

1 Whitney is making ice creams.

She has three flavours and four toppings.



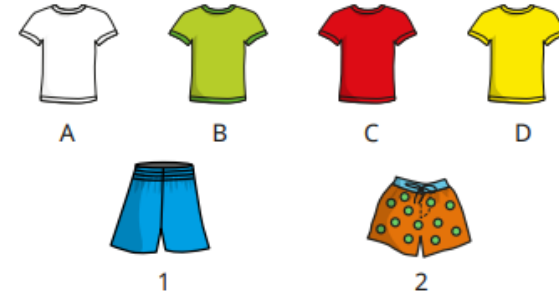
Whitney chooses a flavour and a topping.

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

Ice cream flavour	Topping
chocolate	nuts
chocolate	choc chips
chocolate	sprinkles
chocolate	fudge

b) How did you work out the different combinations?
How do you know that you have found them all?

2 There are four T-shirts and two pairs of shorts.



Dexter chooses a T-shirt and a pair of shorts.

a) List all the possible combinations.

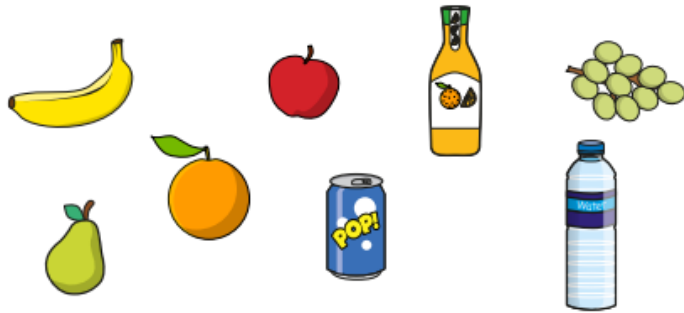
T-shirt	Shorts

b) How many different combinations of T-shirts and shorts are there?

c) Are you sure you have found them all?
Talk about it with a partner.

d) Write a multiplication to work out the number of combinations. × =

- 3 Ron chooses some fruit and a drink.



He says that there are 8 combinations he could choose.

- a) Explain why Ron is incorrect.

- b) How many possible combinations are there?

- 4 Kim has six woolly hats.

She also has five scarves.

Each day in winter she wears a hat and a scarf.

- a) How many possible combinations does she have?

$$\square \times \square = \square$$

- b) Kim buys 2 more scarves.

How many possible combinations does she have now?

$$\square \times \square = \square$$

- 5 Sam and Esther are choosing food from a menu.

Starter	Main	Dessert
Garlic bread	Pizza	Chocolate cake
Soup	Burger	Brownie
	Salad	Ice cream
	Chicken pie	Fruit salad
	Roast beef	

- a) Sam chooses a main and a dessert.

How many different combinations are there?

- b) Esther chooses a starter, main and dessert.

How many different combinations are there?

- 6 Scott is choosing a sandwich and a drink from a cafe menu.

Sandwiches	Drinks
	Water
	Orange juice
	Apple juice

There are 24 different possible combinations of sandwiches and drinks.

How many types of sandwiches are there?

