



Combinations



Watch video

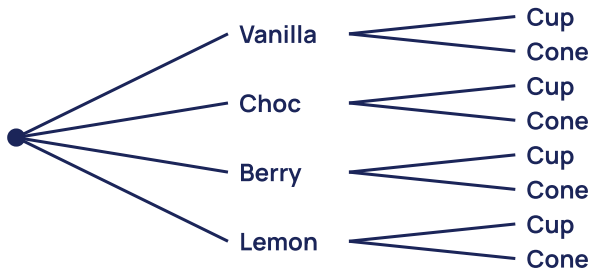
MathApex

Name: _____

Date: _____

From the video 2 flavors, cup or cone → $2 \times 2 = 4$ choices**1 Now it's your turn!**

4 flavors, in a cup or a cone: how many choices are there?



Each flavor can come in a cup or in a cone.

$$4 \times 2 = \boxed{} \text{ choices}$$

3 The table.

Bread: white or brown. Topping: cheese, ham or jam. Write all the combinations in the table.

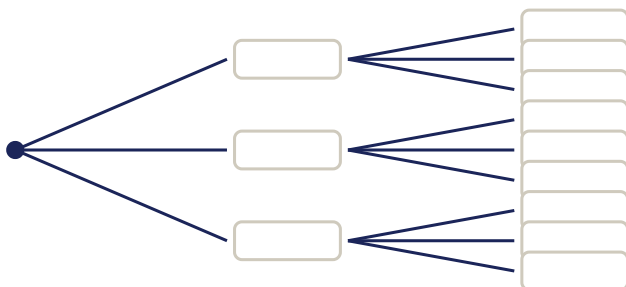
	Cheese	Ham	Jam
white			
brown			

Combinations: $\boxed{}$

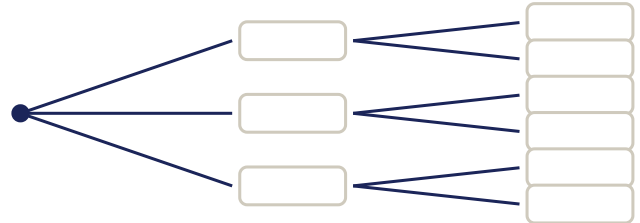
5 Think backwards.

There are 12 choices and 4 flavors. How many serving types are there?

$$12 \div 4 = \boxed{} \text{ types}$$

6 Your own tree diagram.**2 The tree diagram.**

T-shirts: blue, green, red. Pants: short, long. Write in the boxes and count the paths.



$\boxed{}$ choices

4 Words only.

a) 5 kinds of bread and 2 fillings. How many choices?

$$\boxed{} \times \boxed{} = \boxed{}$$

b) 2 dice colours and 6 numbers. How many choices?

$$\boxed{} \times \boxed{} = \boxed{}$$

★ Brain teaser

An ice cream shop has 3 flavors to choose from, 2 serving types and 2 toppings. How many different ice creams can you order?

Think of 3 favourite foods and 3 drinks. Write them in the boxes.

Choices: $\boxed{}$



Combinations



1 Now it's your turn!

$$4 \times 2 = 8 \text{ choices}$$

2 The tree diagram.

$$3 \times 2 = 6 \text{ choices}$$

3 The table.

$$2 \times 3 = 6 \text{ combinations}$$

4 Words only.

$$5 \times 2 = 10$$

$$2 \times 6 = 12$$

5 Think backwards.

$$12 \div 4 = 3 \text{ types}$$

★ Brain teaser

$$3 \times 2 \times 2 = 12 \text{ ice creams}$$

6 Tree diagram.

$$3 \times 3 = 9 \text{ choices}$$

For parents and teachers: This worksheet goes with the video "Combinations" (Math Story 77, Grade 4).

Combinations: number of first choices times number of second choices. A tree diagram and a table show all the paths.

More Math Stories with video and worksheet: www.mathapex.app/en/math-stories/