



DIGITAL SCHOOL

LEARN HERE

Pascal's Triangle

L.I. – to solve problems.

Success Criteria

- I can read the problem carefully.
- I can identify the key words.
- I can choose a strategy to help solve the problem.
- I can show my thinking.
- I can use my mathematical skills to help.

Pascal's Triangle

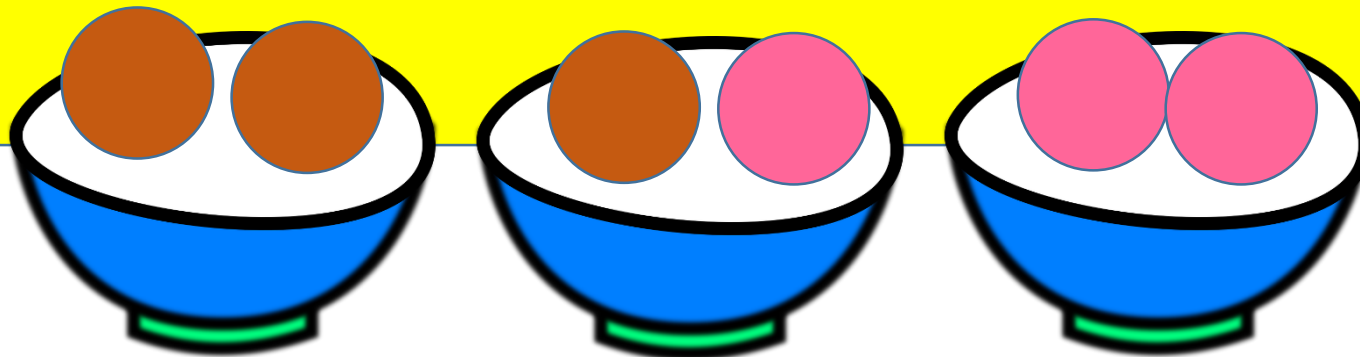
Problem from Education Scotland
National Improvement Hub.

Problem

There are two scoops of ice cream in a bowl. If there are 2 flavours of ice cream (chocolate and strawberry) available then how many flavour combinations will we get?

Let's have a look at this problem. We can draw it out to help us.

As you can see below if there are two flavours then there are 3 possible flavour combinations.



Pascal's Triangle

The patterns within Pascal's Triangle can be used to help solve some problems and can be used to help with this one. Use your problem solving strategies to solve number one and then see if you can find any patterns in Pascal's Triangle which would help solve number two. A copy of Pascal's Triangle can be found on the next slide. (Each bowl must contain only two scoops of ice cream.)

1. If a third flavour, (vanilla) was added then how many combinations are possible?
2. Work out how many combinations are possible for 4, 5 and 6 flavours.

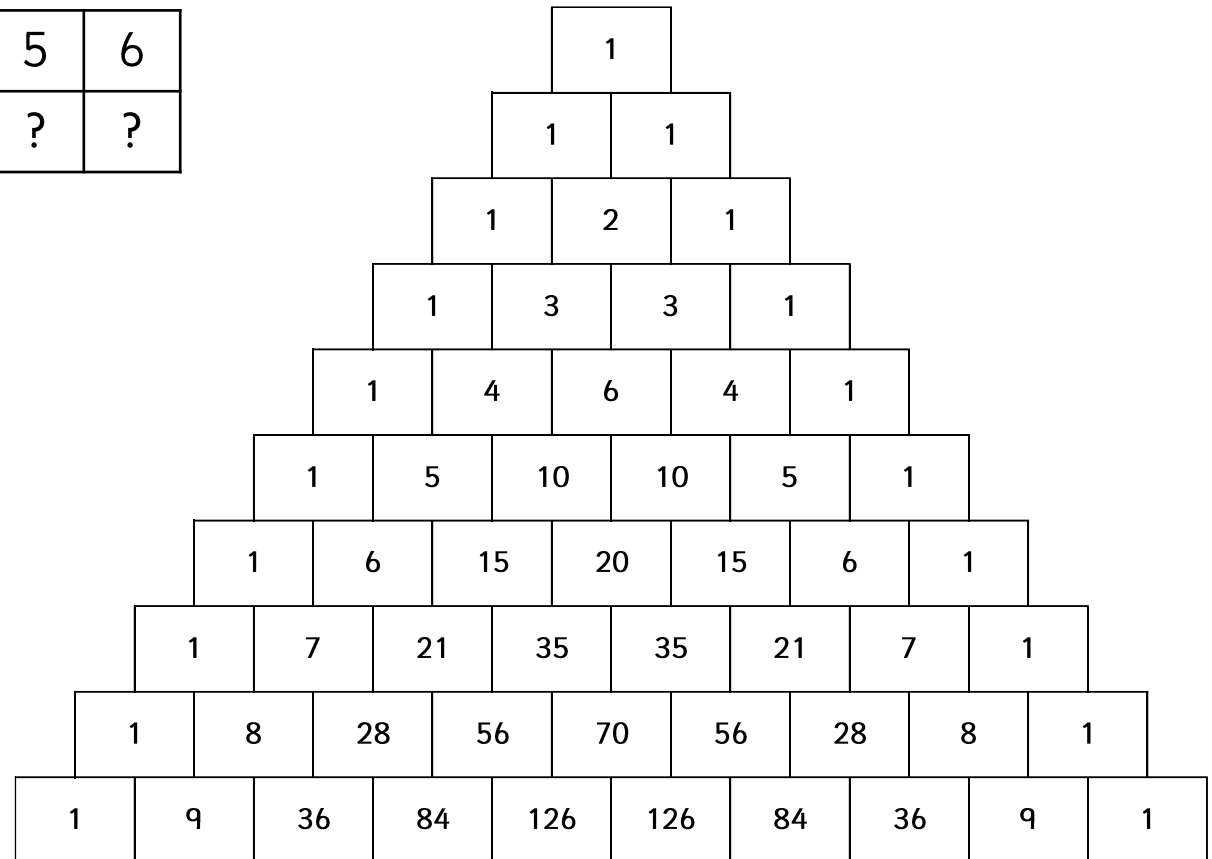
Number of Flavours	1	2	3	4	5	6
Number of flavour combinations	1	3	?	?	?	?

Pascal's Triangle

1. If a third flavour, (vanilla) was added then how many combinations are possible?
2. Work out how many combinations are possible for 4, 5 and 6 flavours.

Number of Flavours	1	2	3	4	5	6
Number of flavour combinations	1	3	?	?	?	?

Click here for a hint, if you are unsure of where to find the pattern in the triangle.



Pascal's Triangle

Now that you have completed the task it is time to self – assess your work.
Let's look back at the Learning Intention and Success Criteria.

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I feel confident and can do these independently

I need some more practise and can do some of these independently

I need some help and more practise

Pascal's Triangle

The first two solutions to the problem are highlighted in yellow in the triangle.

Can you find the next solution?

Can you check it by drawing a picture/making a list?

