Maths
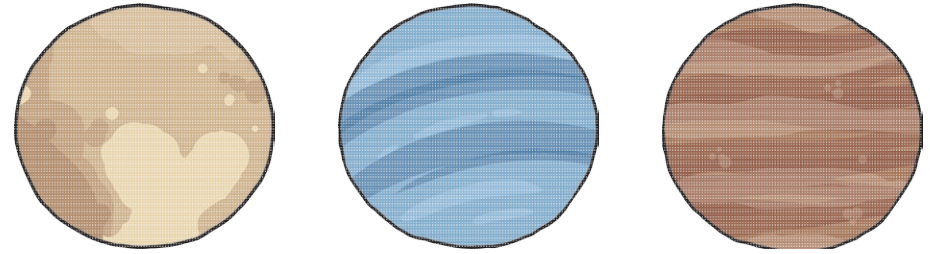## Challenge Cards

Put 12 aliens on 3 planets. There must be a different number of aliens on each planet.

How many different ways are there to do this?

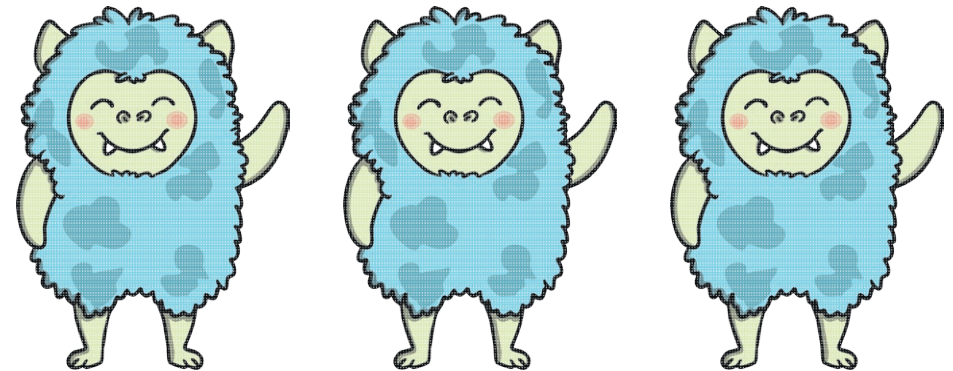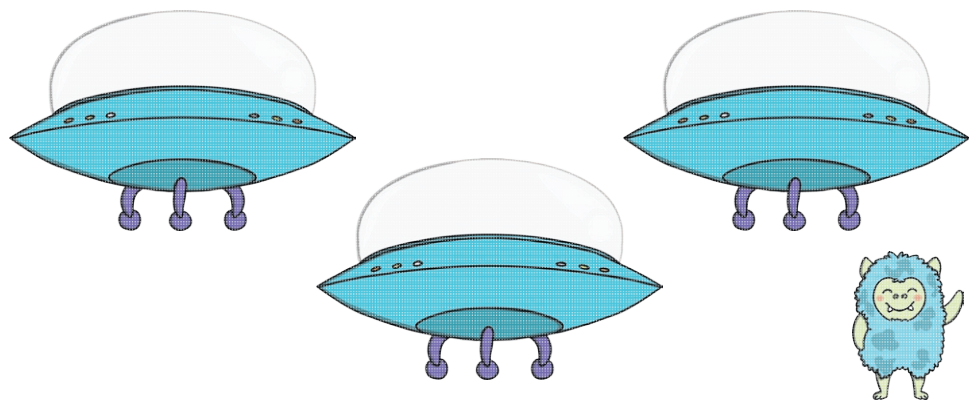How many different ways can you make 8?

2 + 3 + 3 = 8

9 - 1 = 8

Put one star on each alien.

How many different ways are there to do this?

Put 15 aliens on 3 spaceships. Each spaceship must have 3 more aliens than the one before.
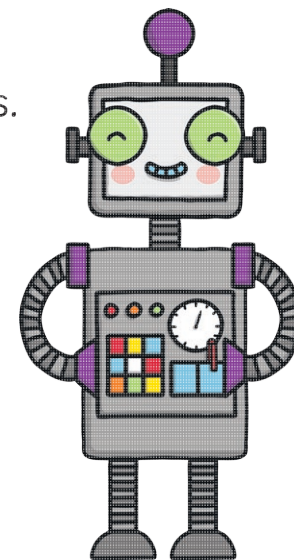
How many different ways are there to do this?

Choose any 2 odd numbers and add them together.

What do you notice?

Try this with different odd numbers.

5   11   13

9   3

What happens?
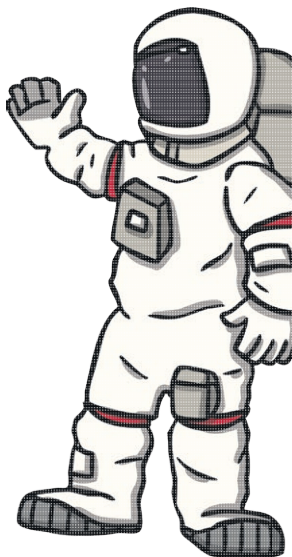
Why does this happen?

Add together the numbers

55, 44, 33, 22, 11

What is the total?

Can you find a quick way to do this?

Choose any 2 even numbers and add them together.

What do you notice?

Try this with different even numbers.

6   12   4

8   10

Does this always happen?

Why does this happen?

What happens when you add an even number and an odd number together?

10   **4**   **7**   **9**

1   **3**   **18**   **5**

6   **2**   **16**

Does this always happen?

Why does this happen?

The space post office has only 1p, 2p and 3p stamps left. Can you make all the different amounts to 30p for the customers?
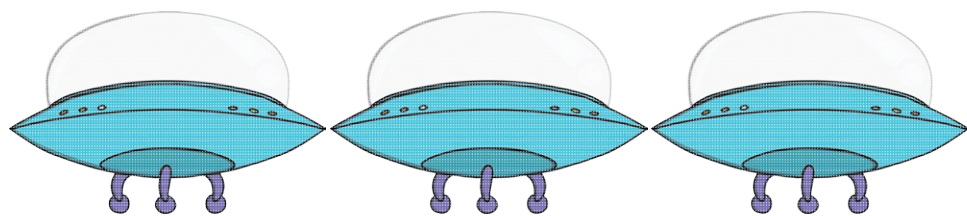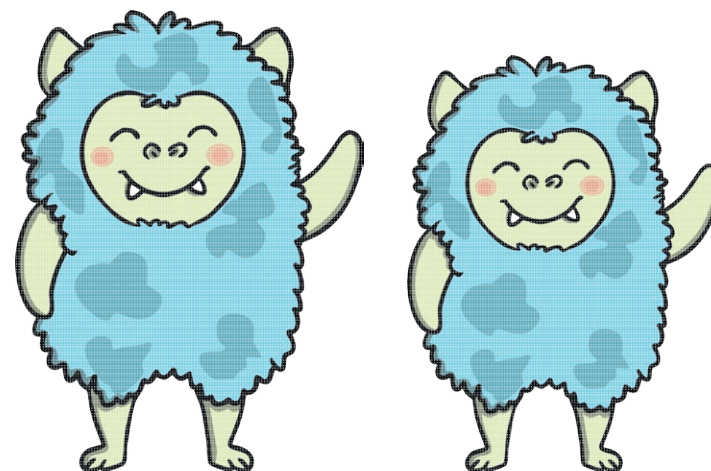

1p   2p   3p

Use as few stamps as possible as they don't want to do too much licking!

There are 3 spaceships in a row. They each have one alien inside. There is a purple, a yellow and an orange alien.
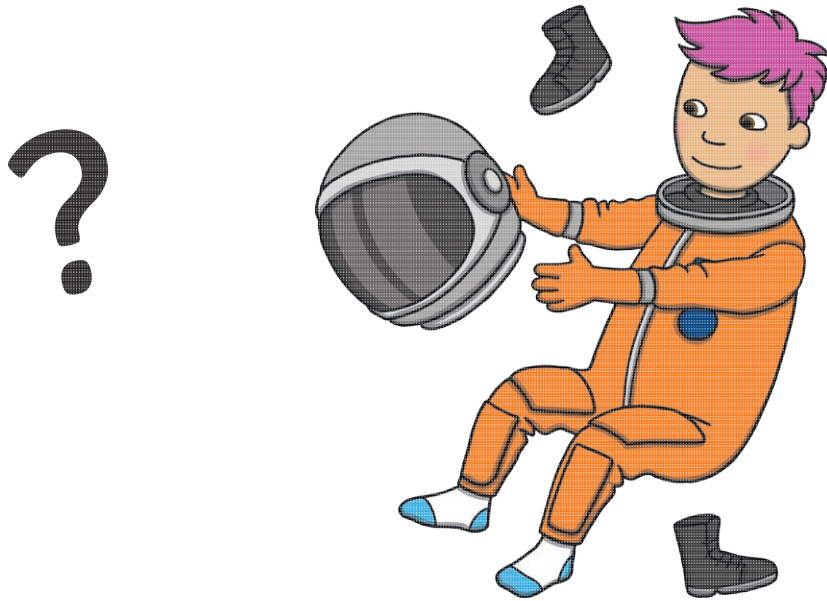

The purple alien is not in the middle. The spaceship on the left has the orange alien. The spaceship on the right does not have the yellow alien. Which colour alien is in the middle spaceship?

Zap the alien is 2 years younger than his brother Zork.

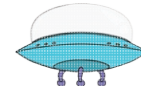How old might each of them be?

Find 3 numbers next to each other that add up to 12.

You can only buy 2 kinds of space toys from my shop at a time.
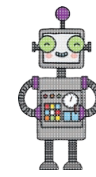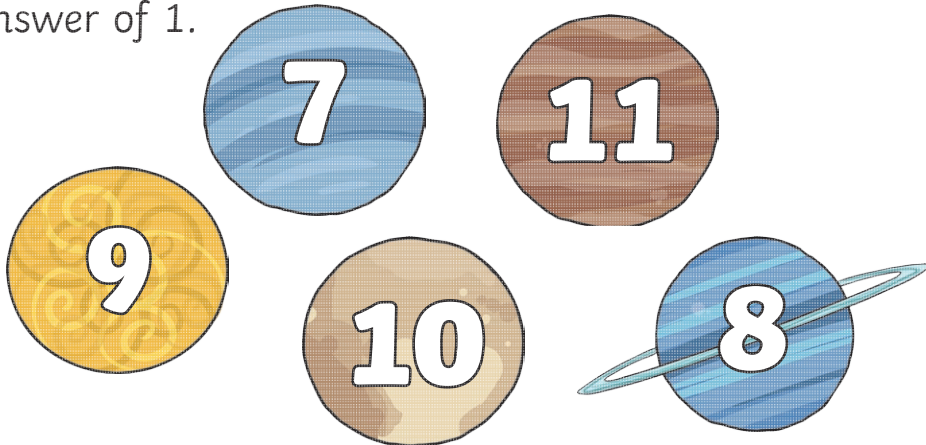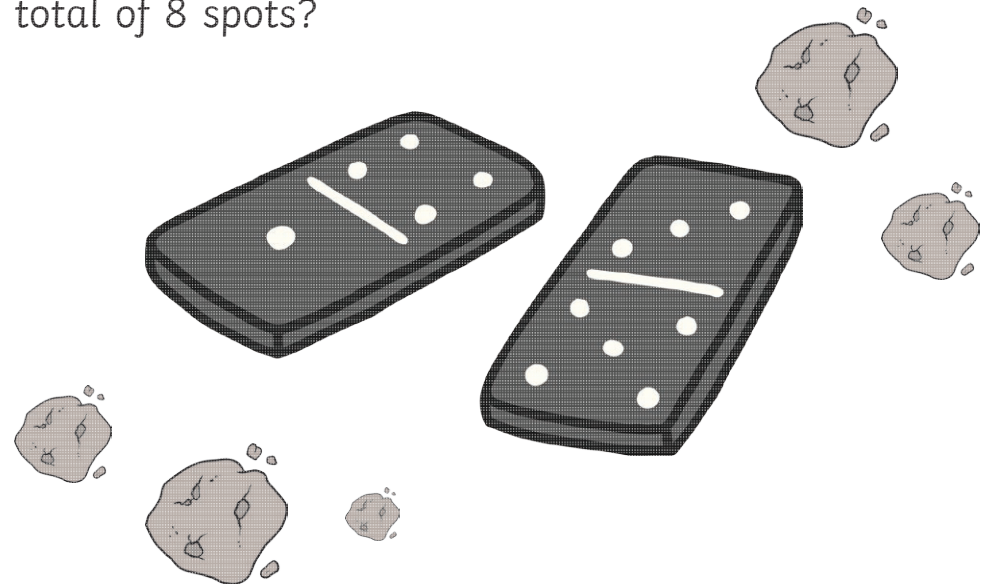
2p   3p   5p   4p   7p   8p

Which space toys can you buy for exactly 30p and how many can you buy?

Find any 2 numbers which, when you take away the smaller one from the bigger one, you get an answer of 1.

7   11   9   10   8

What do you notice?

How many dominoes can you find which have a total of 8 spots?

Find as many ways as you can of adding 3 odd numbers together to make a total of 15.
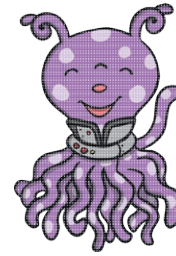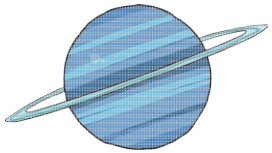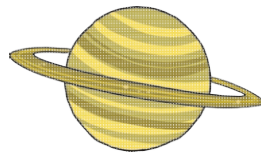
1

7

3

11

5

9

20p   2p   3p   10p

I spent 36p on space toys. What did I buy?
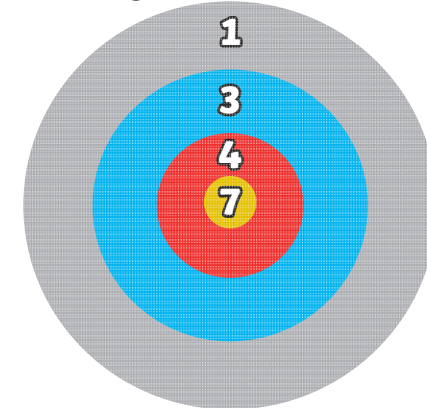
Make up a question for a friend.
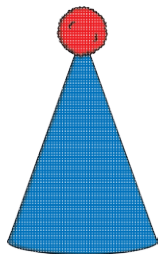
The answer is 12.

What is the question?

How many different questions can you think of?

Zork throws 5 darts at the target board. What is the highest score that he can get? What is the lowest score that he could get?

1

3

4

7

What if all the darts land in a different place?

15 people are going to be at a space themed party! How many packets of each item are you going to buy?
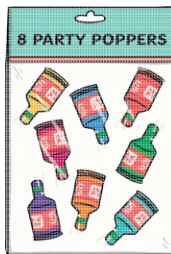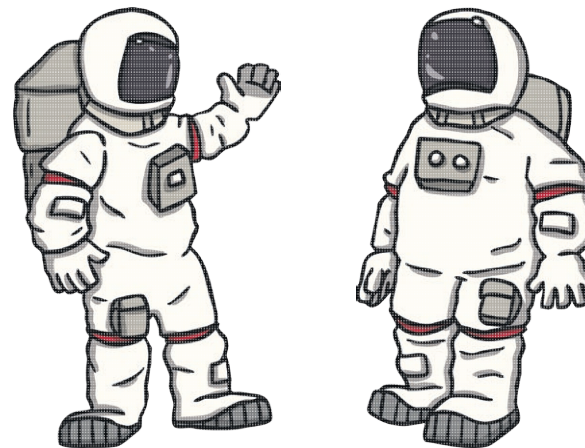
6 per pack   6 per pack   4 per pack   8 per pack

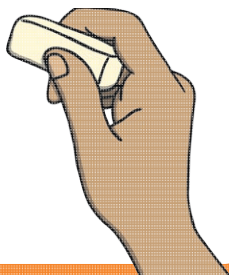Dave says he is 5 years older than Steve. Steve is 31.

How old is Dave?

How long is this line?

Imogen rubs out half of the line.

How long is it now?

15 goals are scored in a space match. Zap scored 5 and Rob scored 3. How many goals did Dave score?

3   5   ?