

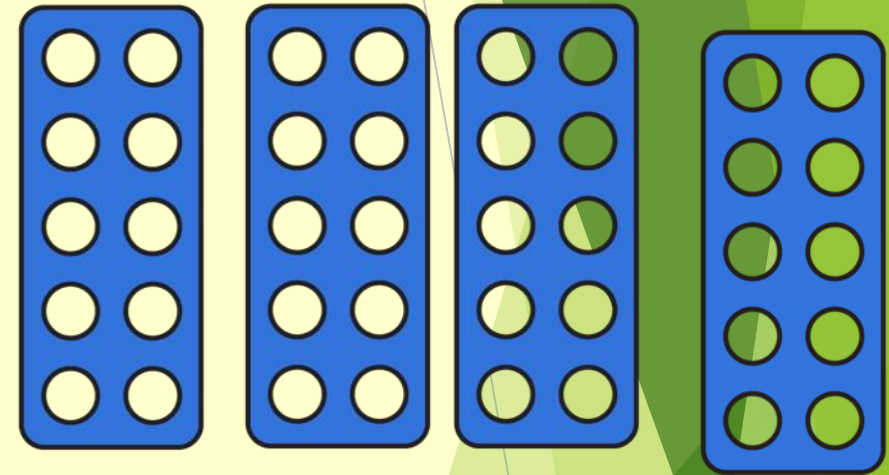
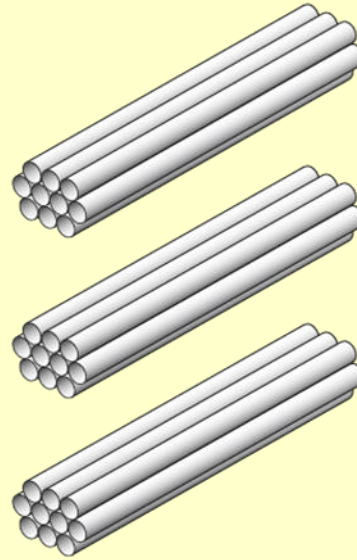
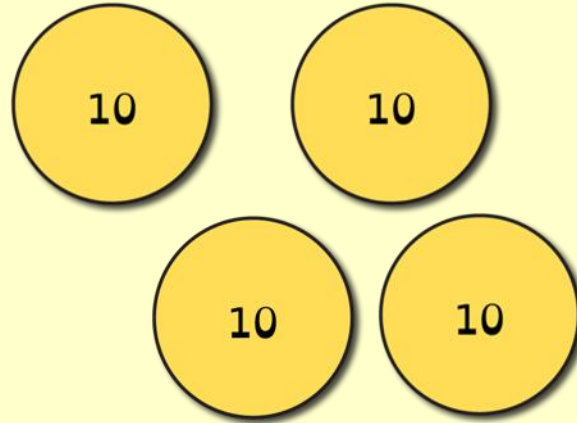
The background features a light cream-colored central area. On the left and right sides, there are abstract, overlapping geometric shapes in various shades of green, ranging from a pale lime green to a deep forest green. These shapes are primarily triangular and polygonal, creating a modern, layered effect. A thin, light blue line runs diagonally across the lower right portion of the image, intersecting the green shapes.

# Division

# Starter

Starter:

Which one doesn't belong?



Explain your answer.

Date: 18.05.20

LO: To recognise equal groups

Date: 18.05.20

LO: To recognise equal groups

Success Criteria

I can use mathematical equipment and pictorial representations to make equal groups by sharing

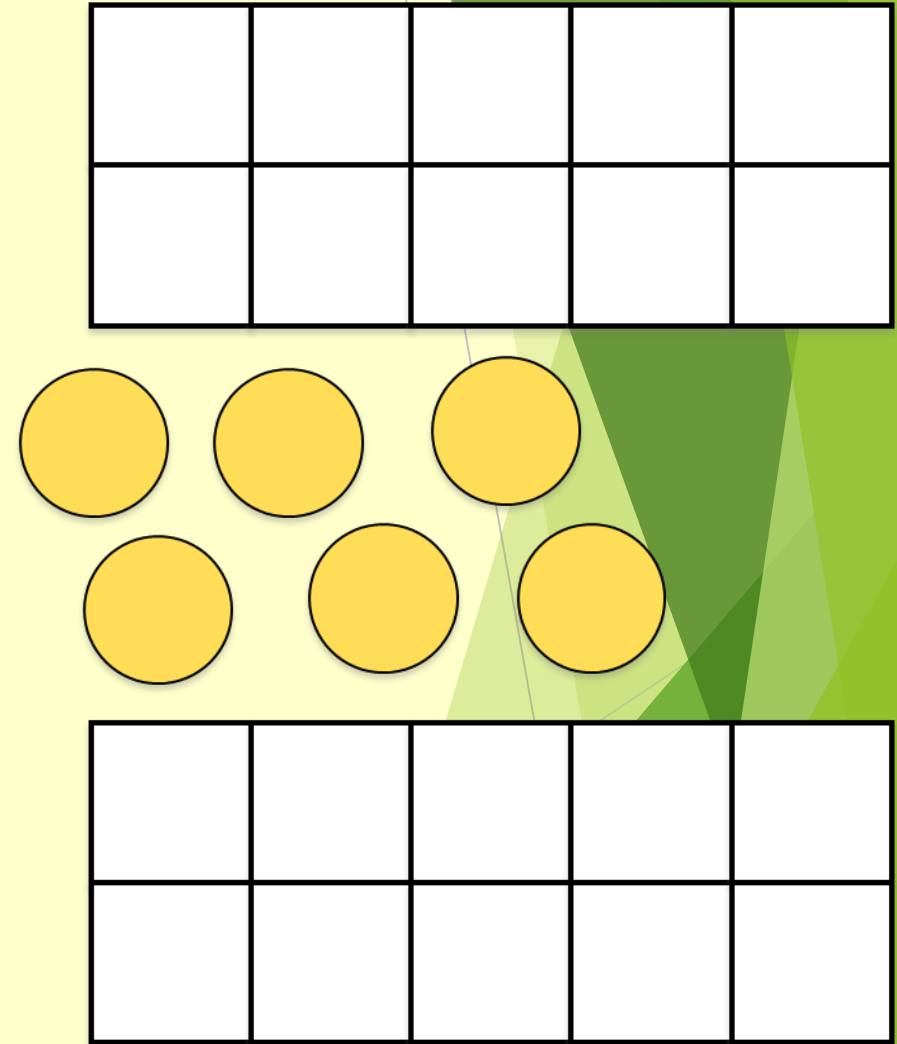
I can explain my reasoning when using mathematical equipment and pictorial representations to make equal groups by sharing

# Descriptive Teaching

## Talking Time:

Share the counters equally between both ten frames and complete the sentences below:

In total, there are \_ counters.  
There are \_ ten frames.  
There are \_ counters in each ten frame.



# Descriptive Doing

Now try this:

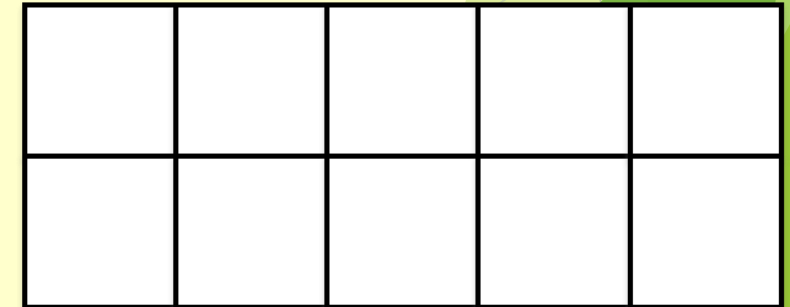
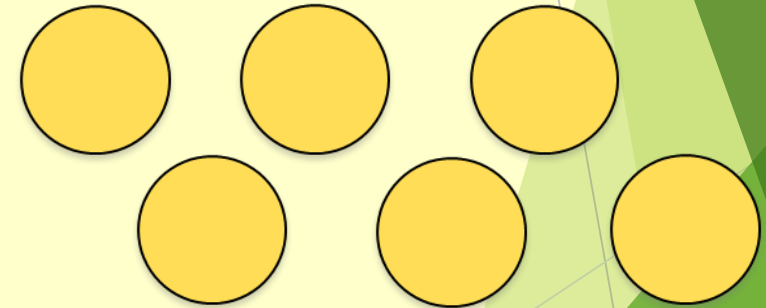
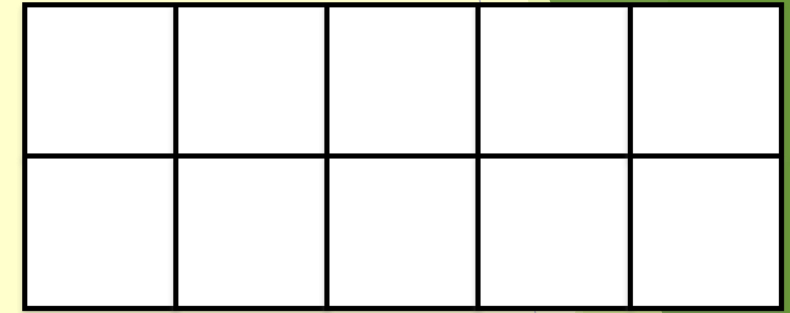
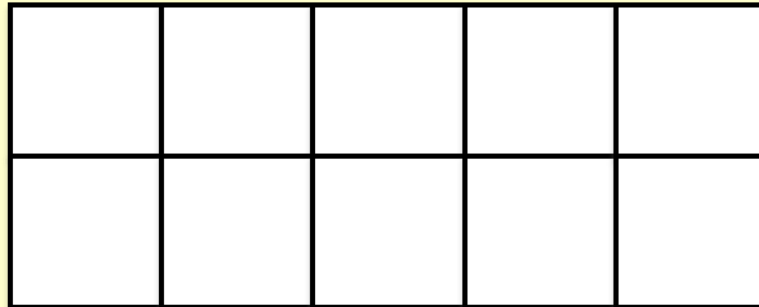
Talking Time:

Share the counters equally between each of the ten frames and complete the sentences below:

In total, there are \_ counters.

There are \_ ten frames.

There are \_ counters in each ten frame.

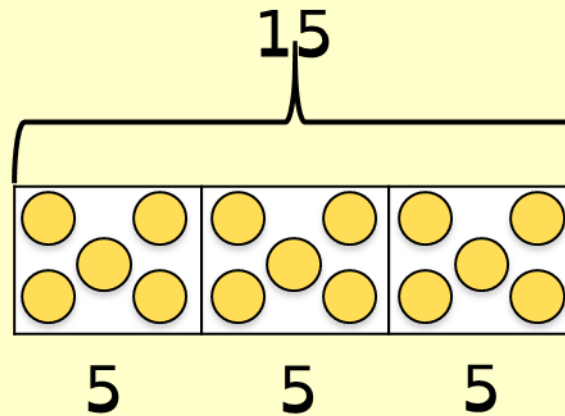


# Reflective Doing

## Talking Time:

Ruth has used a bar model to divide 15 into 3 equal groups.

How does the number sentence match the bar model?



She writes  $15 \div 3 = 5$

How does her model demonstrate the number sentence above?

# Choose your challenge

Create a bar model for:

$$24 \div 2 = 12$$

Create a bar model for:

1.  $30 \div 5 =$

2.  $45 \div 5 =$

3.  $10 \div 10 =$

4.  $20 \div 10 =$

Jamal says, “I can work out  $60 \div 2$ , as I know that  $6 \div 2 = 3$  and 60 is the same as 6 tens, so  $60 \div 2 = 30$ .”

Do you agree? Use Base 10 pieces, Numicon 10 shapes or place value counters to prove your response.

Is it possible to use Jamal’s strategy and similar equipment to solve:

$$80 \div 2?$$

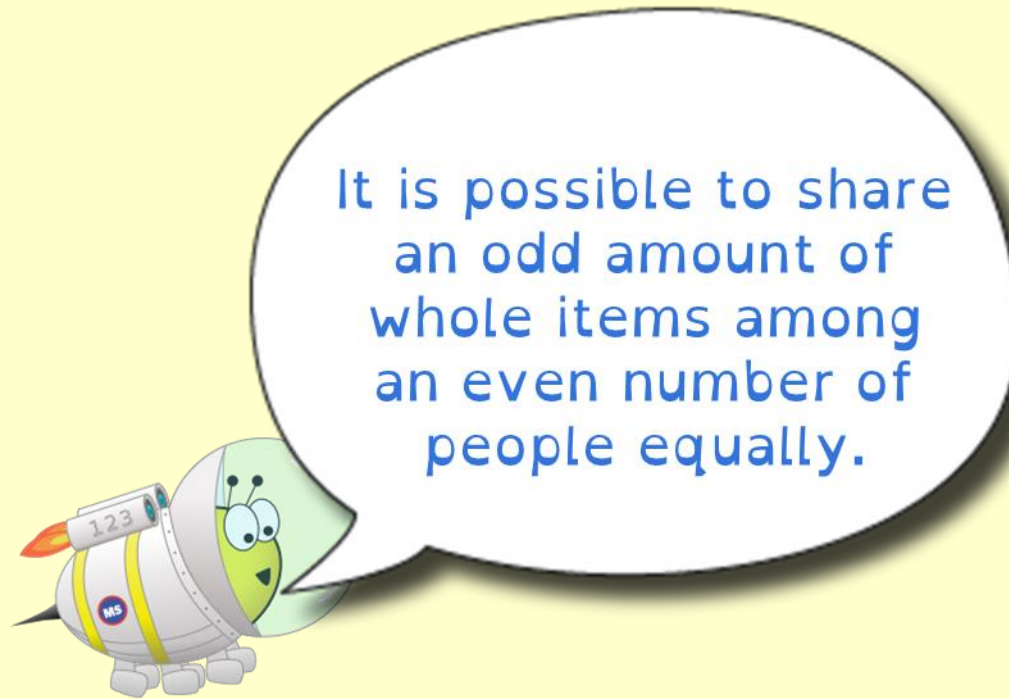
$$70 \div 2?$$

Explain your answer.

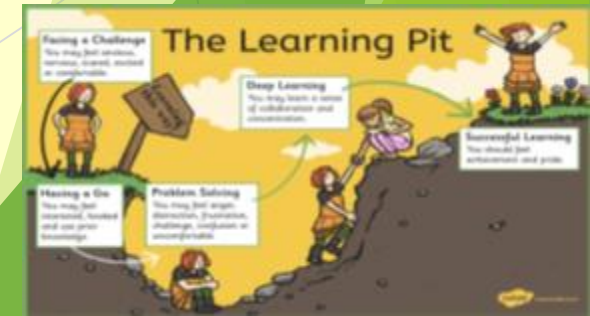




# Reflection Time



Is Astrobee's statement always, sometimes or never true?  
Explain your answer.

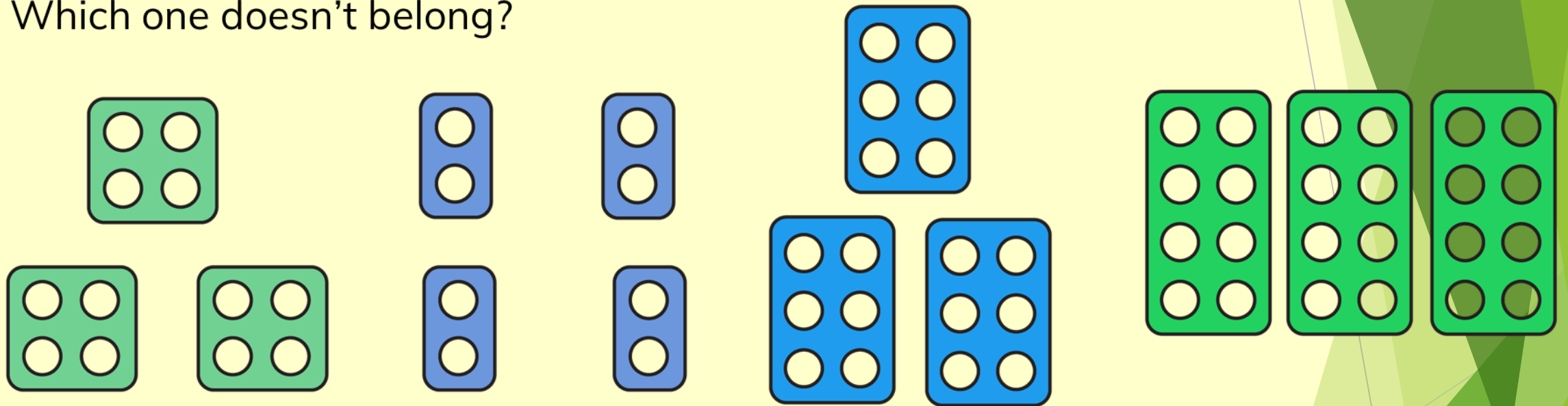


# Division

19.05.20

# Starter

Which one doesn't belong?



Explain your answer.

Date: 19.05.20

LO: To make equal groups by grouping

Date: 19.05.20

LO: To make equal groups by grouping

Success Criteria

I can use mathematical equipment and pictorial representations to make equal groups by grouping

I can explain my reasoning when using mathematical equipment and pictorial representations to make equal groups by grouping

# Descriptive Doing

## Talking Time:

Muffins are baked in batches of 6.

We need to put them in boxes holding 2 muffins each.

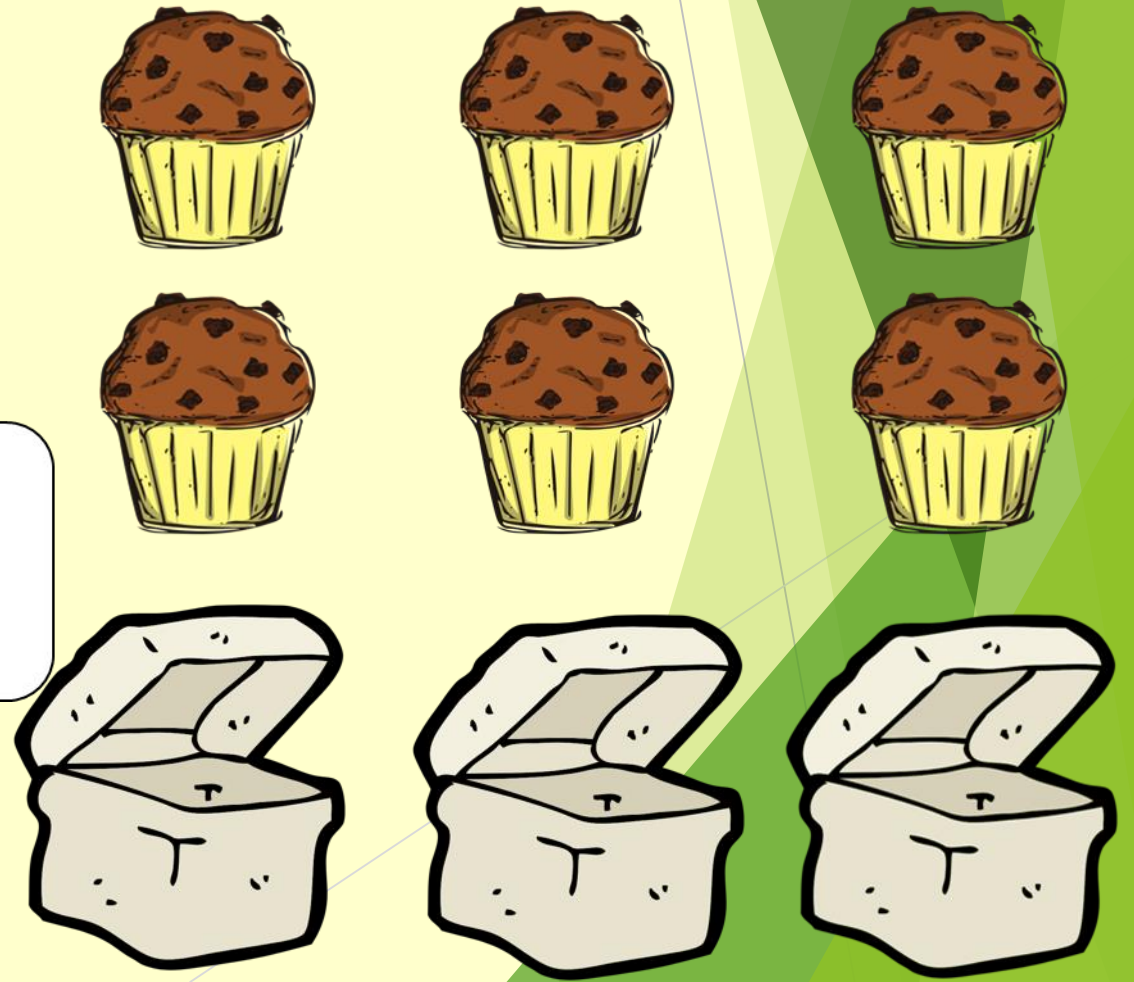
Complete the following sentences:

In total, there are \_\_ muffins.  
We place \_\_ muffins in each box.  
There are \_\_ boxes needed in total.

Can you draw the  
bar model?

Share the muffins  
between the boxes. How  
many are in each box?

What is the  
number  
sentence?



# Descriptive Teaching

## Talking Time:

Cookies are baked in batches of 12.

We need to put them in bags holding 3 cookies each.

How many bags will we need?

In total, there are \_\_ cookies.  
We place \_\_ cookies in each bag.  
There are \_\_ bags needed in total.

Can you draw the  
bar model?

What is the  
number  
sentence?





# Reflective Teaching

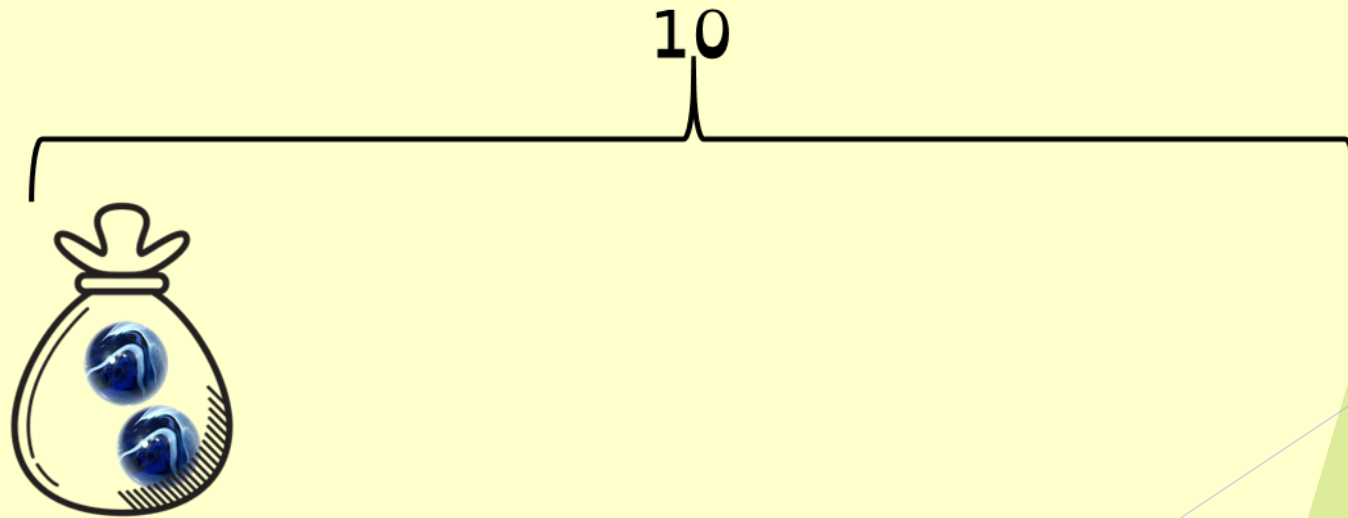
## Talking Time:

Jamal has 10 marbles.

He places two marbles in each bag.

How many bags does he fill?

$$10 \div 2 = \square$$





# Reflective Doing

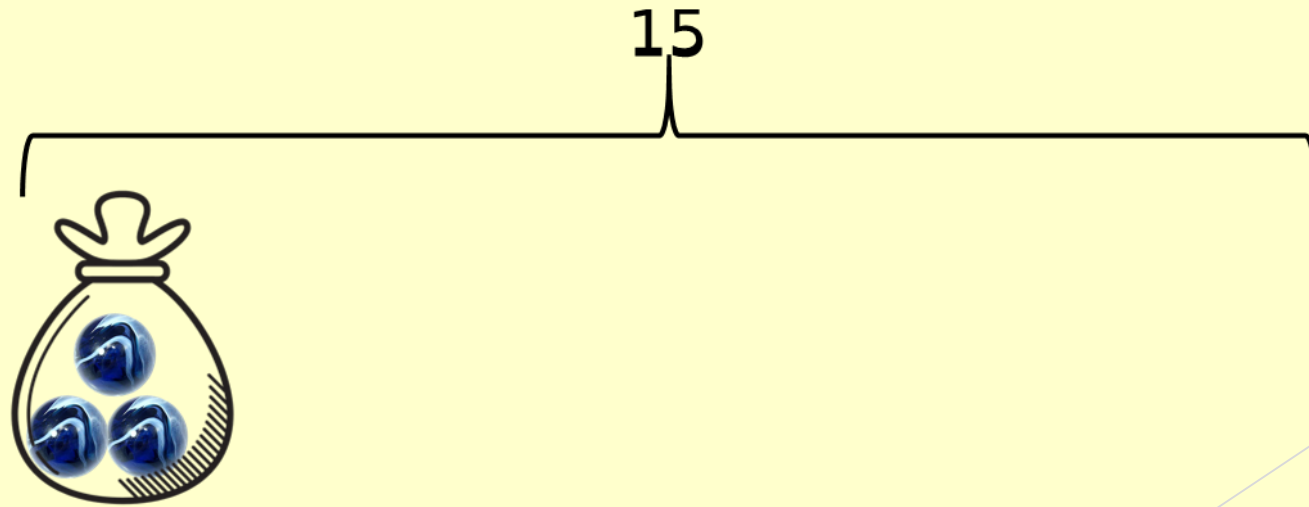
## Talking Time:

Yasmin has 15 marbles.

She places three marbles in each bag.

How many bags does she fill?

$$15 \div 3 = \square$$



# Choose your challenge

Ruth has 20 marbles.

She places five marbles in each bag

How many bags does she fill?

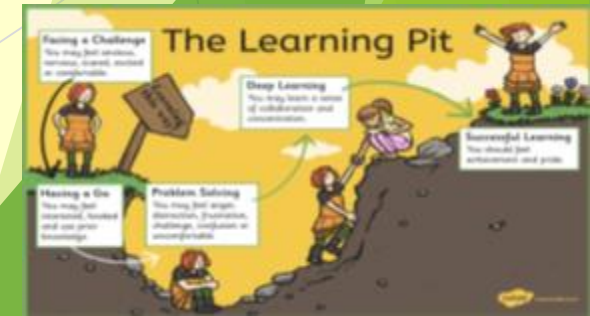
- a) Ahmed uses a number line to find out how many groups of 2 can be made from 8
- b) How many groups of 2 can be made from 12?
- c) How many groups of 3 can be made from 12?
- d) How many groups of 5 can be made from 10?
- e) How many groups of 5 can be made from 20?

You have 32 cubes.

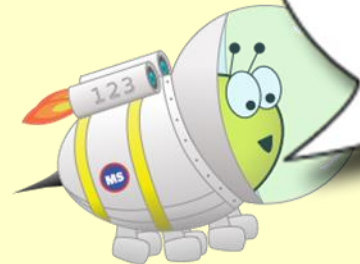
Put them into as many different equal groups as you can.

Write down the different groupings you find.

Example: 32 equal groups of 1 cube



# Reflection Time



It is possible to make  
an odd number of  
groups from an odd  
amount of whole  
items.

Is Astrobee's statement always, sometimes or  
never true?  
Explain your answer.



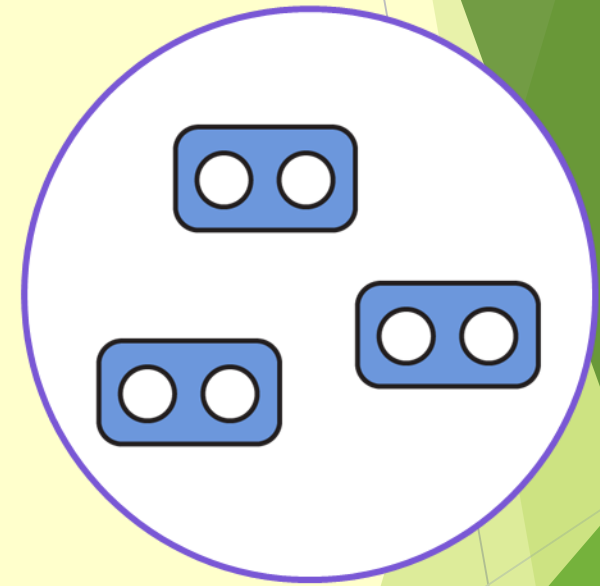
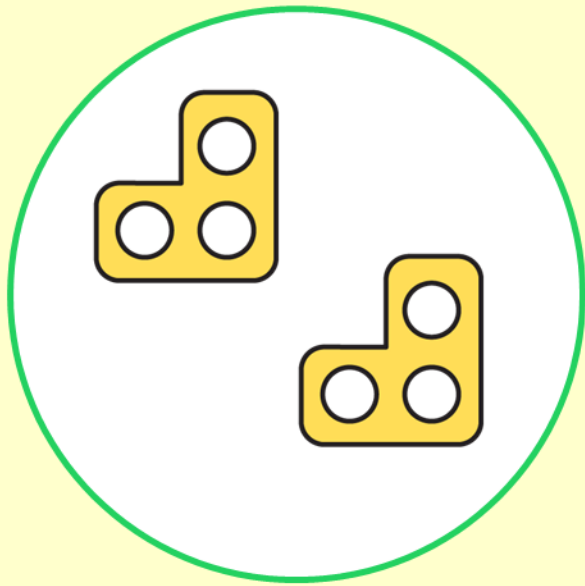
# Division

20.05.20

# Starter

Starter:

What's the same? What's different?



Explain your answer.

Date: 20.05.20

LO: To divide by 2

Date: 20.05.20

LO: To divide by 2

Success Criteria

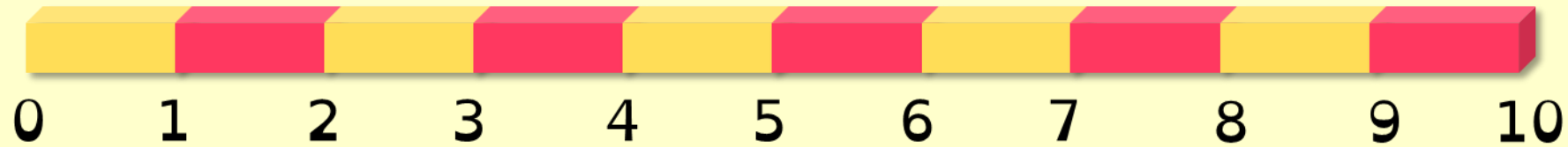
I can use mathematical equipment and pictorial representations for grouping and sharing to divide by 2

I can explain my reasoning when using mathematical equipment and pictorial representations for grouping and sharing to divide by 2

# Descriptive Teaching

## Talking Time:

Use a counting stick to practice the two times table as a class...



Can you fill in the counting stick?

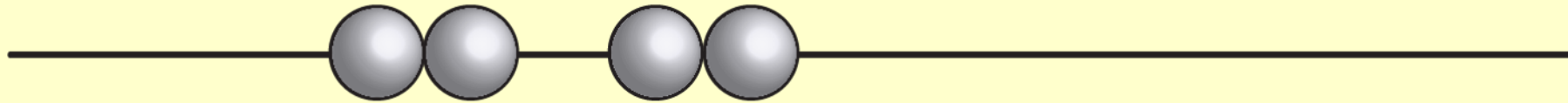
What are  $0 \times 2$  and  $10 \times 2$ ?  
Should I put 10 in the  $4 \times 2$  place?



# Reflective Teaching

## Talking Time:

Referring to the number bead string, complete the sentences below.



What does the bead string show?

In total, there are \_\_ beads.  
They have been separated into equal groupings of \_\_ beads.  
There are \_\_ groups in total.

$$\square \div \square = \square$$

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

Can you draw the bar model?

# Reflective Doing

Ahmed and James have a total of 12 brownies. They share them equally.  
How many brownies does each person receive?

In total, there are \_\_ brownies.  
They have been shared by \_\_ people.  
Each person receives a total of \_\_ brownies.

Complete the  
number sentence



Complete the bar  
model

	÷		=	
--	---	--	---	--

# Challenge

1a. Kyle has 6 sweets. He gives half of them to Katie.



We will get 3 sweets each.

Is Kyle correct? Explain why.



R

1b. Arooj has 14 sweets. She gives half of them to Max.



We will get 8 sweets each.

Is Arooj correct? Explain why.



R



# Challenge

2a. Use the correct digit cards to complete the calculation below.

10



4



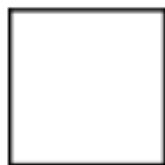
5



÷

2

=



PS

2b. Use the correct digit cards to complete the calculation below.

14



6



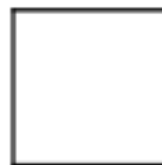
12



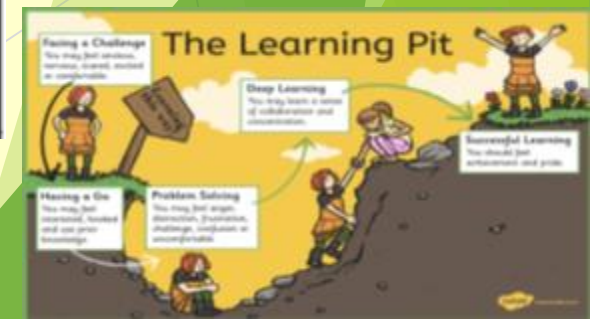
÷

2

=



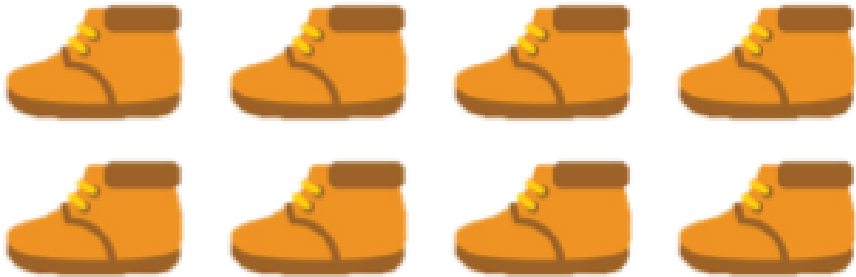
PS



# Challenge

3a. Mum is tidying up and she finds 8 shoes.

How many pairs can she make?



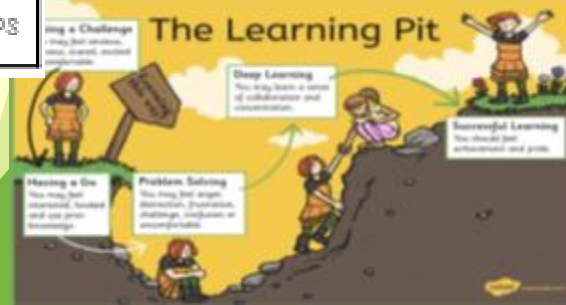
PS

3b. Dad is tidying up and he finds 10 earrings.

How many pairs can he make?

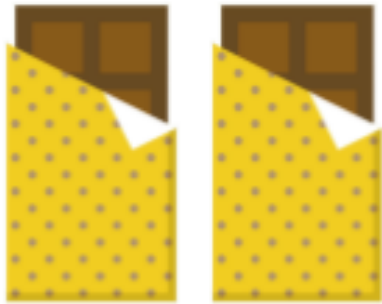


PS



# Challenge

4a. Emma has 18 pieces of chocolate. She gives half of them to Mike.



We will get 8 pieces each.

Is Emma correct? Explain why.



R

4b. Lia has 22 pieces of chocolate. She gives half of them to Joe.



Joe will get 11 pieces.

Is Lia correct? Explain why.

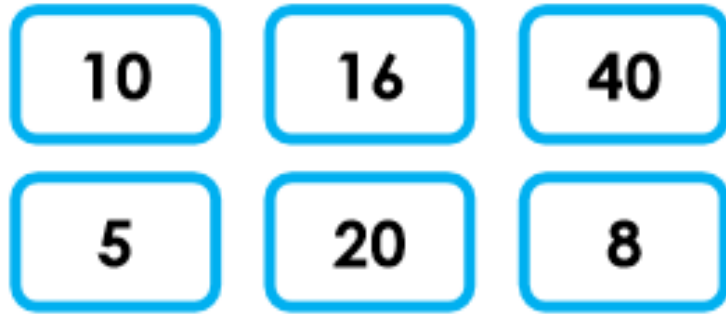


R



# Challenge

5a. Use the digit cards to make 4 division calculations.

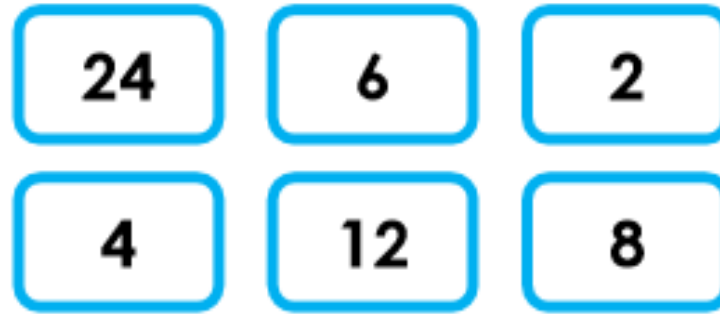


$$\square \div 2 = \square$$



PS

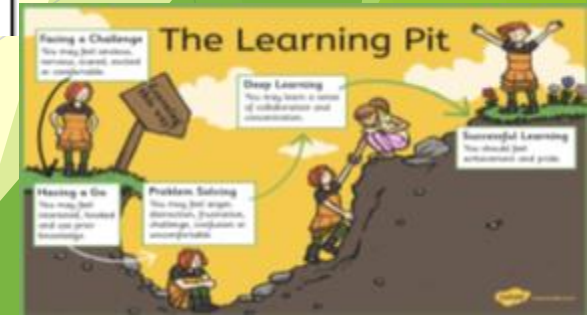
5b. Use the digit cards to make 4 division calculations.



$$\square \div 2 = \square$$



PS



# Challenge

6a. Dad is tidying up and he finds 16 socks.

How many pairs can he make?



He finds 6 more socks. Can he still make pairs?



PS

6b. Sam is tidying up and she finds 24 socks.

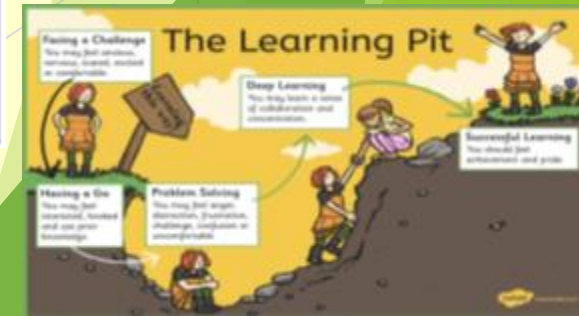
How many pairs can she make?



She loses 8 socks. Can she still make pairs?



PS





# Challenge

7a. Sam has 24 sweets, he eats 2 and then he gives half of what is left to Lee.



We will get 10 sweets each.

Is Sam correct? Explain why.



R

7b. Ola has 16 sweets. She finds 6 more and then she gives half to Will.

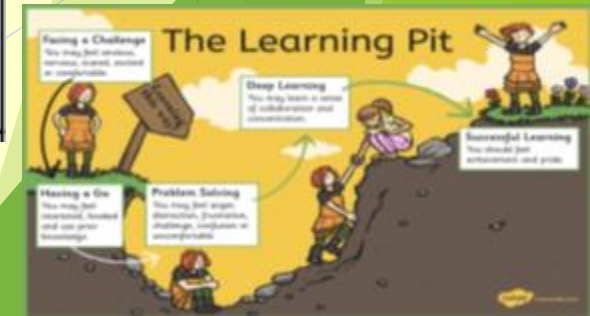


We will get 8 sweets each.

Is Ola correct? Explain why.

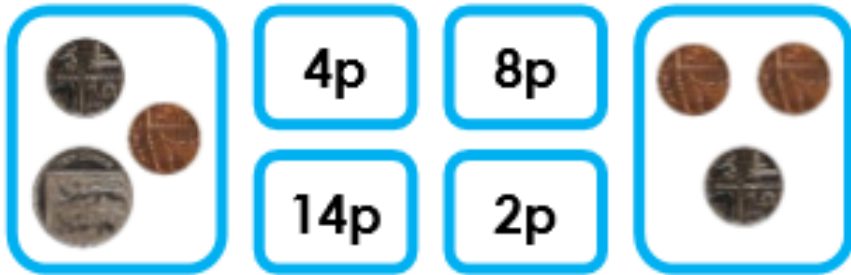


R



# Challenge

8a. Use the digit cards to make 4 division calculations.

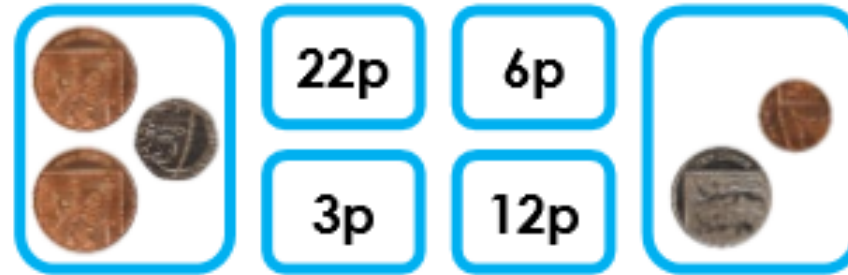


$$\square \div 2 = \square$$



PS

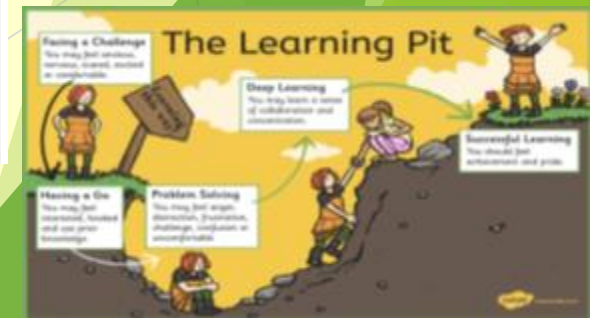
8b. Use the digit cards to make 4 division calculations.



$$\square \div 2 = \square$$



PS



# Challenge

9a. Kim is tidying up and she finds 18 red gloves and 6 blue gloves.

How many pairs can she make?



She loses 3 of the red and 3 of the blue gloves. Can she still make pairs?



PS

9b. Albie finds 14 green gloves and 12 grey gloves.

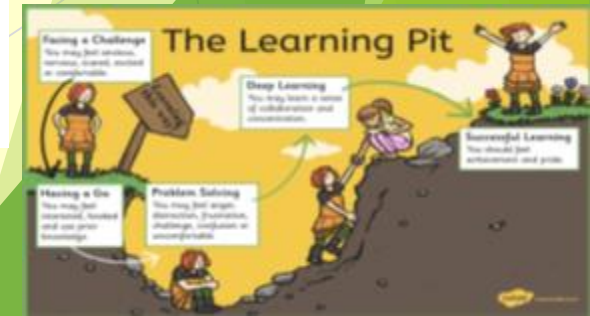
How many pairs of gloves has he found?



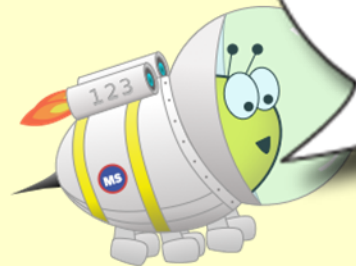
He loses 5 of the green and 1 of the grey gloves. Can he still make pairs?



PS

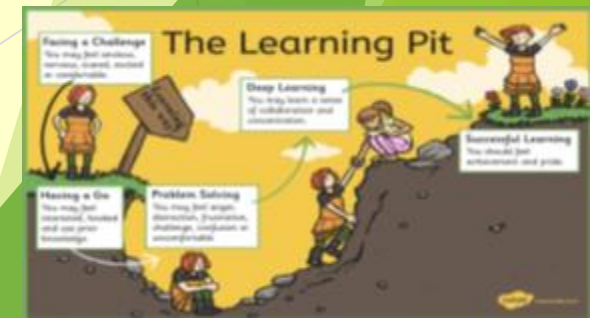


# Reflection Time



You can divide even numbers by 2.

Is Astrobee's statement always sometimes or never true?  
Explain your answer.



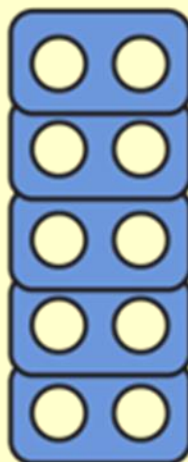
# Division

21.05.20

# Starter

Starter:

What's the same? What's different?



Explain your answer.

Date: 21.05.10

LO: To divide by 5

Date: 21.05.20

LO: To divide by 5

Success Criteria

I can use my knowledge of grouping and sharing strategies, as well as my knowledge of the 5 times table, to divide by 5

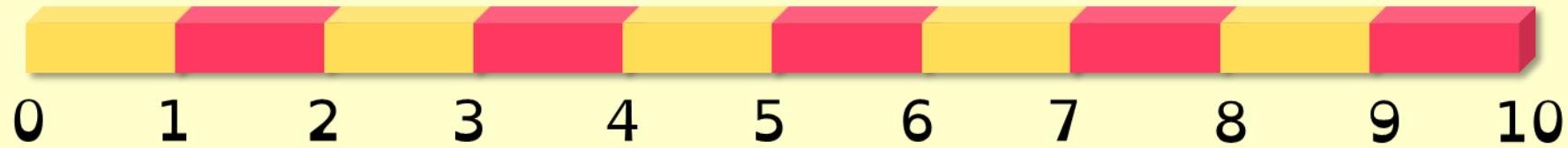
I can explain my reasoning when using my knowledge of grouping and sharing strategies, as well as my knowledge of the 5 times table, to divide by 5



# Descriptive Doing

## Talking Time:

Use a counting stick to practice the five times table as a class...



Can you fill in the counting stick?

What are  $0 \times 5$  and  $10 \times 5$ ?

Should I put 25 in the  $4 \times 5$  place?

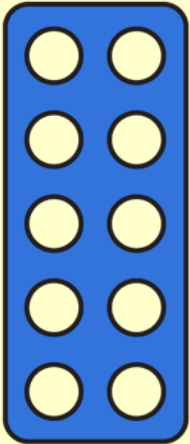
We know  $2 \times 5$  and  $4 \times 5$ , what is  $3 \times 5$ ?

# Reflective Teaching

## Talking Time:

How many 5 shapes can we use to cover the shape below?

Use that information to complete the following sentences:



How many 5's  
complete the 10  
shape?

In total, the shape shows \_\_\_\_.  
\_\_\_\_ five shapes is the same as \_\_\_\_.  
\_\_\_\_ is the same as \_\_\_\_ five shapes.

Complete the  
sentence

# Choose your challenge

## Complete the number sentences

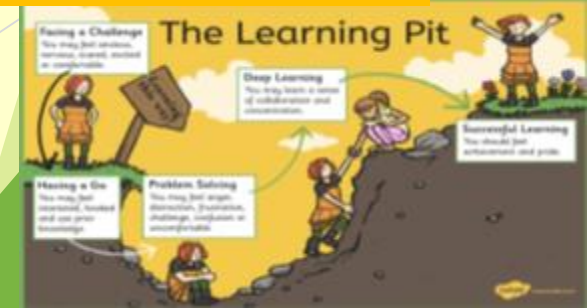
Write four number sentences that use the three numbers listed each time:

2, 10, 5

5, 20, 4

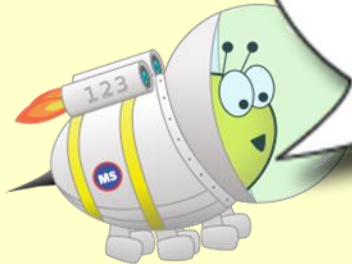
25, 5, 5

## Reasoning and problem solving

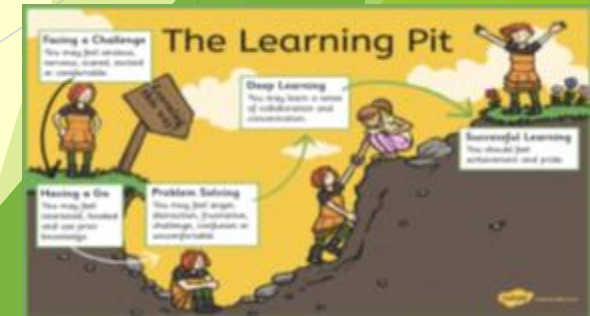


# Reflection Time

You can only divide  
odd numbers into  
equal groups by 5.



Do you agree?  
Explain your answer.



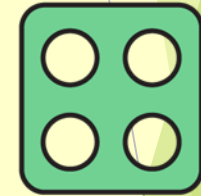
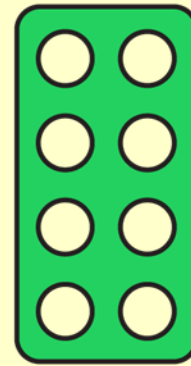
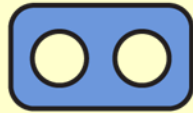
# Division

22.05.20

# Starter

Starter:

Which one doesn't belong?



Explain your answer.

Date: 22.05.20

LO: To identify odd and even numbers

Date: 22.05.20

LO: To identify odd and even numbers

Success Criteria

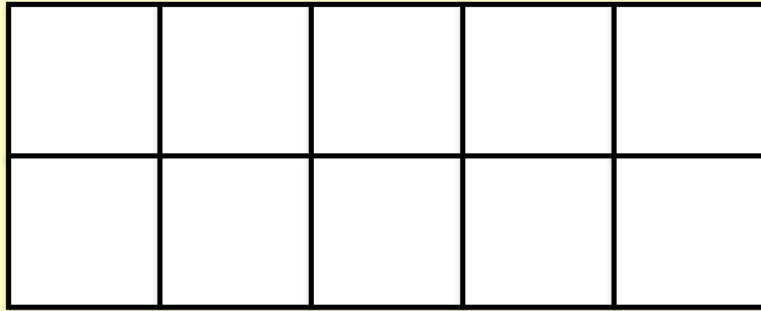
I can use mathematical equipment to explore the properties of odd and even numbers

I can explain my reasoning when using mathematical equipment to explore the properties of odd and even numbers



# Descriptive Doing

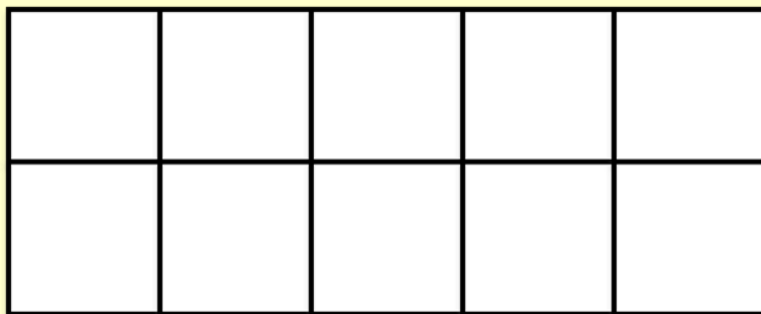
Is this odd or even?



Share the counters on the ten frame-  
does it have a partner?

## Talking Time:

Can you make even pairs in a ten frame with the counters below?  
Is the number odd or even?



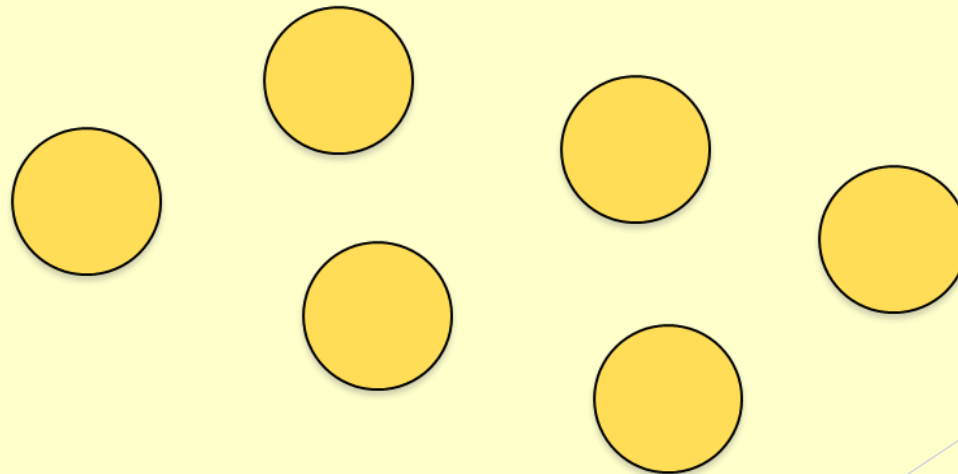
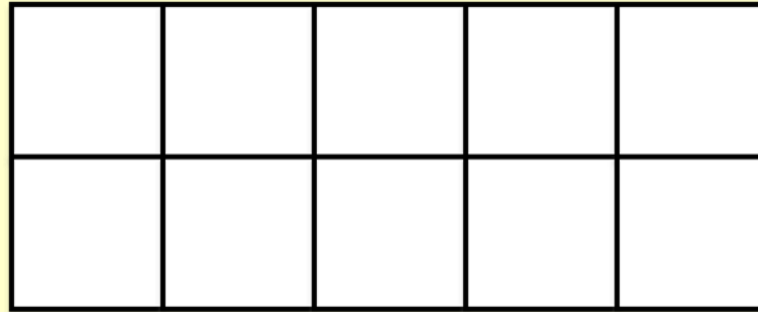
Is this odd or even?



Share the counters on the ten frame-  
does it have a partner?

## Talking Time:

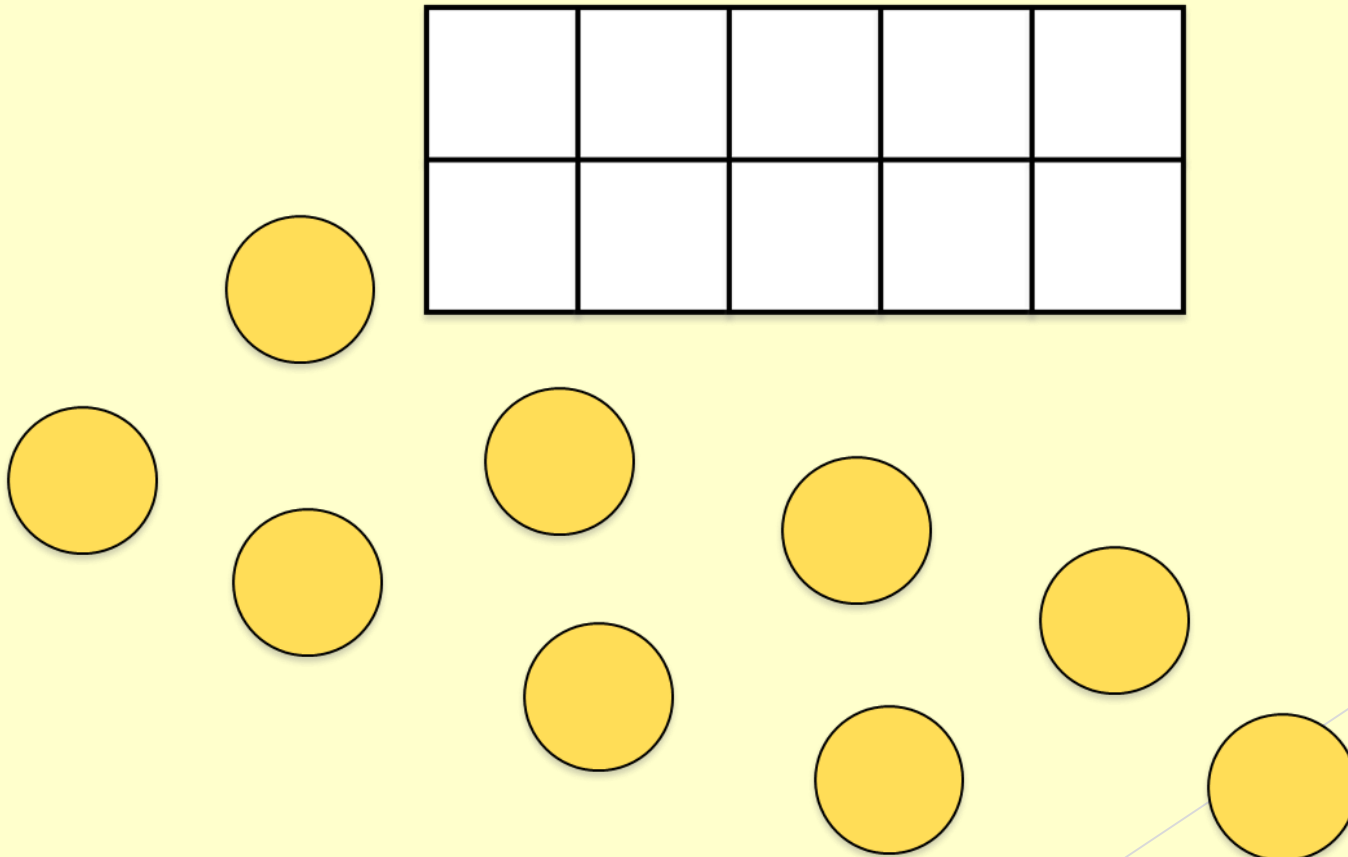
Can you make even pairs in a ten frame with the counters below?  
Is the number odd or even?



Share the counters  
on the ten frame-  
does it have a  
partner?

## Talking Time:

Can you make even pairs in a ten frame with the counters below?  
Is the number odd or even?



Share the counters  
on the ten frame-  
does it have a  
partner?

# Challenge

Make some playdough and roll it out  
Print some numbers:

Which numbers can be cut in half evenly?

Which numbers can't?

Have you discovered a rule?

Explain your answer.

Use counters and a ten frame (or ten frames for the larger numbers) to decide whether the following numbers are odd or even. Then place them in the correct column in the table.

12  
5 11  
17  
4 8  
16  
10 19  
9

odd	even



# Challenge

7a. Allie rolls three dice.

Her total is an even number between 9 and 13.

What numbers could Allie have rolled?



PS

7b. Emmett rolls three dice.

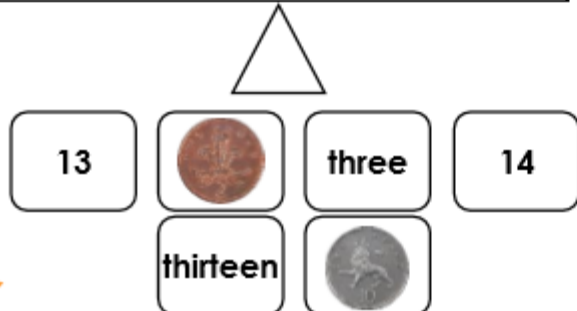
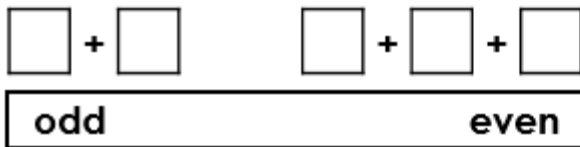
His total is an odd number between 8 and 12.

What numbers could Emmett have rolled?



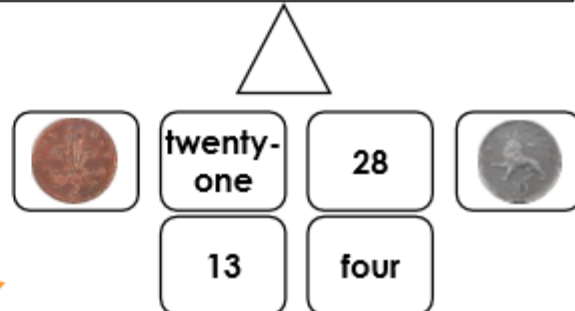
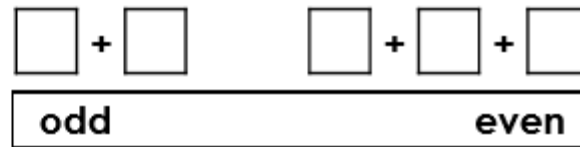
PS

8a. Choose the correct numbers to balance the scales.

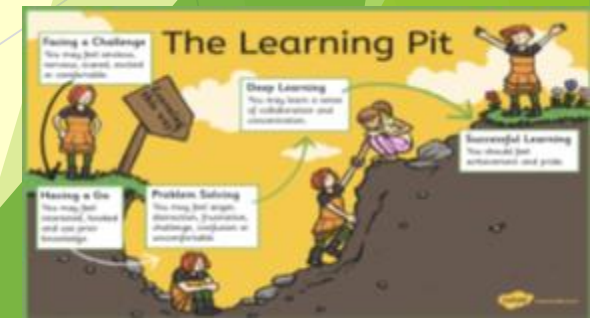


PS

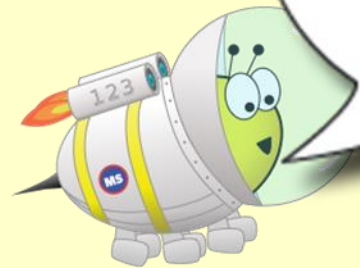
8b. Choose the correct numbers to balance the scales.



PS



# Reflection Time



When you add  
together two odd  
numbers the answer  
is odd.

Is Astrobee's statement always  
sometimes or never true?  
Explain your answer.

