Make Arrays

1. Match the arrays to the correct number sentence.

A. 

10 + 10 = 20

B. 

2 + 2 + 2 + 2 = 8

C. 

5 + 5 + 5 = 15

2. Complete the number sentences to match the statements.

There are 2 rows.
There are 5 columns. → ☐ + ☐ + ☐ + ☐ + ☐ = ☐

There are 10 rows.
There are 3 columns. → ☐ + ☐ + ☐ = ☐

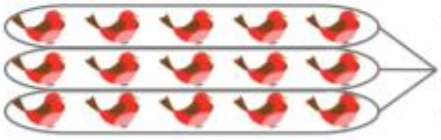
There are 5 rows.
There are 4 columns. → ☐ + ☐ + ☐ + ☐ = ☐

3. Draw 2 different arrays using these marbles.

Maths – Make Arrays

An **array** is a visual representation of a multiplication. For example  shows 3 x 2 and 2 x 3 or 2 + 2 + 2 and 3 + 3.

Question 1 – In this question there are 3 **arrays.** Children are asked to match each array to the correct number sentence. Each array can be broken into small groups (rows or columns) to show what is being added together. For example:



There are 3 groups of 5. This is equivalent to 5 + 5 + 5.

The answers are as follows: A: 5 + 5 + 5 = 15, B: 2 + 2 + 2 + 2 = 8, C: 10 + 10 = 20

Question 2 – This question gives 3 descriptions of **arrays**. Children are asked to write the number sentences to match the descriptions. It may help children to draw the **array** before writing their final answer.

The number sentences are: 2 + 2 + 2 + 2 + 2 = 10, 10 + 10 + 10 = 30, 5 + 5 + 5 + 5 = 20

Question 3 – Children are given 10 marbles and asked to use them to create 2 **arrays**. It may help children to use real marbles or other small items to create their **array** before drawing their final answer. The marbles should be placed in neat columns and rows and all marbles must be used.

The two possible **arrays** that can be created are:  and 

Count in 2s

1. Count the wellies in 2s.

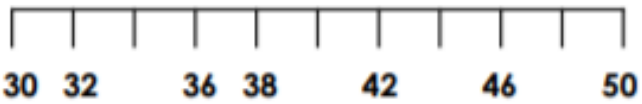
How many wellies are there in total?

2. Circle the number that completes the number track.

20	22	24	26		30	32	34	36	38

31 28 44 15

3. Complete the number line by counting in 2s.



4. Complete the sequences by counting in 2s.

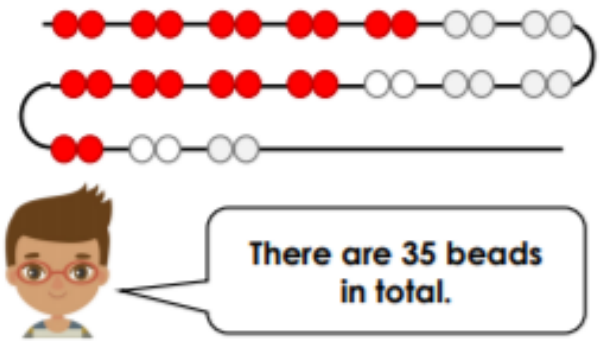
A. 10, 12, 14, ____, 18

B. 22, ____, 26, 28, 30

C. 40, ____, 44, 46, 48

D. 36, 34, 32, ____, 28

5. Tim is counting the beads in 2s.



Is Tim correct? Prove it.

6. Ali is counting in 2s.

30	28	26	24	

What number would be two less?

Circle the card that would not be part of the sequence.

16 22 21 14

7. Find the way through the maze by counting backwards in 2s.

	9	43	29	32	30 finish
	21	38	36	34	15
	42	40	11	17	39
start	44	39	13	25	41

Maths – Count in 2s

Question 1 – Children must count the wellies and write the total number. Encourage children to count in to 2s to find the answer.

The total number of wellies is 24.

Question 2 – This question involves using a **number track.** A **number track** is a representation of the order of numbers when counting. It can go forwards or backwards. It is similar to a number line, but numbers can go up or down in jumps of 1s, 2s, 3s, etc. Children are asked to identify the correct number that will complete the number track.

The missing number is 28.

Question 3 – Similarly to the question above, children must complete a **number line** by counting in 2s. A **number line** is a straight line which has numbers placed at equal points. Most number lines begin at 0, however this is not always the case.

There are 4 missing numbers. The numbers are 34; 40; 44; 48

Question 4 – This question gives four sequences that need to be completed. Some are counting forwards and some are counting backwards. Children must fill in each missing number by counting in 2s to find their answer.

The missing numbers are as follows: A. 16; B. 24; C. 42; D. 30

Question 5 – Tim is counting beads on a string. The beads are grouped in 2s. Children must explain if Tim's statement is correct or incorrect.

Tim is incorrect, there are 34 beads in total. Tim has not counted in 2s.

Question 6 – In this problem, children are asked to identify which number would come next if counting backwards in 2s. There are 4 number cards. Children must also select which number card would not appear if the sequence was continued.

22 would come next. 21 would not appear in the sequence.

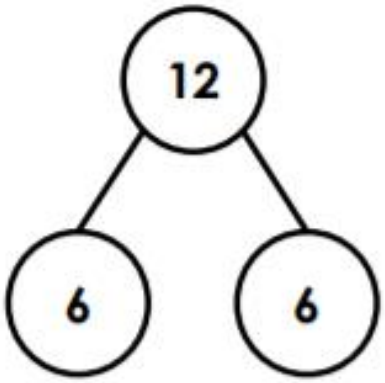
Question 7 – Children are given a maze. To complete the maze, they must count backwards in 2s, colouring each square that they move through.

The maze should be completed as follows:

9	43	29	32	30
21	38	36	34	15
42	40	11	17	39
44	39	13	25	41

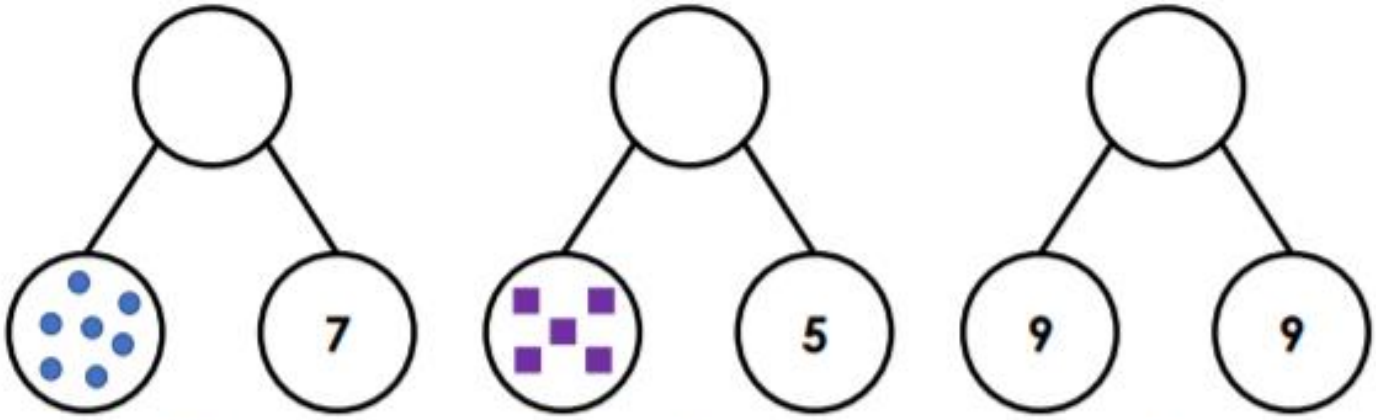
Making Doubles

1. Circle the odd one out.



$6 + 6 = 12$

2. Complete the part-whole models below.



A. B. C.

3. Tia thinks that all of the calculations below are correct. Is she right? Explain why.

Double 10 is 20

Double 6 is 14

Double 8 is 16

Maths – Making Doubles

This worksheet includes the use of **part-whole models**. A **part-whole model** is a concept to show how numbers can be split into different parts. They can be used to represent numbers, as well as a wide variety of calculations. The concept follows the structure part + part = whole, but this may change depending on how many parts there are.

Question 1 – This question asks children to identify the odd one out. The **part-whole model** shows 12 is the whole with two equal parts of 6. The ladybirds are split into two groups of 5 and 6. The calculation shows 6 + 6 = 12.

The ladybirds are the odd one out as they show 5 + 6 = 11. The others both show 6 + 6 = 12.

Question 2 – In this question there are 3 **part-whole models**. Children are asked to complete each one. To do this, they will need to add together the two parts. This can be done by doubling one part.

The missing numbers are as follows: A. 14, B. 10 and C. 18.

Question 3 – Tia has doubled three numbers and written the answers. Children are asked to explain if Tia is correct and explain why or why not. Children need to double each number (10, 6 and 8) and check if Tia's answer is correct. It may help children to write number sentences, use equipment such as counters or draw representations to help find their answers.

Tia is incorrect because double 6 is 12, not 14.

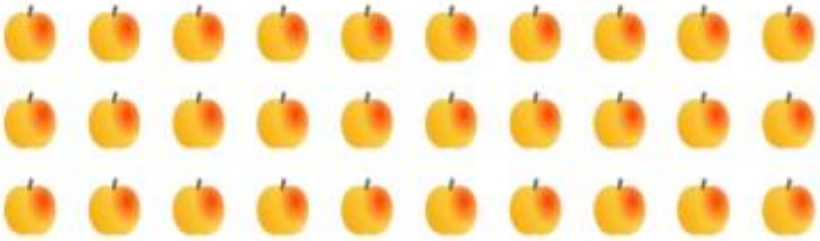
Make Equal Groups – Grouping

1. Make equal groups to complete the boxes.

A. I can make ☐ groups of 5 gems.

B. I can make ☐ groups of 2 gems.

2. Use the images to make equal groups and complete the statements below.

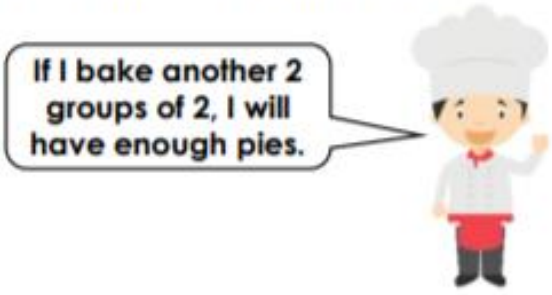


There are ☐ groups of 10 fruit.

There are ☐ groups of 5 fruit.

There are ☐ groups of 2 fruit.

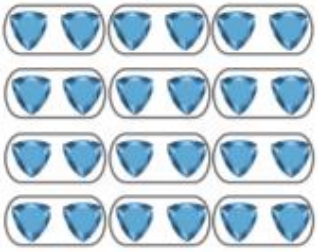
3. Bill the baker wants to make 25 pies. He has already baked 3 groups of 5.



Is Bill correct? Explain your answer.

Maths – Make Equal Groups – Grouping (page 8)

Question 1 – This question gives two groups of gems. The gems need to be grouped equally to find how many groups can be created. To group equally, children can draw around the correct number of gems until all have been grouped. For example:



The gems have been grouped in 2s. There are 12 groups of 2 gems.

A. I can make 5 groups of 5 gems; B. I can make 12 groups of 2 gems.

Question 2 – The images given in this question can be grouped equally in a number of different ways. Children are asked to group them in 3 different ways. Children could draw each set of groups in different colours.

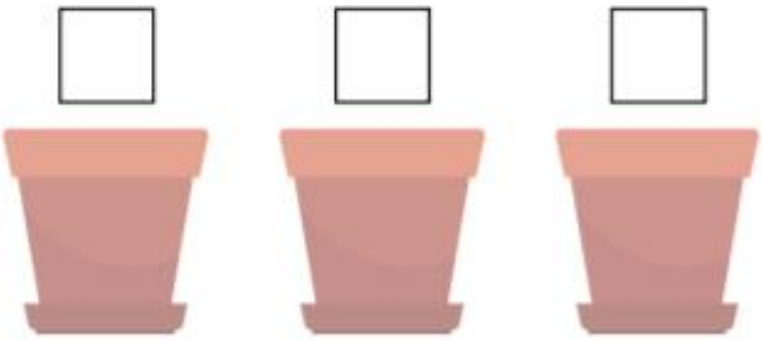
There are 3 groups of 10; There are 6 groups of 5; There are 15 groups of 2.

Question 3 – To solve this problem, children must find out how many pies Bill has already baked. This can be done by adding together the 3 groups of 5; 5 + 5 + 5 = 15. Bill has already baked 15 pies. Bill thinks he can bake another 2 groups of 2 to have enough pies. Children could draw 2 groups of 2 and add the total number to 15 to discover if there are enough pies.

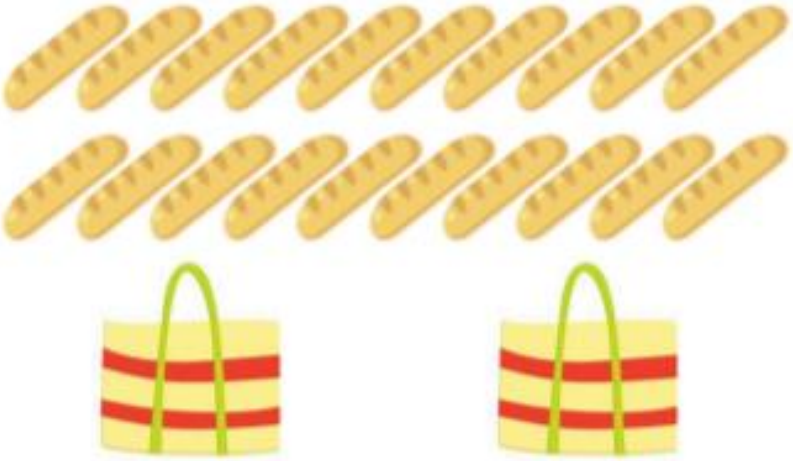
Children will discover Bill is incorrect, he will only have 19 pies. He needs to make 5 groups of 2 in total to have 25 pies.

Sharing Equally

1. Bob has 15 seeds. He shares them between 3 plant pots. Share the seeds equally to show how many he put in each pot.



2. The bread sticks are shared between two bags. Circle the number to show how many bread sticks will be in each bag.

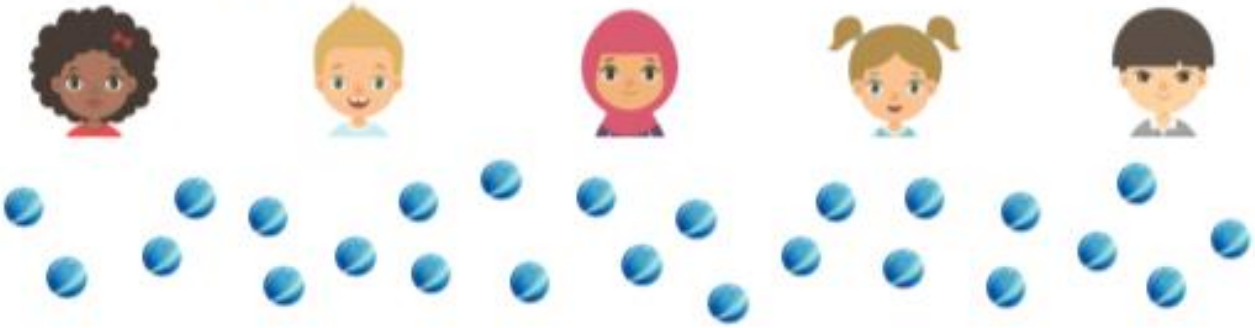


8

9

10

3. True or false? If 25 marbles are shared equally between 5 children, they will get 4 marbles each. Prove it!



Maths – Sharing Equally

Question 1 – This question asks children to share 15 seeds into 3 pots. Children can chose whether to draw or write the correct amount into each pot. To share equally, children should add one seed to each pot in turn until all seeds have been used. It may help to cross out each seed as it is shared out.

There should be 5 seeds in each pot.

Question 2 – There are 20 bread sticks that children are asked to share into 2 bags and asked how many will be in each bag. Children are given 3 possible answers to choose from.

There will be 10 bread sticks in each bag.

Question 3 – To complete this question, children must share 25 marbles between 5 children to find out how many marbles each child will get. They can then explain if the given statement is true or false. It may help children to use real marbles to share into 5 groups, taking it in turns to give one to each group until all marbles are used. If there are no marbles available, children could use other small toys or items to represent the marbles.

The statement is false. If 25 marbles were shared equally between 5 children, they would have 5 marbles each.