

Use this sheet **WHEN** you've completed the main worksheet and want a challenge. Remember to use your blue book if you have it to show your workings. The questions were resourced from White Rose Maths.

1.

Jack has 15 stickers.



He sorts his stickers into equal groups but has some stickers remaining. How many stickers could be in each group and how many stickers would be remaining?

Answers may vary.

You could have 2 groups of 6 with a 3 remaining.

You could have 4 groups of 3 with 3 remaining.

You could have 2 groups of 7 and 1 remaining.

2.

37 sweets are shared between 4 friends. How many sweets are left over?

Four children attempt to solve this problem.

- Alex says it's 1
- Mo says it's 9
- Eva says it's 9 r 1
- Jack says it's 8 r 5

Can you explain who is correct and the mistakes other people have made?

Make sure you have reasoned for each person.

Mo is incorrect as they have worked out how many sweets each friend gets.

Eva has correctly identified that each friend will get 9 and there will be 1 remainder but she has not answered the question.

Jack should know that there is another multiple of 4 after 32 but has not answered the specific question.

Alex is correct as there is 1 left over.

3.

Whitney is thinking of a 2-digit number that is less than 50

When it is divided by 2, there is no remainder.

When it is divided by 3, there is a remainder of 1

When it is divided by 5, there is a remainder of 3

What number is Whitney thinking of?

To start, you will have to have an even number as there is no remainder.

I started by looking at even numbers 1 away from a multiple of 3 eg 16, 22, 26, 28, 34, 40

I then looked at which one is three away from a multiple of 5.

28 – divided by 2, no remainder.

28 – divided by 3 = 9 r 1

28 – divided by 5 = 5 r 3

Answer is 28

4.

Rosie writes,
 $85 \div 3 = 28 \text{ r } 1$

She says 85 must be 1 away from a multiple of 3
Do you agree?

84 is a multiple of 3 ($3 \times 20 = 60$ and $3 \times 8 = 24$ so 84 is a multiple of 3)

85 is one more than 84 so Rosie is correct.