



# PlanIt Year 6

## Addition, Subtraction, Multiplication and Division

Continue the learning in this area of maths with exclusive teacher-created planning packs. Please click on the links below to view our award-winning schemes of work.

This thumbnail features three main sections: 'The Big Question' with a cartoon girl, 'Number Combo' with a play button icon, and 'Order of Operations' with a diagram of a house. Below these are preview images of worksheets and the twinkl planit logo.

This thumbnail displays a stack of challenge cards numbered 1 through 5. Card 1 shows a computer monitor, card 2 shows a CD, card 3 shows a girl pointing to a number line, and card 4 shows a girl with a number line. The twinkl planit logo is at the bottom right.

This thumbnail includes a 'Know Your Number' wheel, a 'Year 6 Addition, Subtraction, Multiplication and Division Starter Ideas' table, and a 'Number Combo' wheel. The twinkl planit logo is at the bottom right.

This thumbnail features a 'Prime Numbers' grid, a 'Multiples' grid, and a 'Subtracting Six-Digit Numbers Using Column Method' section. The twinkl planit logo is at the bottom right.

This thumbnail includes three sections: 'Long Vines' with a snake, 'Jungle Division' with a play button, and 'Slithering Snake' with a snake. Below are preview images of worksheets and the twinkl planit logo.

This thumbnail shows three 'Line Up' worksheets with math problems and a cartoon character. The twinkl planit logo is at the bottom right.

If you need us, just get in touch - contact [twinklcares@twinkl.co.uk](mailto:twinklcares@twinkl.co.uk)

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# Prime Detectives

I can identify prime numbers.



Sing-Song Aloud is a very popular competition for singing. Every year, thousands of people enter the competition in search of fame.

This year is no different... but there has been a crime committed! Somebody has sabotaged the equipment and they have broken the microphones, with only pig-like sounds being emitted! The police have been investigating exactly what happened.

As the Detective Chief Inspector, it is your job to work out who the saboteur is. Your officers have taken down the names and descriptions of the people on set that day. Your task is to solve the clues and work out who has sabotaged the equipment!



| Name                 | Gender | Height | Left-handed or right-handed |
|----------------------|--------|--------|-----------------------------|
| Amelia Killen-Browne | female | tall   | left                        |
| Barry Shaw           | male   | short  | right                       |
| Fenella Bentley      | female | tall   | left                        |
| Gurdeep Mehmi        | male   | short  | left                        |
| Janice Twist         | female | short  | right                       |
| Ken Corder           | male   | tall   | right                       |
| Ling Chang           | male   | tall   | left                        |
| Mei Chang            | female | short  | left                        |
| Nancy Greene         | female | tall   | right                       |
| Ramesh Iqbal         | male   | tall   | right                       |

Clue One

Circle all of the prime numbers. If the amount of prime numbers is odd, then the saboteur is female. If the amount of prime numbers is even, then the saboteur is male.

2      52      9      111      19      83      85      31      59      89  
 133      21      22      88      15      90      17      57      131      72

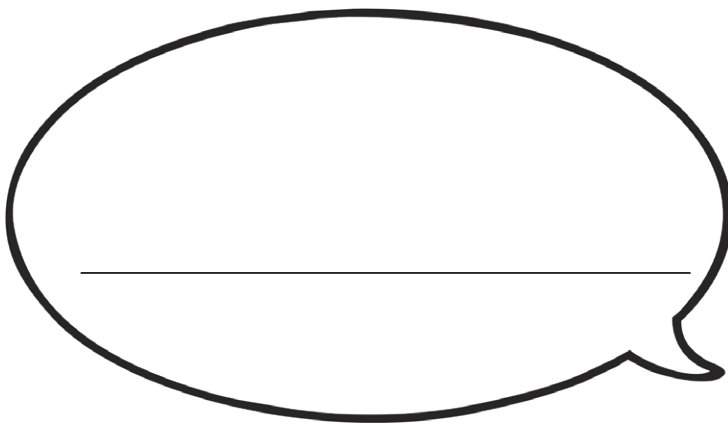
The saboteur is \_\_\_\_\_ .

Clue Two

Count in prime numbers from the first number in the circle, and then take the last number you reach and find the corresponding word in the table below. Rearrange the words to form a sentence and solve the first clue.

|    |   |   |   |   |
|----|---|---|---|---|
| 2  | ○ | ○ | ○ | ○ |
| 13 | ○ | ○ | ○ | ○ |
| 47 | ○ | ○ | ○ | ○ |
| 83 | ○ | ○ | ○ | ○ |

|              |                 |                |             |
|--------------|-----------------|----------------|-------------|
| the<br>11    | microphone<br>9 | ran<br>2       | stole<br>71 |
| short<br>101 | broken<br>27    | saboteur<br>29 | of<br>15    |
| was<br>67    | a<br>69         | singer<br>16   | tall<br>103 |



### Clue Three

Look at the numbers in the circles. Write the nearest prime number lower than the number in the left-hand boxes and the nearest prime number higher in the right-hand boxes. Then add each column of boxes up. If either column adds to exactly 183, the saboteur is left handed.

|                      |   |    |   |                      |
|----------------------|---|----|---|----------------------|
| <input type="text"/> | ← | 45 | → | <input type="text"/> |
| <input type="text"/> | ← | 15 | → | <input type="text"/> |
| <input type="text"/> | ← | 9  | → | <input type="text"/> |
| <input type="text"/> | ← | 68 | → | <input type="text"/> |
| <input type="text"/> | ← | 34 | → | <input type="text"/> |
| _____                |   |    |   | _____                |

The saboteur is \_\_\_\_\_ handed.

The saboteur is \_\_\_\_\_ .



# Prime Detectives Answers

| Question | Answer   |
|----------|--|
| 1.       | <p>Clue One</p> <p>Circle all of the prime numbers. If the amount of prime numbers is odd, then the saboteur is female. If the amount of prime numbers is even, then the saboteur is male.</p> |

|              |    |    |     |               |               |               |               |                |               |
|--------------|----|----|-----|---------------|---------------|---------------|---------------|----------------|---------------|
| <del>2</del> | 52 | 9  | 111 | <del>19</del> | <del>83</del> | 85            | <del>31</del> | <del>59</del>  | <del>89</del> |
| 133          | 21 | 22 | 88  | 15            | 90            | <del>17</del> | 57            | <del>131</del> | 72            |

The saboteur is **male**.

|    |   |
|----|---|
| 2. | <p>Clue Two</p> <p>Count in prime numbers from the first number in the circle, and then take the last number you reach and find the corresponding word in the table below. Rearrange the words to form a sentence and solve the first clue.</p> |
|----|---|

|      |      |      |       |       |
|------|------|------|-------|-------|
| (2)  | (3)  | (5)  | (7)   | (11)  |
| (13) | (17) | (19) | (23)  | (29)  |
| (47) | (53) | (59) | (61)  | (67)  |
| (83) | (89) | (97) | (101) | (103) |

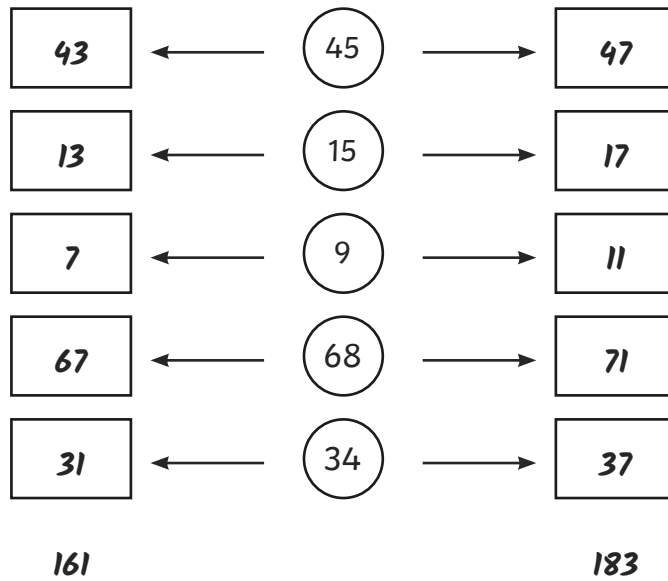
|              |                 |                |             |
|--------------|-----------------|----------------|-------------|
| the<br>11    | microphone<br>9 | ran<br>2       | stole<br>71 |
| short<br>101 | broken<br>27    | saboteur<br>29 | of<br>15    |
| was<br>67    | a<br>69         | singer<br>16   | tall<br>103 |

The saboteur was tall.

3.

Clue Three

Look at the numbers in the circles. Write the nearest prime number lower than the number in the left-hand boxes and the nearest prime number higher in the right-hand boxes. Then add each column of boxes up. If either column adds to exactly 183, the saboteur is left handed.



The saboteur is *left* handed.

The saboteur is *Ling Chang*.