# **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

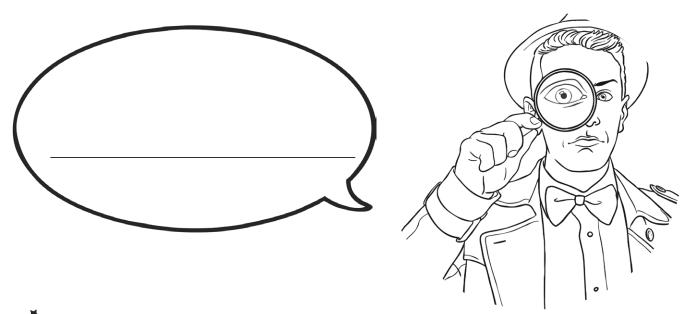
The saboteur is \_\_\_\_\_\_.

#### 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.

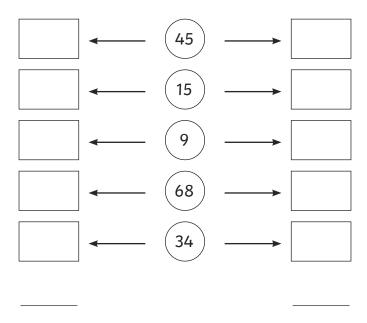
2		
13		
47		
83		

the	microphone	ran	stole
11	9	2	71
short	broken	saboteur	of
101	27	29	15
was	α	singer	tall
67	69	16	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.



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

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



## Prime Detectives **Answers**

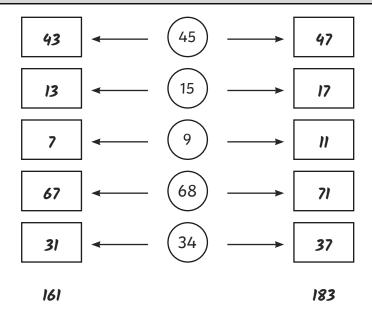
Question	Answer					
1.	Clue One Circle all of the prime numbers. If the amount of prime numbers is odd, then the saboteur is female. If the amount of prime numbers is even, then the saboteur is male.					
	52	9 111	85	<b>39 39</b>		
	133 21 2	22 88 15	90 77 5	72		
	The saboteur is <b>male</b> .					
2.	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	3	7	$\overline{n}$		
	13	(17)	9 (23)	29		
	47	(S)	61	67		
	83	89	7) (101)	103		
	the <b>11</b>	microphone 9	ran 2	stole 71		
	short 101	broken 27	saboteur <b>29</b>	of 15		
	was <b>67</b>	a 69	singer 16	tall <b>103</b>		

The saboteur was tall.

Clue Three

3.

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*.