



1) a) $72 - 45 = 27$

b) $81 - 32 = 49$

c) Car: $103 + 87 = 190$

Bike: $25 + 32 = 57$

$190 - 57 = 133$

133 more children travelled by car compared to bike in December and April.

d) Accept any of the following calculations: $72 + 25 + 103 = 200$; $81 + 32 + 87 = 200$; $109 + 46 + 45 = 200$.
200 children were surveyed.

e) More children travelled by car in December. Accept any logical explanation about why this could be the case. For example, in December, the weather is typically colder so fewer children chose to walk or cycle compared to the other months.

1)



	Science Club	Book Club	Nature Club	Gym Club	Total Number of Girls/Boys
Girls	17	15	14	19	65
Boys	12	21	15	14	62
Total Number of Pupils in Each Club	29	36	29	33	

a) False. The two most popular clubs for girls are Science Club and Gym Club.

b) True. 127 children belong to a club.

c) False. Science Club is more popular with girls than boys but Book Club is more popular with boys than girls.

d) False. Book Club and Nature Club have 65 children while Science Club and Gym Club have 62.

1) a)

	Year 4	Year 5	Year 6
Fish and Chips	50	35	15
Pasta Bake	35	40	25
Chicken Curry	38	48	24





1) This table shows the results from a survey which was done three times in a year to find out how many children either walked, cycled or travelled by car to get to school. The same children were asked each month.

	December	April	July
Walk	72	81	109
Cycle	25	32	46
Car	103	87	45



a) How many more children walked to school in December than travelled by car in July?

b) How many more children walked to school than cycled in April?

c) In December and April, how many more children travelled by car than bike?

d) How many children were asked about how they travelled to school?

e) Did more children travel to school by car in certain months than others? Why do you think this is?



- 1) This table shows the number of boys and girls who belong to different school clubs. Children are only allowed to belong to one club. Complete this table with the missing values:

	Science Club	Book Club	Nature Club	Gym Club	Total Number of Girls/Boys
Girls		15	14		
Boys	12	21			62
Total Number of Pupils in Each Club	29		29	33	



Use the table to decide if each of the statements are true or false. Explain your reasoning.

- a) Science Club and Nature Club are the two most popular clubs for girls.

- b) The total number of children who belong to a club is more than 120.

- c) Book Club and Science Club are more popular with girls than with boys.

- d) In total, more children chose Science Club and Gym Club than Book Club and Nature Club.

- 1) The school kitchen keeps a record of how many children in years 4, 5 and 6 have a hot dinner each day.



- a) Complete the table using the clues they have given to help.

Monday - Fish and Chips

Year 4 ate half of the fish and chip meals served today. Year 6 ate 20 less fish and chip meals than year 5. Year 5 ate 15 less fish and chip meals than year 4. We served 100 meals.

	Year 4	Year 5	Year 6
Fish and Chips			
Pasta Bake			
Chicken Curry			



Tuesday - Pasta Bake

Year 4 and year 6 ate 60 pasta bake meals between the two classes. Year 4 ate 35 meals. Year 4 ate 10 more pasta bake meals than year 6. Year 5 ate the rest. We served the same number of meals today as Monday.

- b) We served between 110 and 150 meals each day.

Use this statement to decide how many meals were served each day for each year group - make sure you keep these numbers secret for now! Generate your own clues and ask a friend to use these to complete the table.

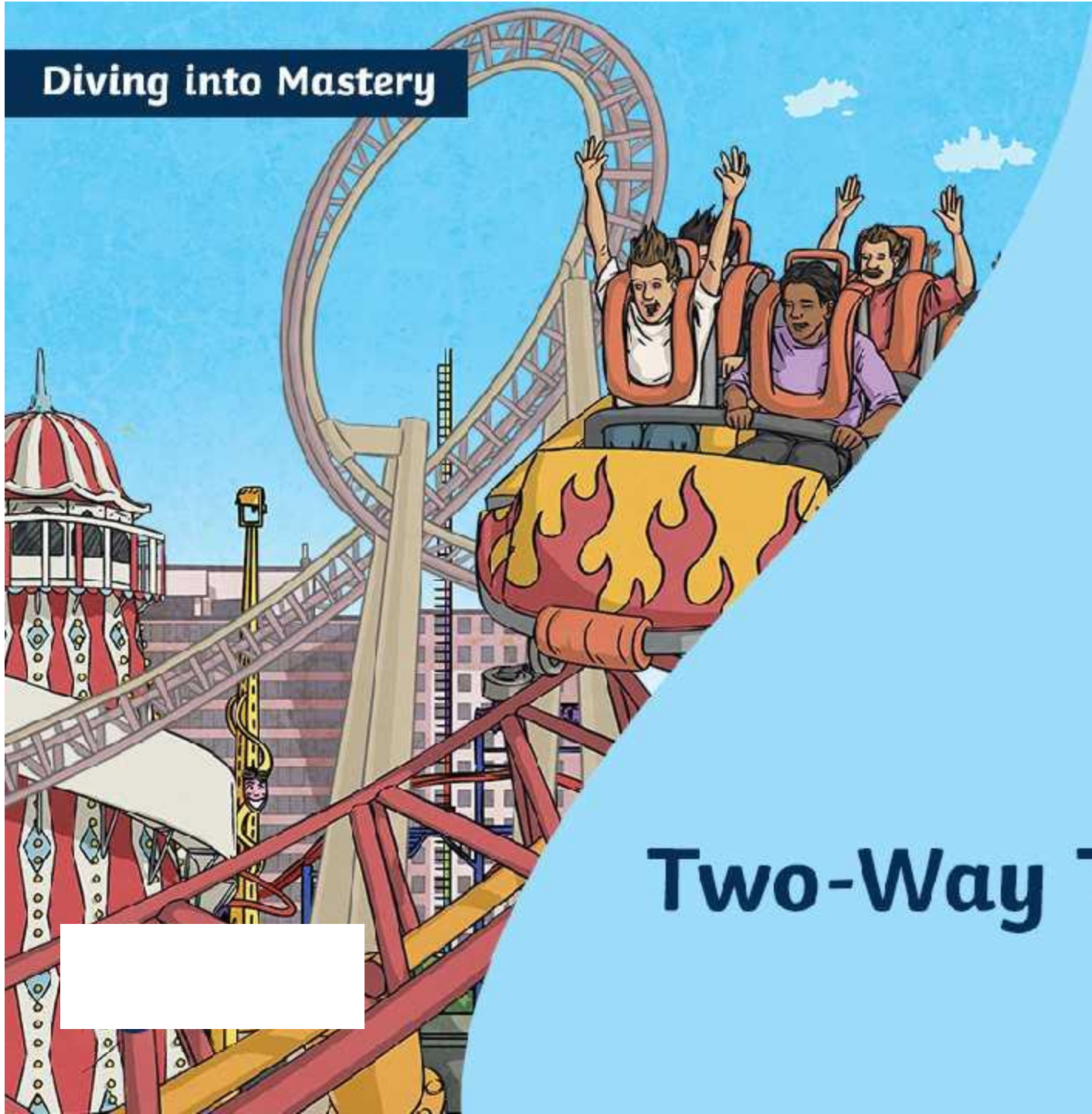
	Year 4	Year 5	Year 6
Pizza			
Jacket Potato			
Pasta Salad			



Wednesday - Chicken Curry

We served 10 more meals than yesterday and year 4 had 38 of them. Year 5 had double the number of meals that year 6 had.

Diving into Mastery



Two-Way Tables

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



Diving



Deeper



Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Aim

- Complete, read and interpret information in tables, including timetables.



Two-Way Tables

Diving



A holiday company recorded how many tourists visited Italy, Spain or France in three different months of the year.

	January	April	August
Italy	270	485	1245
Spain	350	865	1650
France	450	745	1989

Which month was the most popular for tourists?
Why do you think this is?



August is the most popular month for tourists because it is when the school holidays are and is when the weather is at its warmest.

Two-Way Tables

Deeper



This table shows the number of visitors to each ride at a theme park from 2016 to 2018.

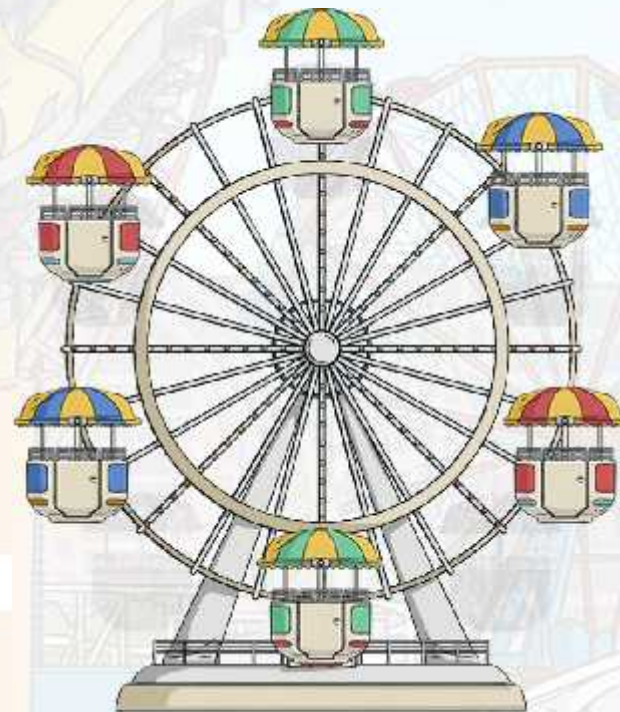
	2016	2017	2018
Screamer	8965	7564	6432
Waltzer	9524	11 546	7654
Big Wheel	10 245	12 568	8965

Decide if each statement is true or false and explain your reasons.

The Waltzer had more visitors than the Big Wheel in 2016.
 More visitors went on the Big Wheel in 2018 than the Waltzer did in 2017.

For the year 2016, the number of visitors to the Screamer was 2874 less than the number of visitors to the Big Wheel.

The difference between the number of visitors to the Screamer and the Waltzer in 2017 is 2941 less than the number of visitors to the Big Wheel.



Two-Way Tables

Deepest



100 children from each year group were asked to pick their favourite sport from a choice of football, athletics and gymnastics.

Use the clues to help fill in the missing parts of the table.

	Year 4	Year 5	Year 6
Football	10	30	60
Athletics	50	35	15
Gymnastics	40	35	25

Compared to year 5, twice as many year 6 children prefer football.

The difference between those who chose athletics as their favourite sport in years 5 and 6 was twenty.

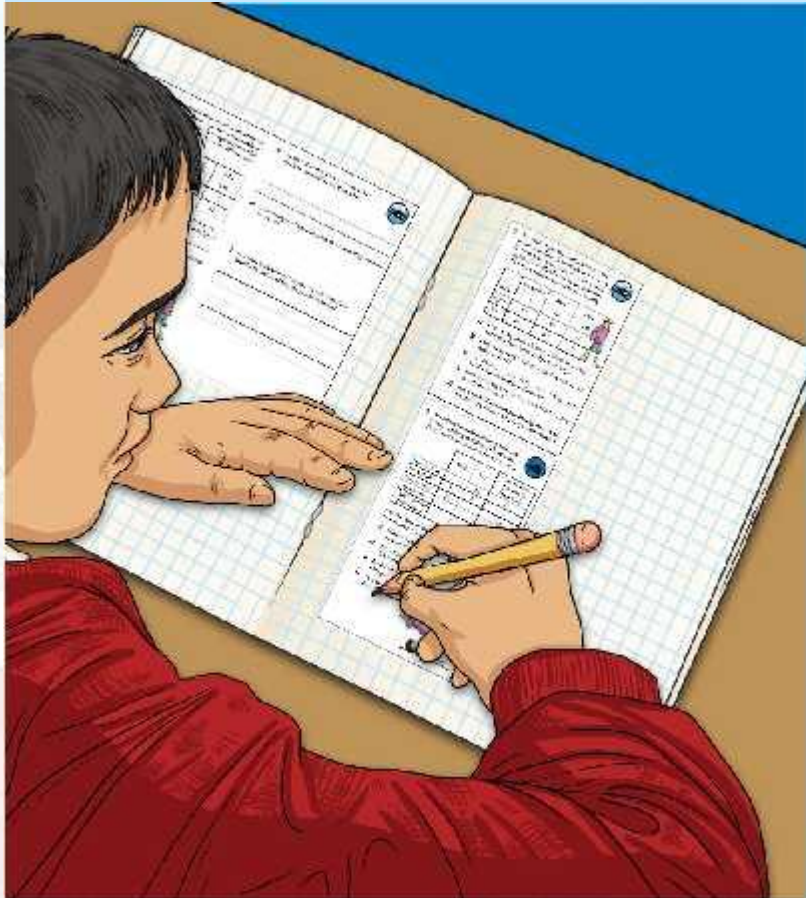
Half of the year 4 children asked chose athletics as their favourite sport.

Compared to year 5, ten fewer children in year 6 chose gymnastics as their favourite sport.



Two-Way Tables

Dive in by completing your own activity!



20) The table shows the number of books sold each month.

	January
2015	120
2016	175
2017	110

a) Working backwards

b) Working backwards

21) The number of people taking part in a quiz.

22) Working backwards

23) Working backwards

24) The table shows the number of people who bought different types of books.

	Novels (N)	Textbooks (T)	Reference (R)	Biography (B)	Total number of books sold
Male	75	60			
Female	60	75			135
Total number of books sold	135	135	20	30	

The table also shows the number of people who bought different types of books.

a) If the total number of books sold is 300, how many books were sold?

b) If the total number of books sold is 300, how many books were sold?

c) How many people bought books of each type if the total number of books sold is 300?

25) The table shows the number of people who bought different types of books.

a) Complete the table by filling in the missing values.

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Female	60	75	
Total number of books sold			20

Working Backwards

The table shows the number of people who bought different types of books.

The total number of books sold is 300.

How many people bought books of each type?

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