

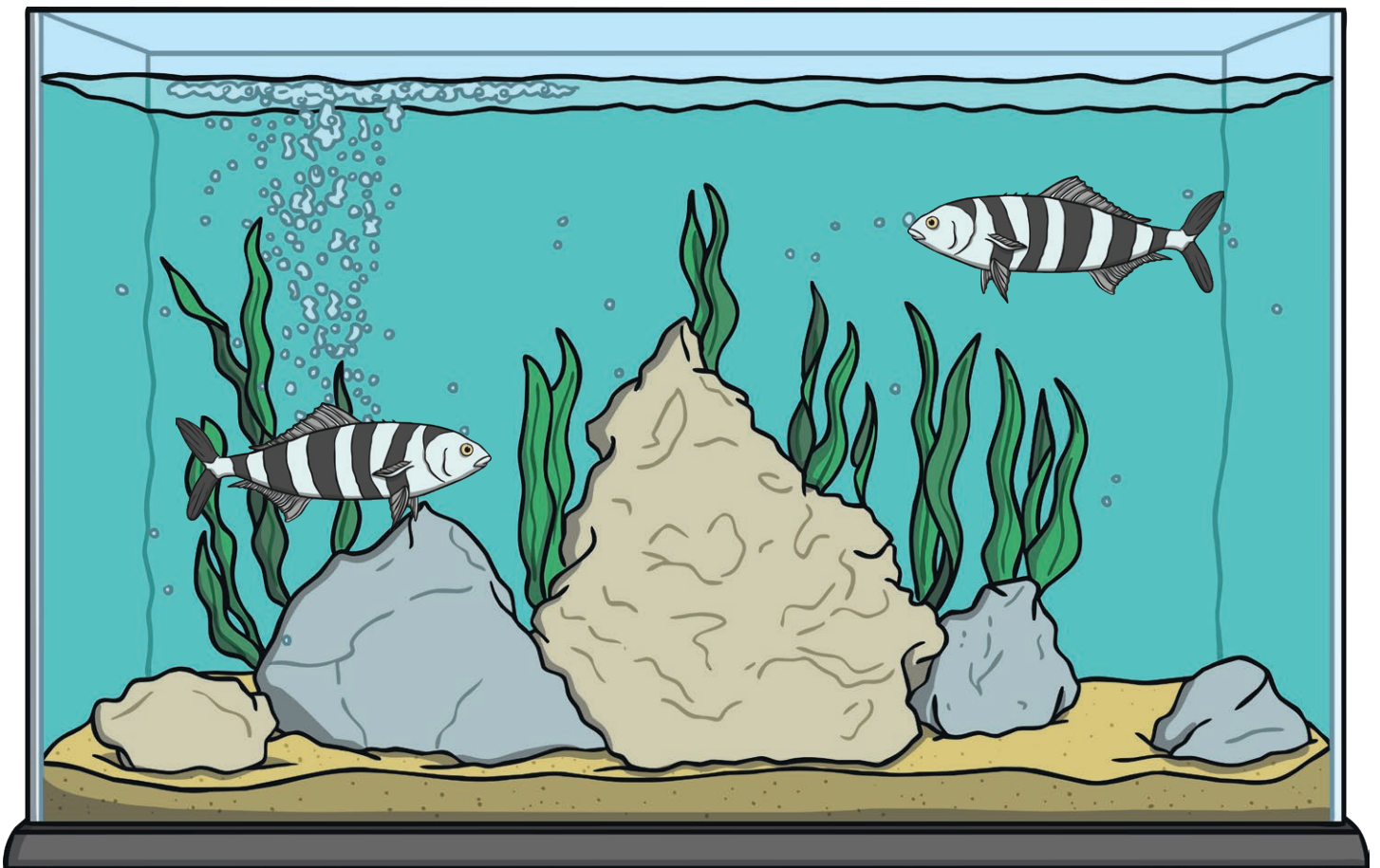
The Mystery of Zone A at the Aquarium

Miss Turnip's class is visiting the aquarium. All the children have been put into groups and sent off to explore with an adult.

Disaster has struck - at dinner time, Miss Turnip notices that the signs have been switched around in Zone A. Nobody knows which animal is which!

Use the descriptions and the clues to find out who the sign switching culprit is.

Good luck!



Name	Girl / Boy	Hair Colour	Age	Group	Favourite marine animal
Annabelle	girl	red	5	1	shark
Brian	boy	blonde	7	2	stingray
Connor	boy	light brown	6	1	crab
Danielle	girl	blonde	6	3	seahorse
Ella	girl	dark brown	5	4	shark
Franklin	boy	blonde	6	1	clownfish
Giovanni	boy	light brown	6	2	starfish
Harriet	girl	blonde	7	4	stingray
Isaac	boy	blonde	6	3	jellyfish
Jennifer	girl	blonde	6	2	seahorse
Kumar	boy	black	5	2	shark
Laura	girl	dark brown	7	3	starfish
Mo	boy	red	6	4	jellyfish
Nicky	boy	blonde	6	1	starfish
Poppy	girl	black	7	2	stingray

Clue 1: Solve the problems

Solve the problems and draw a line to the correct answers.
The leftover answer will reveal the age of the culprit.

There are 20 penguins altogether.
They are fed in 4 separate groups.
How many penguins are in each feeding group?

40
Age: 4

Each penguin eats 5kg of fish a day.
How many kilograms of food is fed to the group of 20 penguins every day?

45
Age: 5

Each penguin has two flippers. How many flippers will 20 penguins have altogether?

50
Age: 6

All 20 penguins have been divided into 2 equal groups. How many penguins are in each group?

5
Age: 7

Next week, the aquarium are welcoming 25 more penguins.
How many penguins will there be altogether?

10
Age: 4

Clue 1: The culprit is _____ years old.

Clue 2: Missing Numbers

Complete the number sequences below by filling in the missing answers. Colour in the words that match the numbers you have filled in.

Rearrange the words so that it makes sense and you will reveal the colour of the culprit's hair.



10		14	16	18	20
----	--	----	----	----	----

60	50	40	30		10
----	----	----	----	--	----

11	13	15		19	21
----	----	----	--	----	----

30		20	15	10	5
----	--	----	----	----	---

28	26		22	20	18
----	----	--	----	----	----

17 has	10 red	12 hair	15 light brown	22 black
30 there	20 the	24 blonde	25 culprit	28 dark borwn

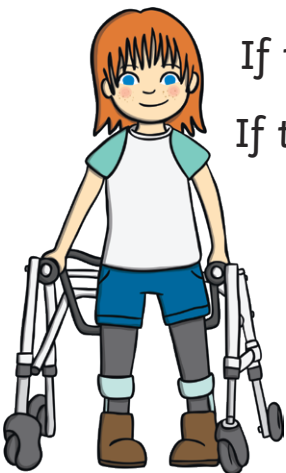
Clue 2: _____.

Clue 3: True or False

If the calculation is right, put a tick in the 'True' column '✓'.

If the calculation is wrong, put a cross in the 'False' column 'x'.

	True	False
Half of 19 is 8		
3 less than 87 is 84		
$41 > 45$		
$92 = 62 + 30$		
$8 \times 5 = 40$		
$\frac{1}{2}$ of 8 = 3		
$6 + 4 + 3 = 14$		
$3 + 17 = 10 + 10$		
$\frac{1}{4}$ of 12 is 4		
Total		



If there are more true calculations, the culprit is a **girl**.
If there are more false calculations, the culprit is a **boy**.

Clue 3: The culprit is a _____.




























Clue 4: Feeding Time

Solve the answers to the questions about the pictogram and colour the answers in the grid.

Then, rearrange the words into a sentence to reveal which group number the culprit is in.

The pictogram shows how many fish the cheeky penguins tipped out of the bucket.



						
						
						
						
						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Wednesday the	5 is in	50 group 3
75 group 1	25 culprit	Saturday isnt

How many fish were tipped out of the bucket on Thursday? _____.

On which day were the most fish tipped out of the bucket? _____.

How many more fish were tipped out on Tuesday than Monday? _____.

How many fish were tipped out at the weekend? _____.

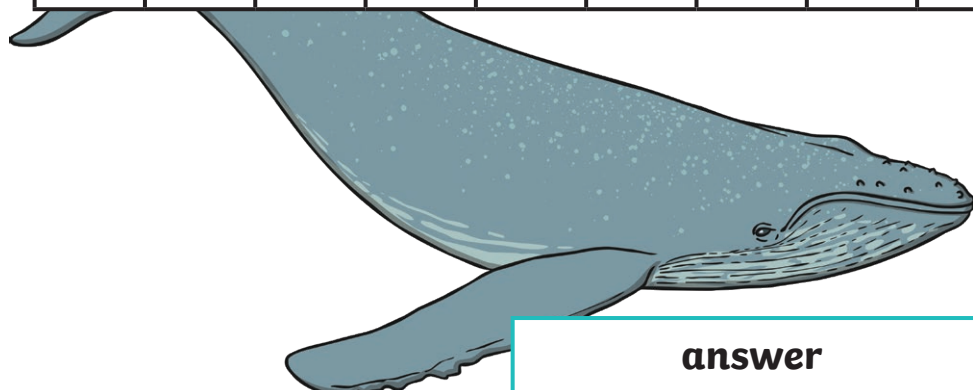
Clue 4: _____.

Clue 5: Code Breaker

Solve the calculations and use the code breaker to reveal an anagram. Then, rearrange the letters to find the culprit's favourite animal.

a	b	c	d	e	f	g	h	i	j	k	l	m
15	7	18	14	2	12	13	10	20	23	4	22	16

n	o	p	q	r	s	t	u	v	w	x	y	z
30	5	17	11	25	6	19	1	26	24	8	3	21



	answer	letter
$30 \div 5$		
$17 + 3$		
$2 + 2 + 2 + 2 + 2$		
Half of 24		
12×2		
3 more than 19		
10×3		
2 lots of 9		
$\frac{1}{4}$ of 20		

Clue 5: The culprit's favourite animal is a _____.

The culprit is _____.

Clue 1: Solve the problems **Answers**

There are 20 penguins altogether. They are fed in 4 separate groups. How many penguins are in each feeding group?	40 Age: 4
Each penguin eats 5kg of fish a day. How many kilograms of food is fed to the group of 20 penguins every day?	45 Age: 5
Each penguin has two flippers. How many flippers will 20 penguins have altogether?	50 Age: 6
All 20 penguins have been divided into 2 equal groups. How many penguins are in each group?	5 Age: 7
Next week, the aquarium are welcoming 25 more penguins. How many penguins will there be altogether?	100 Age: 5
	10 Age: 4

Clue 1: The culprit is **6** years old.

Clue 2: Missing Numbers **Answers**

10	12	14	16	18	20
----	----	----	----	----	----

60	50	40	30	20	10
----	----	----	----	----	----

11	13	15	17	19	21
----	----	----	----	----	----

30	25	20	15	10	5
----	----	----	----	----	---

28	26	24	22	20	18
----	----	----	----	----	----

17 has	10 red	12 hair	15 light brown	22 black
30 there	20 the	24 blonde	25 culprit	28 dark borwn

Clue 2: The culprit has blonde hair.

Clue 3: True or False Answers


	True	False
Half of 19 is 8		x
3 less than 87 is 84	✓	
$41 > 45$		x
$92 = 62 + 30$	✓	
$8 \times 5 = 40$	✓	
$\frac{1}{2}$ of 8 = 3		x
$6 + 4 + 3 = 14$		x
$3 + 17 = 10 + 10$	✓	
$\frac{1}{4}$ of 12 is 4		x
Total	4	5


























If there are more true calculations, the culprit is a **girl**.

If there are more false calculations, the culprit is a **boy**.

Clue 3: The culprit is a **boy**.

Clue 4: Feeding Time Answers

 = 10	 = 5
---	---

						
						
						
						
						
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Wednesday the	5 is in	50 group 3
75 group 1	25 culprit	Saturday isnt

How many fish were tipped out of the bucket on Thursday? **25**.

On which day were the most fish tipped out of the bucket? **Wednesday**.

How many more fish were tipped out on Tuesday than Monday? **5**.

How many fish were tipped out at the weekend? **75**.

Clue 4: The culprit is in group 1.

Clue 5: Code Breaker Answers

a	b	c	d	e	f	g	h	i	j	k	l	m
15	7	18	14	2	12	13	10	20	23	4	22	16

n	o	p	q	r	s	t	u	v	w	x	y	z
30	5	17	11	25	6	19	1	26	24	8	3	21

	answer	letter
$30 \div 5$	6	s
$17 + 3$	20	i
$2 + 2 + 2 + 2 + 2$	10	h
Half of 24	12	f
12×2	24	w
3 more than 19	22	l
10×3	30	n
2 lots of 9	18	c
$\frac{1}{4}$ of 20	5	o

Clue 5: The culprit's favourite animal is a **clownfish**.

The culprit is **Franklin**.