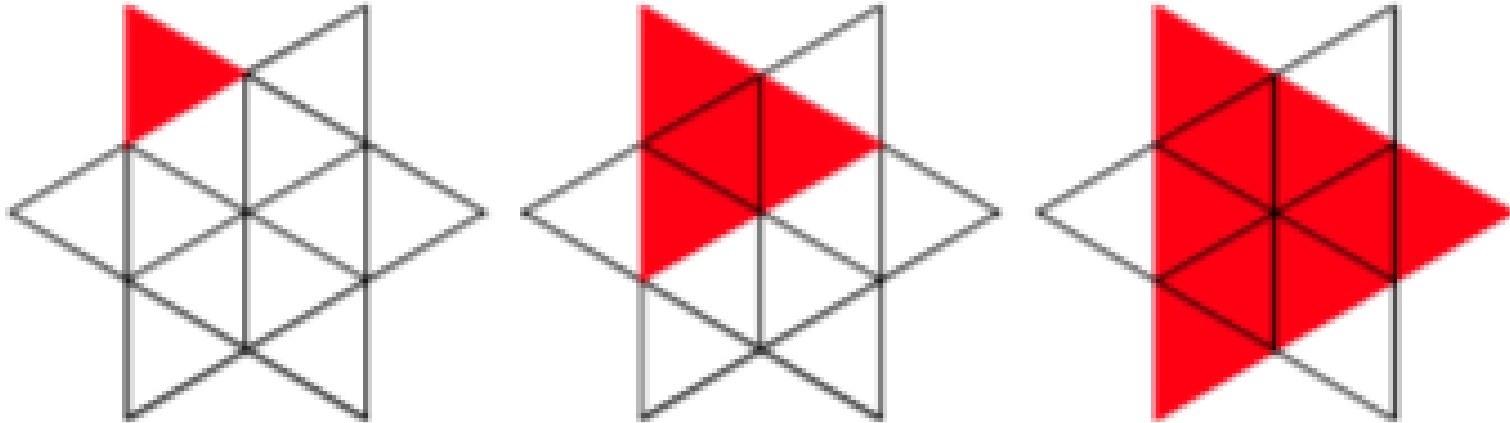


Starter

3. How Many Triangles?

$$12 + 6 + 2 = 20$$



The Mystery at the Grand Portrait Gallery


Answers

Clue 1: Forwards and Backwards

18 is	60 doodler	35 the
50 short	20 tall	14 female
10 mysterious	16 moustache	15 chocolate

Answer to clue 1: The mysterious moustache doodler is tall.

Clue 2: Right or Wrong

	Right	Wrong
A rectangle has two long sides the same length and two shorter sides the same length.	✓	
These coins add up to £1.16. 		✓
140cm is the same as 1m 40cm.	✓	
There are 15 days in two weeks.		✓
A cylinder has two squares at each end.		✓
$2 + 2 + 2 + 2$ is equal to 4×2 .	✓	
$42 - 13 = 30$		✓

Answer to clue 2: There are more wrong answers so the culprit is male.

The Mystery at the Grand Portrait Gallery

Answers

Clue 3: Arrays of Arrays!

$8 \times 3 = 24$ is	$10 \times 3 = 30$ Klee	$4 \times 5 = 20$ Cézanne	$4 \times 3 = 12$ in
$10 \times 5 = 50$ Choco Glory	$8 \times 2 = 16$ Monet	$6 \times 2 = 12$ vandal	$2 \times 7 = 14$ chocolate
$5 \times 2 = 10$ the	$2 \times 3 = 6$ found	$5 \times 5 = 25$ group	$10 \times 2 = 20$ wrapper

Answer to clue 3: The vandal is in Klee group.

Clue 4: Fraction of a Whole

3 was	0 shoe	4 beside	10 found
1 Dippy Duo	5 wrapper	11 Choco Glory	7 Caramel Bite
6 the	9 a	12 paintings	2 size

Answer to clue 4: A Caramel Bite wrapper was found beside the paintings.

Clue 5: Missing Moustaches

102 the	76 five	101 drawing
90 vandal	73 moustache	105 three
66 behind	100 a	99 left
98 size	70 four	92 footprint

Answer to clue 5: The moustache drawing vandal left a size four footprint.

The mysterious moustache doodler is Raphael!

Clue 1: Zoo True or False?

Answers

	true	false
If there are four enclosures each holding eight lemurs, there must be thirty-two lemurs altogether.	✓	
One side of a pentagonal enclosure measures 18m. The perimeter must be 108m.		✓
0.25 equals $\frac{1}{4}$.	✓	
XIX is the same as 18.		✓
$218 - 89 = 119$		✓
The giraffes have 24kg of food. They eat half. The remainder would be 12 000g.	✓	
The penguin enclosure is closed for $\frac{1}{4}$ of the year. That means it is closed for four months.		✓
A child's ticket to the zoo costs £14.45. An adult's ticket costs £19.40. For two adults and one child, the price will be £53.25.	✓	
Annual membership to the zoo for one adult costs £60. That works out at £5 a month.	✓	

Clue 2: Divide and Conquer! Answers

- | | |
|-------------------------|-------------------------|
| 1. $210 \div 10 = 21$ | 5. $3 \div 10 = 0.3$ |
| 2. $3000 \div 10 = 300$ | 6. $7 \div 10 = 0.7$ |
| 3. $270 \div 10 = 27$ | 7. $300 \div 100 = 3$ |
| 4. $27 \div 100 = 0.27$ | 8. $21 \div 100 = 0.21$ |

0.1 keys	0.03 friendly	0.7 mischievous	27 creature
0.3 is	3000 primate	2.1 noisy	21.7 leaves
0.27 monkey	21 a	30 seeds	300 very
3 the	0.07 screeches	0.027 fruit	0.21 sociable

The mischievous monkey is a very sociable creature.

There are more true answers. The monkey is male.

Clue 3: Along the Landing and Up the Stairs **Answers**

Eat Fruit

Clue 4: Feeding Time at the Zoo **Answers**

16.40 wasn't	13.00 capuchin	15.45 was	13.40 height
14.00 keys	15.40 who	16.16 baboon	17.20 mandrill
16.15 the	12.40 short	14.30 stole	30.30 lost
14.40 howler	13.25 monkey	13.30 dropped	16.00 a

Monkey who stole the keys was a mandrill.

Clue 5: How Tall is the Monkey? **Answers**

$$\begin{array}{r} 1. \quad \times \quad 23 \\ \quad \quad \quad 4 \\ \hline \quad \quad \quad 92 \end{array}$$

$$2. \quad 178 \div 2 = 89$$

$$\begin{array}{r} 3. \quad \quad 42 \\ \quad \quad + \quad 49 \\ \hline \quad \quad 91 \end{array}$$

$$\begin{array}{r} 4. \quad \quad 47 \\ \quad \quad \times \quad 2 \\ \hline \quad \quad 94 \end{array}$$

$$\begin{array}{r} 5. \quad \quad 121 \\ \quad \quad - \quad 27 \\ \hline \quad \quad 94 \end{array}$$

$$\begin{array}{r} 6. \quad \quad 564 \\ \quad \quad - \quad 475 \\ \hline \quad \quad 89 \end{array}$$

$$\begin{array}{r} 7. \quad \quad 1000 \\ \quad \quad - \quad 908 \\ \hline \quad \quad 92 \end{array}$$

$$8. \quad 184 \div 2 = 92$$

