Answers for Monday's Mystery

There are 462 fans at a football match and $\frac{1}{3}$ of them are girls. How many of the fans are boys? **308 boys**

A coach seats 52 people. How many coaches will be needed to transport 724 supporters to their away match? **14 coaches**

In the crowd of a football match, there are 1746 red scarves, 764 blue scarves and 904 green scarves. How many scarves are there altogether? **3414 scarves**

Everyone who took part in a school football tournament was given a medal. The number of medals given out was a multiple of 6, between 90 and 120, with a digit total of 6. How many medals were given out?

114 medals

On a non-uniform day, $\frac{3}{5}$ of the children wear a football shirt. There are 320 children altogether.

How many children wore a football shirt? **192 children**

The cost of hiring a coach to transport a team is calculated using the following formula:

(number of players in the team × 75) + 43

How much would it cost a team of 11 players to hire the coach? **825 + 43 = £868**

In a football tournament, team A scored 84 goals. Team B scored $\frac{5}{7}$ of this amount. How many goals did team B score? **60 goals**

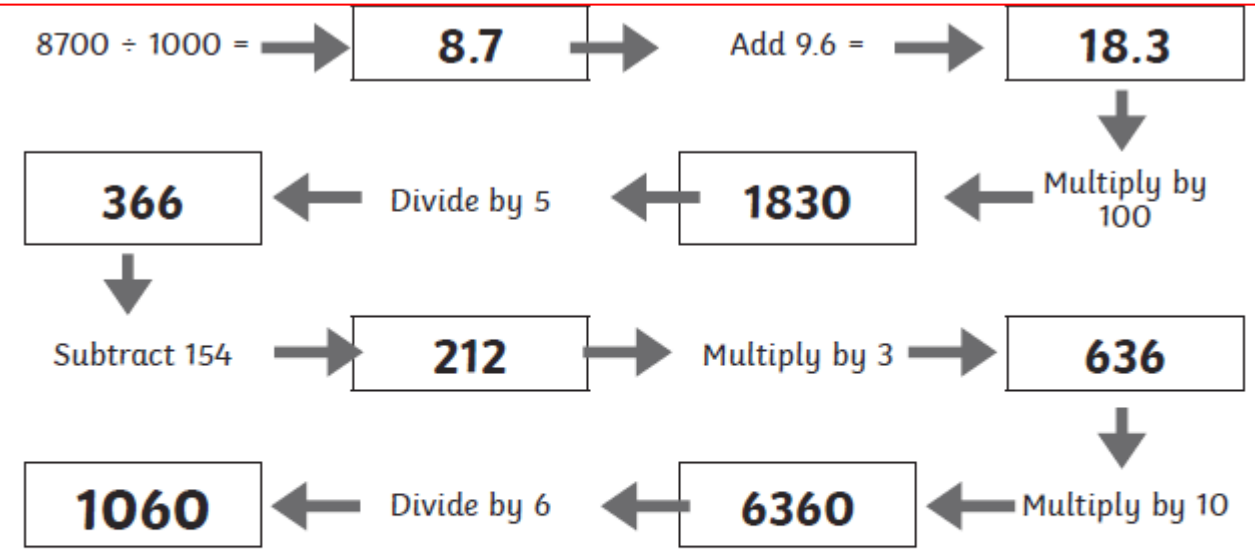
Player A does 8 penalty kick practice shots every day. Player B does 50% more penalty kick practice shots every day. How many penalty kick practice shots do they do altogether over one week? **140 penalty kicks**

Clue 1: The practical joker does not have blonde hair.

18 × 7 = **126**	34 × 8 = **272**	55 × 6 = **330**
26 × 9 = **234**	76 × 5 = **380**	85 × 4 = **340**
97 × 3 = **291**	28 × 9 = **252**	44 × 6 = **264**

234 Their age is not a multiple of 2.	330 Their age is a multiple of 5.	**350** **Their age is not a multiple of 4.**	252 Their age is a prime number.	380 Their age is not a square number.
126 Their age is a multiple of 4.	264 Their age is not a prime number.	340 Their age is a square number.	272 Their age is a multiple of 2.	291 Their age is not a multiple of 5.

Clue 2: **Their age isn't a multiple of 4.**



The practical joker's favourite colour is:

red 601	blue 1600	green 160	**yellow 1060**

Clue 3: **The practical joker's favourite colour is yellow.**

1. Charlotte scored 19 goals in the football tournament. **True**
2. Darius scored 3 fewer second-half goals than first-half goals. **False**
3. Ruby scored 6 more goals than Lucas in the tournament. **False**
4. Jamil scored 2 more second-half goals than first-half goals. **True**
5. Altogether, the five players scored 99 goals in the tournament. **False**

Clue 4: **The practical joker is on the football pitch.**

y + 17 = 49	31	**32**	33	34
y - 28 = 66	**94**	95	96	97
y ÷ 2 = 911	1820	1821	**1822**	1823
3y = 105	34	**35**	36	37
34 + y = 105	68	69	70	**71**
y ÷ 4 = 2492	**9968**	9969	9970	9971
1023 - y = 290	732	**733**	734	735
	The practical joker is **male**.	The practical joker is **female**.	The practical joker is **male**.	The practical joker is **female**.

Clue 5: **The practical joker is female.**

THE PRACTICAL JOKER IS **SARA**

Today you are doing a variety of revision (most of the week will be the same)

It will be in the form of ‘Maths Mats’ the same as the SPaG ones – but maths ☺

I’ve added 6 mats to keep you going – do as many as you can in an 1 hour ☺

Section 1

Order the following numbers from smallest to largest.

471 741	417 471	471 174	417 741	471 417

smallest largest

Section 3

Fatima has 36 cakes to share with some friends. She could share the cakes so 36 children have 1 cake each. Explain four other ways she could share the cakes equally without cutting the cakes.

___ children have ___ cakes each. ___ children have ___ cakes each.

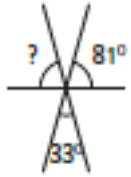
___ children have ___ cakes each. ___ children have ___ cakes each.

Section 2

Three classes of children raise money for Comic Relief by selling cakes. Each class is given £17.80 to buy ingredients. At the end of the sale, each class counts how much money they have. The classes have £34.82, £29.01, £41.78. After subtracting the amount given to buy ingredients, how much money is raised?

Section 7

Calculate the missing angle:



Section 4

Complete the table to convert between mixed fractions and improper fractions.

$\frac{13}{4}$	
	$5\frac{1}{2}$
$\frac{19}{3}$	

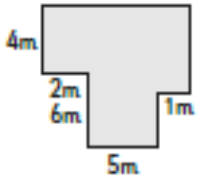
Section 5

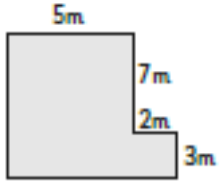
Write the equivalent to the fractions and decimal fractions.

$\frac{3}{4}$	
	0.667
$\frac{5}{8}$	

Section 6

Calculate the perimeter of these rectilinear shapes:





Section 8

Estimate how many millilitres in a mug.

Section 1

Circle the numbers where '5' is in the thousands place:

92 735 92 854

85 492

95 410 16 905

56 892

78 501 50 467

27 651 93 578

Section 2

Calculate the following in your head:

56 + 19 = ☐

27 + 54 = ☐

82 - 45 = ☐

92 - 38 = ☐

Section 3

Calculate:

5.6 x 100 = ☐

7.69 x 100 = ☐

219 ÷ 100 = ☐

3304 ÷ 100 = ☐

Section 4

Insert the correct symbol to make this number sentence correct. <, > or =

$\frac{4}{5}$		$\frac{8}{10}$
$\frac{1}{3}$		$\frac{5}{12}$
$\frac{7}{8}$		$\frac{33}{40}$

Section 5

Match the following numerals to the equivalent written number.

seventeen point one seven	17.07
seven point one seven	7.17
seventeen point zero seven	17.17

Section 6

Complete the table to convert between millilitres and litres.

Millilitres	Litres
110ml	
	10l
1650ml	

Section 7

Write regular or irregular under the following shapes:

....

Section 8

Here is a table showing the number of vehicles that passed a school in one day.

Vehicle	Number
Car	273
Bus	37
Lorry	29
Van	

Three times as many cars passed the school as other vehicles. How many vans passed the school?

Section 1

Continue the linear sequence.

1099	2099			
92 773	91 773			
56 923	66 923			
718 902	708 902			

Section 2

Write all the prime numbers from 21 to 50.

Section 3

Calculate:

5 x 60 =

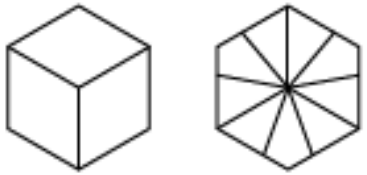
30 x 7 =

40 x 90 =

80 x 110 =

Section 4

Shade the following hexagons so the same fraction is shaded in both and write the fraction that they represent.



Section 5

Round these numbers to the nearest whole number:

11.5 =

1.96 =

9.12 =

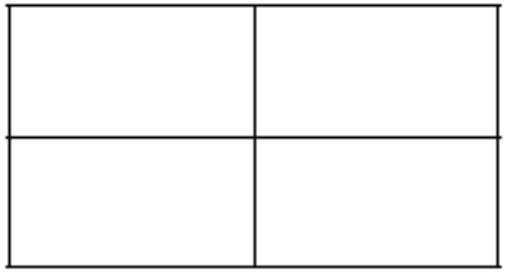
56.29 =

Section 6

Ben gets the 17:12 train. The journey is due to last 1 hour 52 minutes. At what time should the train arrive?

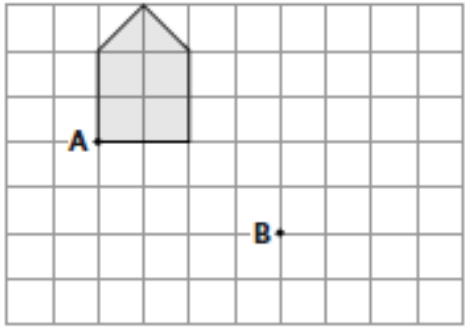
Section 7

How many rectangles are there in this drawing?



Section 8

Translate this shape from point A to point B.



Section 1

The temperature is -8°C. Two hours earlier, the temperature was 6°C warmer. What was the temperature two hours earlier?

Section 2

Here are the weekend cinema takings for 29th April - 1st May 2016.

Captain America	£14 466 681
The Jungle Book	£5 758 824

What was the difference in takings between the two films, rounded to the nearest thousand?

Section 3

$$\begin{array}{r} 5\ 7\ \square \\ +\ \square\ 9 \\ \hline 6\ 1\ 1 \end{array} \qquad \begin{array}{r} 6\ \square\ 2 \\ -\ \square\ 0\ \square \\ \hline 2\ 6\ 3 \end{array}$$

Section 4

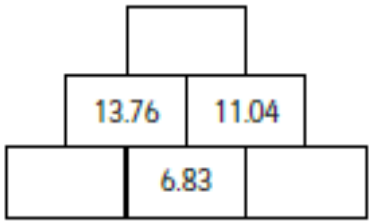
Order the following fractions from smallest to largest.

$\frac{2}{3}$ $\frac{11}{12}$ $\frac{5}{6}$ $\frac{13}{18}$

smallest largest

Section 5

Adjacent squares are added together to give the number above. Complete the number wall.



Section 6

1kg ≈ 2.2lb (pounds)

1 stone = 14lb

How many kilograms in one stone? Give your answer to two decimal places.

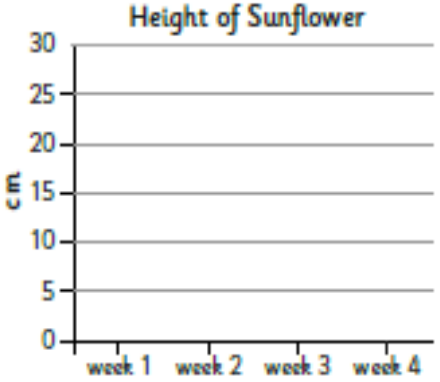
Section 7

Draw a triangular prism.

Section 8

Children measure the height of a sunflower once a week. They record their measurements in a table.

Week	Height of sunflower (cm)
Week 1	3
Week 2	10
Week 3	18
Week 4	27



Draw the line on the graph.

Section 1

Write these Roman Numerals as numbers.

CXXVI → ☐

DCCLXIX → ☐

Section 3

Calculate:

426 x 13 = ☐

1456 ÷ 7 = ☐

Section 4

Calculate:

$\frac{2}{5} + \frac{1}{10} =$ ☐

$\frac{2}{3} - \frac{1}{12} =$ ☐

Section 5

Write the following fractions as percentages:

$\frac{48}{100} =$ ☐ $\frac{19}{100} =$ ☐ $\frac{6}{100} =$ ☐

Section 2

Circle the square numbers:

1 12 23 27 5 16 41 35 90 49 82 50 64 99 58 77 110 135 71 121 118 144 165 169

Section 6

1ml of water weighs 1g. An empty plastic bottle weighs 10g. How much do 4 half-litre bottles full of water weigh in kilograms?

☐

Section 7

Draw a triangle with 2 acute angles and 1 obtuse angle.

Section 8

Here is a train timetable:

London St Pancras	06:32	07:24	07:58
Leicester	07:52	08:30	09:01
Derby	08:19	09:05	09:25
Chesterfield	08:37	09:27	09:43
Sheffield	08:55	09:41	09:58

Which is the slowest train? ☐

Jan needs to arrive in Sheffield by quarter to ten. Which train should she catch from Leicester? ☐

Section 1

I am a 3-digit number.

I am odd.

I have twice as many hundreds as tens.

I have twice as many tens as ones.

What am I?

Section 2

Write the factor pairs of 32.

Write the common factors of 9 and 27.

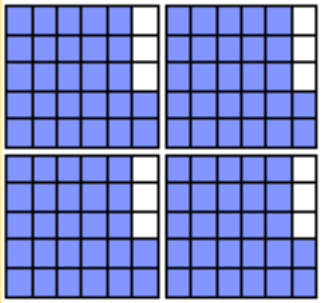
Section 3

Lucas collects 5p coins. When his jar is full, he shares the money between 3 local charities. He counts the full jar and has 255 5p coins. How much will each charity receive?

Section 4

Use the visual representation to calculate:

$5\frac{2}{5} \times 4 =$



Section 5

Complete the table by writing the equivalent fraction or percentage:

$\frac{2}{5}$	**40%**
	33%
	80%
$\frac{1}{2}$	
$\frac{3}{4}$	

Section 6

Which rectangle has the larger area?