Answers for Friday

$$\frac{5}{6} \div \frac{1}{9} = \frac{5}{6} \times \frac{9}{1} = \frac{45}{6} = 6\frac{5}{6}$$

$$\frac{8}{11} \div \frac{6}{7} = \frac{8}{11} \times \frac{7}{6} = \frac{56}{66} = \frac{28}{33}$$

$$\frac{4}{5} \div \frac{8}{10} = \frac{4}{5} \times \frac{10}{8} = \frac{40}{40} = 1$$

$$\frac{4}{14} \div \frac{7}{8} = \frac{4}{14} \times \frac{8}{7} = \frac{32}{98} = \frac{16}{49}$$

$$\frac{3}{4} \div \frac{1}{2} = \frac{3}{4} \times \frac{2}{1} = \frac{6}{4} = 1\frac{2}{4} = 1\frac{1}{2}$$

$$\frac{2}{3} \div \frac{10}{13} = \frac{2}{3} \times \frac{13}{10} = \frac{26}{30} = \frac{13}{15}$$

$$\frac{5}{9} \div \frac{2}{6} = \frac{5}{9} \times \frac{6}{2} = \frac{30}{18} = \frac{15}{9} = 1\frac{6}{9} = 1\frac{2}{3}$$

$$\frac{8}{11} \div \frac{4}{5} = \frac{8}{11} \times \frac{5}{4} = \frac{40}{44} = \frac{10}{11}$$

$$\frac{5}{12} \div \frac{6}{9} = \frac{5}{12} \times \frac{9}{6} = \frac{45}{72} = \frac{15}{24}$$

Sorry if you did these as multiply by – I did write a note on it that they needed to be divided by

$$3 \div \frac{1}{9} = \frac{3}{1} \div \frac{1}{9} = \frac{3}{1} \times \frac{9}{1} = \frac{27}{1} = 27$$

$$\frac{6}{10} \div 2 = \frac{6}{10} \div \frac{2}{1} = \frac{6}{10} \times \frac{1}{2} = \frac{6}{20} = \frac{3}{10}$$

$$\frac{1}{9} \div 3 = \frac{1}{9} \div \frac{3}{1} = \frac{1}{9} \times \frac{1}{3} = \frac{1}{27}$$

$$8 \div \frac{1}{10} = \frac{8}{1} \div \frac{1}{10} = \frac{8}{1} \times \frac{10}{1} = \frac{80}{1} = 80$$

$$10 \div \frac{3}{5} = \frac{10}{1} \div \frac{3}{5} = \frac{10}{1} \times \frac{5}{3} = \frac{50}{3} = 16\frac{2}{3}$$

$$\frac{7}{8} \div 7 = \frac{7}{8} \div \frac{7}{1} = \frac{7}{8} \times \frac{1}{7} = \frac{7}{56}$$

Write the calculation.

$$\frac{6}{10} \div 3 = \frac{2}{10}$$

What fraction of cake does each child get?

Each child gets $\frac{2}{10}$ or $\frac{1}{5}$ of the cake.

Incorrect, the missing number in the second calculation is 8.

$\frac{20}{32} \div 6 = \frac{5}{48}$

correct as $\frac{5}{8} \div 6 = \frac{5}{48}$

$\frac{21}{36} \div 4 = \frac{7}{48}$

correct as $\frac{7}{12} \div 4 = \frac{7}{48}$

$\frac{20}{32} \div 6 = \frac{5}{48}$

incorrect as $\frac{2}{7} \div 5 = \frac{2}{35}$

△	♡	⚡	☺	☆	☾
30	8	15	42	36	9

I couldn't let the last Monday of online go by, without doing another 'mystery' lesson

The first clue page is tricky – make sure you take your time, you don't want to go wrong at the first hurdle!

The Mystery of the Mixed-Up Football Shirts

It is the day of the final match in a football tournament. This is the day that the players have all been waiting for! They are feeling nervous, but they are excited to get into their football kits. However, when they finally open up their bags, they see a huge problem and it doesn't take long for chaos to follow!

All of the numbers and names on the players' football shirts have been mixed up! If the team want to take part in the final, they must find the culprit and fix this problem!

Solve the clues to find out which member of the opposing team has played this practical joke on the players.

Good luck!

Name	Male or Female	Age	Hair Colour	Favourite Colour	Location
Adam	Male	15	Brown	Red	Changing room
Bethany	Female	13	Blonde	Blue	Football pitch
Casper	Male	12	Black	Green	Sideline
Daniel	Male	14	Ginger	Yellow	Changing room
Emily	Female	11	Brown	Red	Football pitch
Fran	Female	16	Blonde	Blue	Sideline
George	Male	13	Ginger	Yellow	Football pitch
Grace	Female	15	Black	Green	Changing room
Harry	Male	12	Brown	Red	Sideline
Henry	Male	14	Blonde	Blue	Changing room
Isaac	Male	11	Black	Green	Football pitch
Jacob	Male	16	Ginger	Yellow	Sideline
Isobel	Female	15	Brown	Red	Changing room
Julio	Male	13	Blonde	Blue	Football pitch
Magdalena	Female	12	Black	Green	Sideline
Marcel	Male	14	Ginger	Yellow	Changing room
Ola	Female	11	Brown	Red	Football pitch
Olivia	Female	16	Blonde	Blue	Sideline
Samir	Male	12	Black	Green	Changing room
Sara	Female	14	Ginger	Yellow	Football pitch
Terri	Female	17	Brown	Red	Sideline
Thomas	Male	16	Blonde	Blue	Changing room

Clue 1: Rearrange the Words

Solve the problems and circle the correct answers in the grid. Combine the circled words to complete the first clue.

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

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

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?

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?

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?

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?

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?

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?

For the fractions – remember to divide by denominator to find what '1' lot is

308 practical	868 have	237 black	14 not
3414 blonde	140 the	420 brown	192 joker
114 does	152 white	126 ginger	60 hair

Clue 1: _____

Clue 2: Cross It Off

Solve the multiplication problems and cross off the correct answers that appear in the grid. The remaining clue that is **not** crossed off will reveal the age of the practical joker.
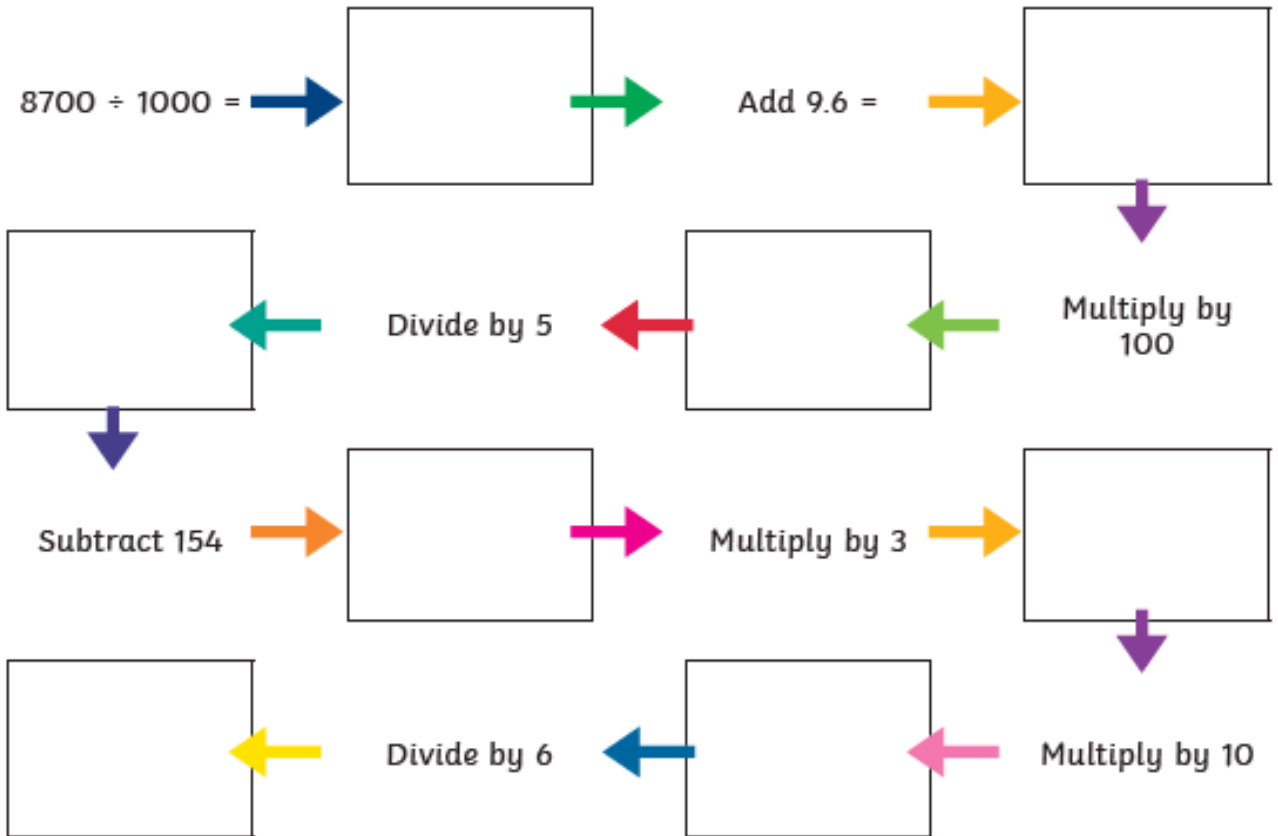
18 × 7 =	34 × 8 =	55 × 6 =
26 × 9 =	76 × 5 =	85 × 4 =
97 × 3 =	28 × 9 =	44 × 6 =

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

Clue 2: _____

Clue 3: Number Maze

Follow the instructions to discover a clue about the practical joker's favourite colour.

$8700 \div 1000 =$

Add 9.6 =

Multiply by 100

Divide by 5

Multiply by 100

Subtract 154

Multiply by 3

Multiply by 10

Divide by 6

Multiply by 10

The practical joker's favourite colour is:

| red	blue	green	yellow
601	1600	160	1060

Clue 3: _____

Clue 4: Football Statistics

To reveal the next clue, decide whether the statements about the bar chart are true or false.

If there are more true answers, the practical joker is in the **changing room**.

If there are more false answers, the practical joker is on the **football pitch**.

A Bar Chart to Show the Number of Goals Scored in a Football Tournament
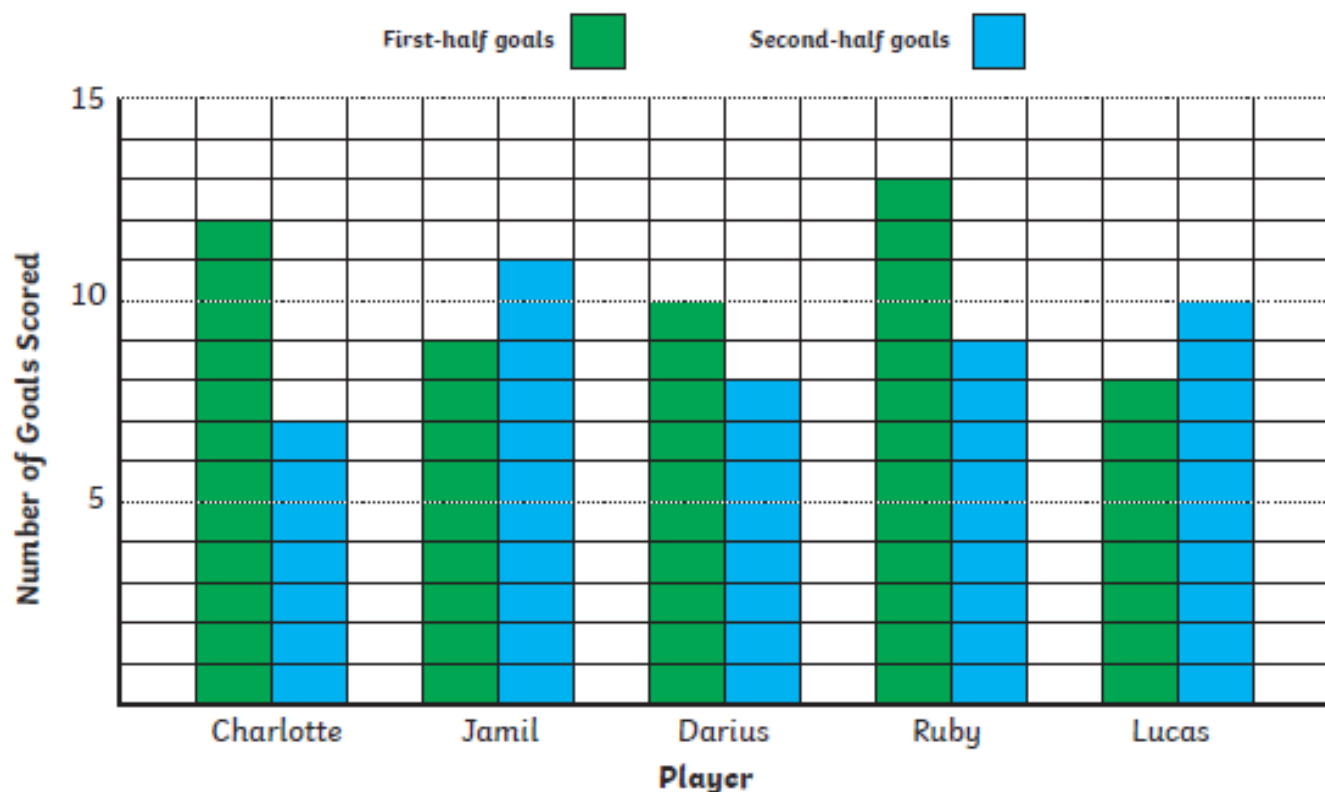
1. Charlotte scored 19 goals in the football tournament.
2. Darius scored 3 fewer second-half goals than first-half goals.
3. Ruby scored 6 more goals than Lucas in the tournament.
4. Jamil scored 2 more second-half goals than first-half goals.
5. Altogether, the five players scored 99 goals in the tournament.

Clue 4: _____

Clue 5: Multiple Choice

Choose the correct value for y in each of the calculations.

The column with the most correct answers will tell you whether the practical joker is male or female.

$y + 17 = 49$	31	32	33	34
$y - 28 = 66$	94	95	96	97
$y \div 2 = 911$	1820	1821	1822	1823
$3y = 105$	34	35	36	37
$34 + y = 105$	68	69	70	71
$y \div 4 = 2492$	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: _____

This one just means 3 x y

The practical joker is....

You'll find out on Monday ☺