Home Learning MATHS week 11

Summer Term - Week 8 (w/c 15th June)

Summer Term - Week 7 (w/c 8th June)

Summer Term - Week 6 (w/c 1st June)

Monday - Week 8 lesson 1

Tuesday - Week 8 lesson 2

Wednesday - Week 8 lesson 3

Thursday - Week 8 lesson 4

Friday - Week 8 Friday Maths Challenges (Click here for challenges)

This is where this weeks videos

will be

Home Learning MATHS week 11

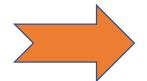
This week, you will not be able to access the

worksheets online.

I have included them as a PDF file and are

accessible through the school website.

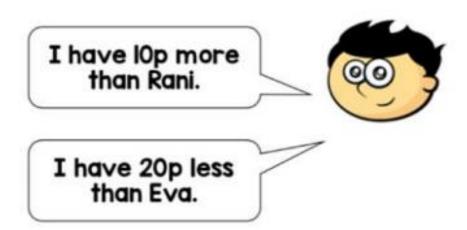
You will need to use this link to access the videos



Friday Challenges

Challenge 1

Rani has 38p.



How much money does Eva have?

Challenge 2

If



and

Work out the value of



Challenge 3

A sequence is made up of three 2-digit numbers.

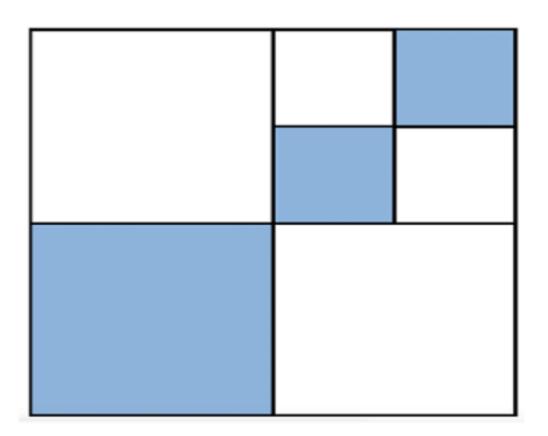
The sequence increases by eight each time. These are the digits that make u the three numbers.



Work out the numbers in the sequence.

Challenge 4

A square is divided into smaller squares.



What fraction of the square is shaded?

Challenge 5

The mass of an empty jar is 470 g.



6 marbles are placed in the jar.



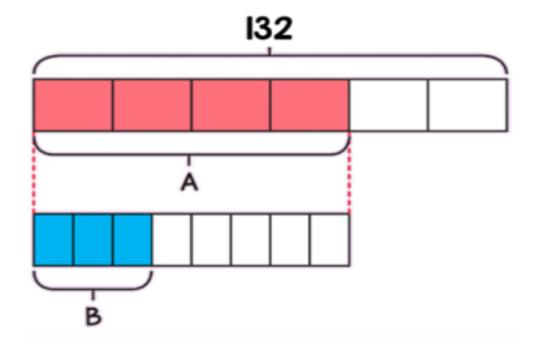
The total mass of the jar and marbles is now 1.1 kg.

Two of the marbles are removed.

What is the mass of the jar and marbles now?

Challenge 6

Work out the value of B.



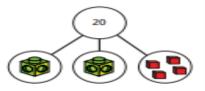
Click here for Challenge Answers

Answers - Monday

Solve two-step equations



Here is a part-whole model.



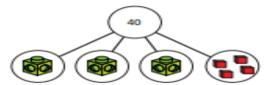
a) Write an equation for the part-whole model.

b) Solve the equation to work out the value of





If each multilink cube represents x, form and solve an equation to find the value x.



There is the same number of counters under each cup. There are 16 counters in total.



 a) Use y to represent the number of counters under each cup. Write an equation in terms of y.

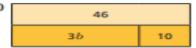
b) Solve the equation to find the value of y.

c) How many counters are under each cup?



Write an algebraic equation to represent each bar model. Find the values of a and b.







a)
$$5x + 1 = 31$$

d)
$$9 = 2y + 8$$

b)
$$3x - 3 = 9$$

e)
$$10g - 2 = 46$$

c)
$$4p - 11 = 3$$

f)
$$4 + 3y = 28$$

6 Dani thinks of a number.

She doubles it and adds 3

She gets the answer 15

a) Write an equation to represent Dani's problem.

b) Solve the equation to find her number.





7 Alex is y years old.

Her friend Brett is 3 years older.

The total of their ages is 25

How old are Alex and Brett?















a) Work out the cost of one banana and one orange.

One banana costs 32

One orange costs

28e

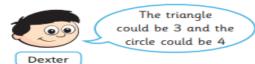
b) Compare methods with a partner.





Class 6 are trying to solve a number puzzle.

a)



Do you agree with Dexter? 400 Explain why.

3+3+4=16

b)



What is the value of the circle in Dora's number puzzle?



c) Find other pairs of values that the triangle and circle could equal. Find three pairs.









a and b are whole numbers.

$$2a + b = 14$$

Complete the table to show different possible values for a and b.

a	0	1	2	3	4	5	6	7	
2 <i>a</i>	o	2	ц	6	8	10	12	ly	
ь	14	12	10	8	6	4	2	0	
2 a + b	14	14	14	14	14	14	14	14	

 \emph{c} and \emph{d} are both integers less than 15 but greater than zero.

$$3c - d = 2$$

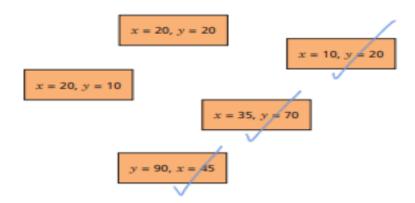
Complete the table to show different possible values for c and d.

c	1	2	3	4	5	
3 c	3	6	9	12	15	
d	1	4	7	lo	13	
3c - d	2	2	2	2	2	

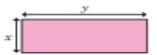
b) Explain why there are no other possible values for c and d.

Is a would be greated

4 x and y are both multiples of 5 less than 100 If 2x = y, circle the possible values of x and y.



5 Here is a rectangle.
x and y are both integers.



The rectangle has a perimeter of 28 cm.

a) Write an equation to represent the perimeter of the rectangle.

b) List all the possible pairs of values for x and y.

OC = 1	y = 13	oc=5 y:	-9
Jr. = 2	9=13	aca 6 y s	- B
	y=11	•	
	y=10		

Compare answers with a partner. How do you know you have found all the possible values?



6 Aisha is buying some stationery for school.

She spends exactly £1

List the possible combinations of pencils and pens that Aisha could have bought.



2 pers & 7 persils

- Ron has four digit cards.
 - Two of the cards have the same value.
 - All of the cards are less than 10 but greater than zero.
 - All of the cards are odd.
 - The sum of the four cards is 24

Find two possible sets of cards.

Set 1



5

9



Set 2









8

$$2ab = 48$$



b) Work with a partner to find as many pairs of values as you can.







Wednesday

Convert metric measures



1 How many centimetre cubes can you fit along a metre stick?



L



What does this tell you?



- Complete the sentences.
 - a) There are 1,000 grams in 1 kilogram.

There are 1,000 kilograms in one tonne.

- b) There are (,000 millilitres in 1 litre.
- c) There are () millimetres in 1 centimetre

There are | OO centimetres in 1 metre.

There are 1,000 metres in 1 kilometre.

Complete the bar models.

a)

1 km	1 km	1 km	1 km		
1,000 m	1,000 m	1,000 m	1,000		

There are 4,000 m in 4 km.

ь

,							
	1 kg	1 kg	1 kg	1 kg	1 kg	1 kg	$\frac{1}{2}$ kg
	1,000 g	1,000 g	1,000 g	1, cong	L,000g	ريسي	Sooo

There are 6,500 g in $6\frac{1}{2}$ kg.

Complete the conversions.

a)
$$2 \text{ kg} = 2,000 \text{ g}$$

 $5 \text{ kg} = 5,000 \text{ g}$

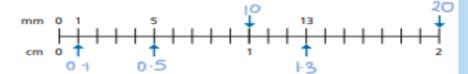
10 kg =
$$10,000$$
 g

b) 1 l =	1,000	ml
5 I =	5,006	ml
11 [=	ULOOD	\neg

5 A bag of dog food weighs 2.5 kg. Write this weight in grams.



What measurements are the arrows pointing to? Label them on the number line.



- 7 Complete the conversions.
 - a) 10 mm = | cm
- mm = 1.1 cm
- 11 mm = [cm
- 10.1 cm
- (() mm = 11 cm
- b) 2.1 km = 2,(00 m
- 2.01 km = 2,010 m
- 2.001 km = 2,00 (m
- 2.011 km = 2,011 m
- 8 Write > , < or = to complete the statements.</p>
 - a) 100 m (<) 1 km
- b) 5.1 I = 5,100 ml
- 10 m (>) 10 cm

- 607 I (>) 0.607 m
- 10.1 mm (<) 101 cm
- 0.05 I () 5 m

Dora and Amir are trying to convert 1.05 metres into millimetres.



You can multiply 1.05 by 100 to convert it into centimetres, then multiply the product by 10 to convert it into millimetres.

Dora

You can just multiply 1.05 by 1,000!



Who do you agree with? Both

Explain your thinking.



What is the mass of one of the boxes?
Give your answer in grams.

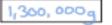


2509

- There are 1,000 kg in one tonne.
 - a) How many grams are there in one tonne?



b) A car weighs 1.3 tonnes.
 Write the weight of the car in grams.



1,000,000



Thursday

Miles and kilometres

White Rose Maths

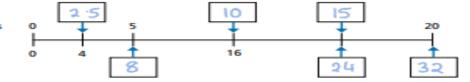
Tick the statements that are true.

Use the bar model to help you.

1 mile		e		1 mile	1 m	ile		1 mile		1 n	nile	
	1 km	1 k	m	1 km	1 km	1 km	1	1 km	1	l km	1 km	

- a) 5 miles is approximately equal to 8 kilometres.
- b) 1 mile is longer than 1 kilometre.
- c) 2 kilometres is longer than 1 mile.
- d) 2 kilometres is longer than 2 miles.
- 2 Fill in the missing numbers on the number line.

miles km



- Complete the conversions.
 - a) 5 miles 8 kilometres

 10 miles 6 kilometres

 15 miles 24 kilometres

Complete the conversions.

a) 100 miles – 160 km

d) 95 miles - ISQ km

b) 45 miles = 72 km

e) 7.5 miles - 12 km

c) 400 - 640 km

f) 2 miles = 3.2 km

(5)



If 5 miles is approximately 8 kilometres, then 10 miles is approximately 13 kilometres.

Here is Whitney's working out,

Explain Whitney's mistake.







41-92km

The maximum speed limit on residential roads in the UK is 30 miles per hour.



In France, the maximum speed limit on residential roads is 50 kilometres per hour.



a) Which country has the higher speed limit for these roads?



b) What is the difference between the speed limits in miles per hour?



Esther cycles 70 miles over 4 days.



On day 2 she cycles 32 km.

On day 4 she cycles twice as far as she does on day 3

How far does she cycle on day 4?

Give units with your answer.

24 miles

Use a map of your local area. Various answers.



a) 1 mile away from your school

Find something that is approximately:

b) 1 km away from your school

c) 5 miles away from your school

d) 5 km away from your school

Compare answers with a partner.



