

Week beginning 12.10.20

Maths

This week we are looking at division and factors.

Please complete the lessons on the following link

<https://whiterosemaths.com/homelearning/year-6/week-6-number-addition-subtraction-multiplication-division/>

Complete only the lesson about factors (lesson 4)

Task A

- 1) Calculate the following expressing the remainder as a whole number and fraction.

$$2,637 \div 16 =$$

$$1,426 \div 13 =$$

$$4,453 \div 22 =$$

$$4,203 \div 18 =$$

- 2)

Which numbers up to 20 can 4,236 be divided by without having a remainder?

What do you notice about all the numbers

- 3)

Here are two calculation cards.

$$A = 396 \div 11$$

$$B = 832 \div 11$$

Whitney thinks there won't be a remainder for either calculation because 396 and 832 are both multiples of 11

Rosie disagrees, she has done the written calculations and says **one** of them has a remainder.

Who is correct? Explain your answer.

Task B

1)

Form of answer

$$\begin{array}{r} 13 \text{ r } 4 \\ 6 \overline{)82} \end{array}$$

Question	Answer
Eggs are packed in boxes of 6. The farmer has 82 eggs. How many boxes does he need?	14 boxes
A sunflower grows to a height of 82cm in 6 weeks. On average, how many centimetres does it grow each week?	
82 children turn up for a 6-a-side football tournament. How many teams can be made? Teams can have substitutes.	
An artist works on a masterpiece for 82 hours over 6 days. On average, how long does she work each day?	

2) Answer the following questions:

- A cat rescue centre uses 21 cans of cat food every day. They receive a donation of 2,478 cans of cat food. How many days will the cat food last for?
- A ranger at a wildlife reserve needs 475kg of bird seed to make feeders. The seed comes in bags of 35kg. How many bags will the ranger need to buy?
- Amelia has 2,000ml of juice. She fills each ice-lolly mould with 75ml of juice. How many ice lollies can she make, and how much juice will be left?
- Bela has 2,500ml of juice and she uses 95ml of the juice for each ice lolly. Will she have more or less juice left than Amelia?
- What fraction of an ice lolly can Amelia and Bella each make with their remaining juice?

3) Write a story problem with a remainder of 10.

Task C

1)

Here is Annie's method for finding factor pairs of 36

1	36
2	18
3	12
4	9
5	X
6	6

When do you put a cross next to a number?

How many factors does 36 have?

Use Annie's method to find all the factors of 64

2)

List the factors of these numbers:

1. 16
2. 21
3. 24
4. 48
5. 64

List the factors of these numbers:

6. 7
7. 11
8. 23
9. 13
10. 5

What do you notice about these numbers?

These numbers are called prime numbers.

Can you find three more prime numbers? _____, _____, _____

3)

True or false?

The bigger the number the more factors it has.

Convince me