

Monday

Starter:

Four children are thinking of four different numbers.

3.454

4.445

4.345

3.54

Teddy: "My number has four hundredths."

Alex: "My number has the same amount of ones, tenths and hundredths."

Dora: "My number has less ones than tenths and hundredths."




Jack: "My number has 2 decimal places."

Match each number to the correct child.

Main activity:

The mean

Here is a method to find the mean.

No. of glasses of juice drunk by 3 friends	Total glasses of juice drank	If each friend drank the same no. of glasses	The mean number of glasses of juice drunk is 3
			

Use this method to calculate the mean average for the number of slices of pizza eaten by each child.



When would using the mean be useful in real life?

Calculate the mean number of crayons:

Crayon colour	Amount
Blue	14
Green	11
Red	10
Yellow	9

Hassan is the top batsman for the cricket team. His scores over the year are: 134, 60, 17, 63, 38, 84, 11

Calculate the mean number of runs Hassan scored.

Work out the total of these lists of numbers:

1. 3,4,5,6
2. 7,10,13,16
3. 8,10,12,14
4. 20,19,18,17
5. 21,25,29,33

There are 5 numbers which have a total of 70. The difference between the biggest and smallest (range) is 10. What is the mean? What could the numbers be?

Tuesday

Starter:

Identify the number represented on the place value chart.

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths
			● ●	●	

Multiply it by 10, 100 and 1,000 and complete the sentence stem for each.

When multiplied by ____ the counters move ____ places to the ____.

$$0.1 \times 100 =$$

$$10 \times 0.76 =$$

$$\underline{\hspace{2cm}} = 0.25 \text{ multiplied by } 1000$$

The product of 3.456 and 10 is _____

Main activity:

- 1) Find the mean for the following sets of numbers:
 - A) 5,3,12,3
 - B) 12,8,21,37,34
 - C) 123,666,92

- 2) How would you find the:
 - a. Mean age of players in a football team
 - b. Mean height of a family
 - c. Mean number of sweets eaten by boys in a day
 - d. Mean number of hours spent watching TV for a pupil each night

- 3) Write down 3 possible lists of numbers if there are:
 - a. 4 numbers with a mean of 6
 - b. 5 numbers with a mean of 8
 - c. 7 numbers with a mean of 9

- 4) How could you calculate the mean number of times the word “the” appears on a page? Pick any book and work it out by using at least 5 different pages? Can you think of a word which would have a higher or lower mean than “the”?

Wednesday

Starter:

-  Use a place value chart to multiply the following decimals by 10, 100 and 1,000

6.4

6.04

6.004

-  Fill in the missing numbers in these calculations

$$32.4 \times \boxed{} = 324$$

$$1.562 \times 1,000 = \boxed{}$$

$$\boxed{} \times 100 = 208$$

$$4.3 \times \boxed{} = 86$$

Main activity:

The mean number of goals scored in 6 football matches was 4.

Use this information to calculate how many goals were scored in the 6th match:

Match number	Number of goals
1	8
2	4
3	6
4	2
5	1
6	

3 Imagine these people are all members of a basketball team.

Tom Cruise	1.73 m
Katie Holmes	1.75 m
Will Smith	1.88 m
David Beckham	1.8 m
Kevin Rudd	1.79 m
Paris Hilton	1.73 m
Hugh Jackman	1.89 m
Nicole Kidman	1.81 m
Nicole Richie	1.55 m

a Calculate the mean height:

b If you wanted your tallest 5 players on court at the same time, who would they be and what is their mean height?

c Tom Cruise pulls rank and subs himself for Hugh Jackman and subs Nicole Richie for Nicole Kidman. What is the mean height of the group on court now?

Three football teams each play 10 matches over a season. The mean number of goals scored by each team was 2.

How many goals might the teams have scored in each match?

How many solutions can you find?



Thursday

Starter:

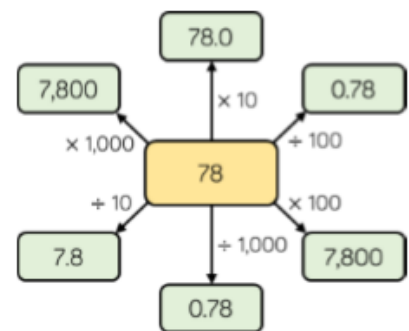
Dora says,



When you multiply by 100, you should add two zeros.

Do you agree?
Explain your thinking.

Tick the correct answers.
Can you explain the mistakes with the incorrect answers?

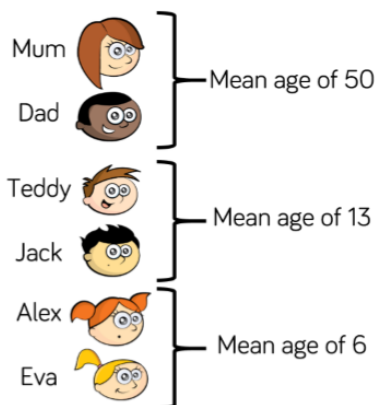


Main activity:

Work out the age of each member of the family if:

Mum is 48 years old.

Teddy is 4 years older than Jack and 7 years older than Alex.



Calculate the mean age of the whole family.

On the 1st of September 2014, the mean age of 6 family members was 22 years and 3 months. The sum of all their ages added together made a total of 133.5 years.

A new baby was born into the family on the 1st of March 2015. What was the mean age of the 7 family members on the 1st of September 2015?

Mean age on 1st of September 2015 = years of age

Davina threw 3 darts at the target board.



The median of the 3 scores was 5.

The 3 scores total 29.

Use the information to work out what numbers she threw.

Give both possible solutions.

Friday

Starter:

Complete the table.

	÷10	÷ 100	÷ 1,000
30			
3 kg			
	0.9		
			9.0
		9.09	

Main activity:

<https://nrich.maths.org/4956>

The Mean Problem

Age 11 to 14 Short ★★



There are four unknown numbers.

The mean of the first two numbers is 4.

The mean of the first three numbers is 9.

The mean of all four numbers is 15.

If one of the four numbers is 2, what are the others?