

**Lesson 3**

L.O: I am learning to find the mean average (1).






<b>All</b>	All of you must complete the fluency section.
<b>Most</b>	Most of you will complete the fluency and reasoning sections.
<b>Some</b>	Some of you will complete the fluency, reasoning, and problem-solving sections.

Try your best – it is all we can ask for! 😊

This video may help if you are stuck at any point:

<https://www.youtube.com/watch?v=x8oPXlrLMc0>

**Fluency**

Key vocabulary: Mean, Average, Total, Product	Your answer								
<p>Complete the stem sentence...</p> <div style="border: 1px solid black; border-radius: 10px; background-color: #fff9c4; padding: 5px; margin: 10px 0;"> <p>To calculate the mean average, we _____ the _____ by the number of _____.</p> </div>									
<p>Jane, Caleb and Asha ate some apples.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Total number of apples = _____                  Number of children = _____                  _____ ÷ _____ = _____                  The mean number of apples eaten is _____.</p>									
<p>After school, Jerry read 15 pages of his reading book, Darcey read 14, Alfie read 8 and Millie read 11.</p> <p>What is the mean number of pages they read?</p> 									
<p>Ranjit went running over the bank holiday weekend.</p> <div style="display: flex; align-items: center;">  <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Day</th> <th>Distance</th> </tr> </thead> <tbody> <tr> <td>Saturday</td> <td>7</td> </tr> <tr> <td>Sunday</td> <td></td> </tr> <tr> <td>Monday</td> <td>11</td> </tr> </tbody> </table> </div> <p>If his mean running distance is 8km, how many km did he run on Sunday?</p>	Day	Distance	Saturday	7	Sunday		Monday	11	
Day	Distance								
Saturday	7								
Sunday									
Monday	11								

5a. Calculate the mean of these numbers.

7.3

12

13.4

8

6

25.3

7a. True or false? The mean of these numbers is 16.

12.4

17

13.1

16.3

18.2

19



10b. Calculate the mean of these coins.



11a. True or false? The mean of these numbers is  $108\frac{1}{4}$ .

124

272

14.7

37.3

123

60.5



## Reasoning

**Key vocabulary:** Mean, Average, Total, Product

**Your answer**

**3a. Felicia has worked out the mean of four numbers: 9, 4, 6 and 5.**



To work out the mean, you must put the numbers in order first, before you divide by 4.

**Do you agree with Felicia? Why?**

**The number of school lunches ordered by each class in Anita's school is shown in the table below...**



Reception	12
Year 1	15
Year 2	9
Year 3	13
Year 4	11
Year 5	14
Year 6	10

**Anita says...**



The mean number of school lunches per class is 14.

**Do you agree with her? Explain your reasoning!**

**The mean of Marlon's video game high scores is 200.**



Day	High Score
January	85
February	
March	149
April	
May	271
June	375




**He says...**





















My high scores must have been 160 in both February and April.

**Is he correct? Prove it!**

## Problem Solving

Key vocabulary: Mean, Average, Total, Product	Your answer
<p><b>4a. Lucie knows that the mean of her cards is 5.</b></p> <div style="display: flex; justify-content: space-around; align-items: center; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">2.5</div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">  </div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">9</div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin: 10px 0;"> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">6.5</div> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: 40px; text-align: center;">2</div> </div> <p><b>She spilled paint on two of her cards. What could the missing numbers be?</b></p>	
<p><b>5a. Four friends are trying to work out their mean height. Aisha is 3cm smaller than Zain. Zain is 7cm taller than Marie. Marie is 5cm smaller than Oliver. Oliver is 185cm tall.</b></p> <div style="text-align: center; margin: 10px 0;">  </div> <p><b>What is their mean height?</b></p>	

## Extension

Key vocabulary: Mean, Average, Total, Product	Your answer																		
<p>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.</p> <div style="margin: 10px 0;"> <table style="border: none;"> <tr> <td style="padding-right: 5px;">Mum</td> <td style="text-align: center;"></td> <td rowspan="2" style="font-size: 2em; padding: 0 5px;">}</td> <td rowspan="2" style="vertical-align: middle;">Mean age of 50</td> </tr> <tr> <td>Dad</td> <td style="text-align: center;"></td> </tr> <tr> <td>Teddy</td> <td style="text-align: center;"></td> <td rowspan="3" style="font-size: 2em; padding: 0 5px;">}</td> <td rowspan="3" style="vertical-align: middle;">Mean age of 13</td> </tr> <tr> <td>Jack</td> <td style="text-align: center;"></td> </tr> <tr> <td>Alex</td> <td style="text-align: center;"></td> </tr> <tr> <td>Eva</td> <td style="text-align: center;"></td> <td style="font-size: 2em; padding: 0 5px;">}</td> <td style="vertical-align: middle;">Mean age of 6</td> </tr> </table> </div> <p>Calculate the mean age of the whole family.</p>	Mum		}	Mean age of 50	Dad		Teddy		}	Mean age of 13	Jack		Alex		Eva		}	Mean age of 6	
Mum		}			Mean age of 50														
Dad																			
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