

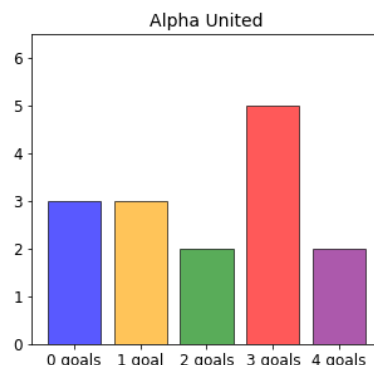
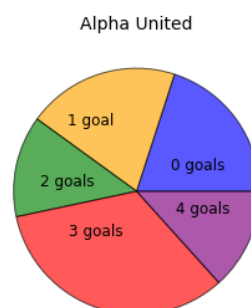
Age 11+ Level ★★ Worksheet 2

1. Alpha United

Alpha United have played fifteen games in their league.

The bar chart and pie chart show how many goals they scored in each of their matches.

Can you find the mode and median number of goals scored by Alpha United?



2. Average Temperature

The average temperature in 6 European cities is 5° Celsius.

What is the new average temperature, if two more cities, with temperatures of 12° Celsius and -6° Celsius, are added to the list?

3. French Test

The first four students to take a test get an average of 4 marks.

The next six students to take the test get an average of 6 marks.

What is the average for all 10 students?

4. Sevens

Sophie has to choose seven different positive whole numbers whose mean is 7. What is the largest possible number that she could choose as one of the seven numbers?

5. Bat Wings

Here is a table of information about the wingspan of bats.

Unfortunately, two entries are missing from the table.

Student	Data Set (Wingspans in cm)						Mean (cm)
A	13	-	16	12	10	15	13
B	13	16	-	13			

Student A collected 6 measurements and worked out that their mean was 13cm. Student B collected 4 measurements.

The overall mean of the combined data was 13.4cm.

Can you work out what the two missing values are?

These problems are adapted from UKMT (ukmt.org.uk) and WMC (competition.ac) problems.