

Foundation GCSE: Bar Charts and Pictograms

Name: _____

Class: _____

Instructions: Answer all questions. Questions are ordered from easiest (1) to hardest (10). Working out should be shown where appropriate.

- In a pictogram where one symbol represents 4 cars, how many cars do 3.5 symbols represent?
- A pictogram uses a star symbol to represent 10 points. If a team earns 45 points, how many stars should be drawn?
- The pictogram below shows the number of apples sold by four local shops last week. Using the key, calculate the total quantity of apples sold by Shop A.

Shop	Apples Sold
Shop A	○○○○
Shop B	○○○
Shop C	○○○○○○
Shop D	○○

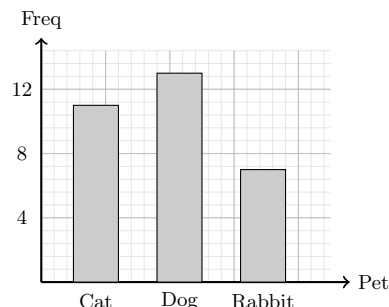
Key: Each ○ represents 6 pieces of fruit.

- A pictogram key states Car = 8 vehicles. If 22 cars were counted, how many full and partial car symbols are required?
- The pictogram below records ice cream cones sold over a weekend. Using the key, calculate the total count of ice creams sold on:
 - Saturday
 - Sunday

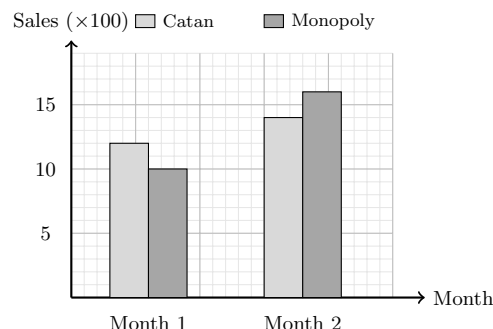
Day	Ice Creams Sold
Saturday	△△△△△
Sunday	△△△△△△△

Key: Each △ represents 12 items.

- The bar chart below shows the pet preferences of a year group.
 - How many students chose Cat?
 - How many more students chose Dog than Rabbit?



- A bar chart vertical axis goes from 0 to 50 with 5 major grid subdivisions. What is the value of each subdivision step?
- A bar chart records ice cream sales: Vanilla 35, Chocolate 50, and Strawberry 25. Calculate the range between the highest and lowest sales.
- Find the total frequency represented by four bars in a frequency chart with heights of 6, 14, 9, and 11 units respectively.
- The dual bar chart below compares weekly sales (in hundreds of units) of two board games across two months.
 - Calculate the total combined sales for both games in Month 1.
 - Calculate the percentage increase in total combined sales from Month 1 to Month 2.



Answers & Worked Solutions

1. 14 cars
(3.5×4).
(2.75 grid units $\times 4$).
(b) 6 students
(Dog = 13, Rabbit = 7; $13 - 7 = 6$).
2. 4.5 stars
($45 \div 10$).
3. 24 pieces of fruit
(4×6).
4. 2 full symbols and $\frac{3}{4}$ of a symbol
($22 \div 8 = 2$ remainder 6, and $\frac{6}{8} = \frac{3}{4}$).
5. **(a)** 54 items
(4.5×12).
(b) 84 items
(7×12).
6. **(a)** 11 students
(b) 25
($50 - 25$).
7. 10 units per subdivision
($50 \div 5$).
8. 25
($50 - 25$).
9. 40
($6 + 14 + 9 + 11$).
10. **(a)** 2200 units
($1200 + 1000 = 2200$).
(b) 36.4%
(Month 1 Total = 22, Month 2 Total = $14 + 16 = 30$; $\frac{30-22}{22} \times 100\% = 36.36\ldots\% \approx 36.4\%$).