

Constructing a pie chart

date

remember: there are 360° in a circle.

Pie charts are used to **compare proportions**

To make a pie chart we first need a frequency table showing results....

Construct a pie chart from the following frequency table:

Favourite food	Chips	Pizza	Salad	Cake	Curry
Frequency	3	5	8	2	6

STEP 1: Always find the TOTAL FREQUENCY first

so $3 + 5 + 8 + 2 + 6 = 24$ this means that there were 24
people in this survey

Each person is entitled to the same size slice of the pie!!!

STEP 2: DIVIDE 360 by the total frequency to calculate what size of the pie each person gets.

$$\text{so } 360^{\circ} \div 24 = 15^{\circ}$$

so each person gets a 15° slice of the pie chart!

HOWEVER - we can group people together by the answers they gave!

STEP 3: MULTIPLY each individual frequency by the answer to step 2

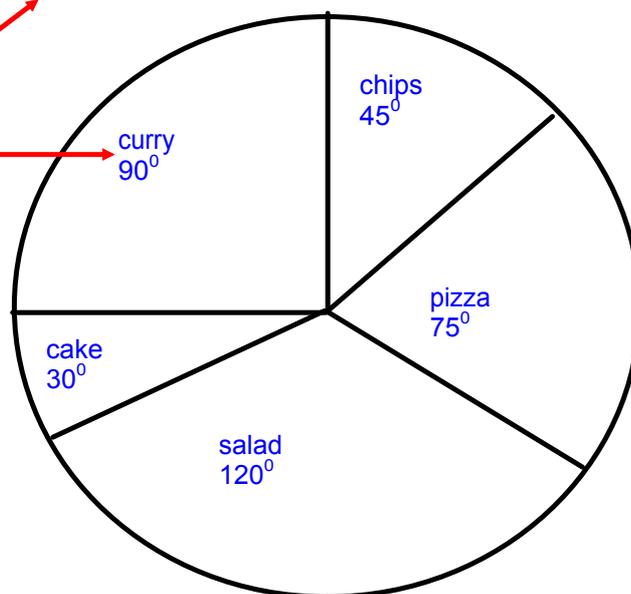
so: chips = $3 \times 15^0 = 45^0$
pizza = $5 \times 15^0 = 75^0$
salad = $8 \times 15^0 = 120^0$
cake = $2 \times 15^0 = 30^0$
curry = $6 \times 15^0 = 90^0$

Always check your work by
ADDING all these answers
together - it should come to 360^0

These values tell you what size slice of the pie each group gets

Answer = Pie chart showing 24 peoples favourite foods

ALWAYS put a TITLE
and ALWAYS LABEL
your pie chart!



You might wish to recap how to use a PROTRACTOR
when it comes to making the pie chart!!