

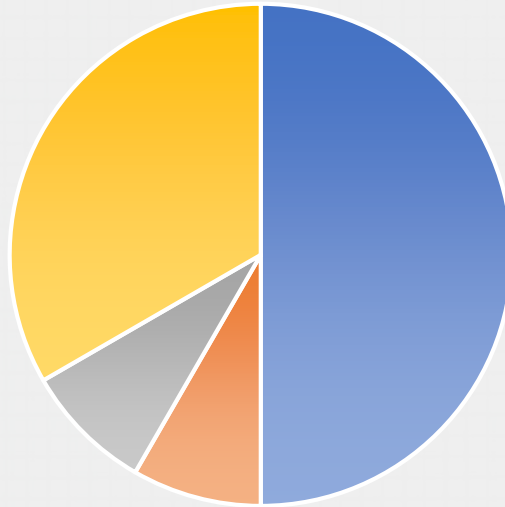
# Part 3: Reasoning

## WALT Draw Pie Charts

*Use my green notes to help  
you.*

## Reasoning 1

This pie chart represents 60 items of litter found on a beach.

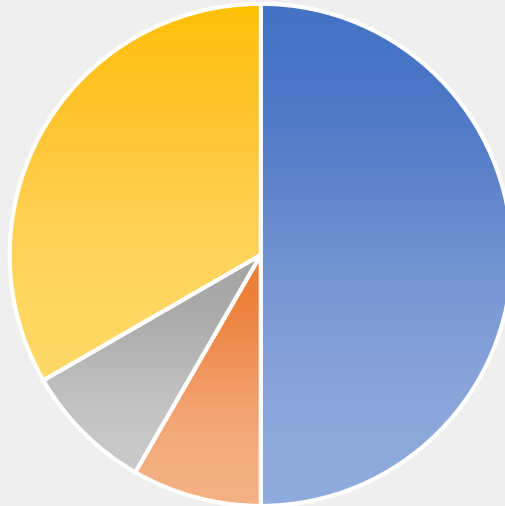


- plastic bottles
- crisp packets
- tin cans
- other

If one third of the litter is other and tins cans and crisp packets are equal, how many crisp packets were found? Explain how you know.

## Reasoning 1

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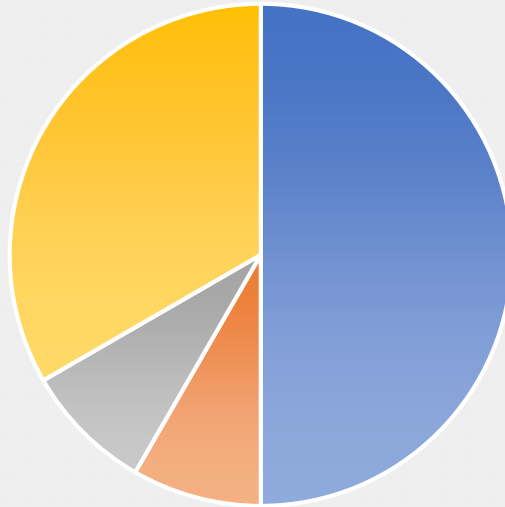
- plastic bottles
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If one third of the litter is other and tins cans and crisp packets are equal, how many crisp packets were found? Explain how you know.

There were  crisp packets found because...

## Reasoning 1

This pie chart represents 60 items of litter found on a beach.



- plastic bottles
- crisp packets
- tin cans
- other

If one third of the litter is other and tins cans and crisp packets are equal, how many crisp packets were found? Explain how you know.

**There were 5 crisp packets found because plastic bottles (half) = 30; other (one third) = 20; crisps and tin cans together = 10 and half of 10 = 5.**

## Problem Solving 1

Annie is creating a pie chart about the favourite animals of Year 6.

In a class of 90, 25 children chose tigers, one third of the class chose monkeys, 12 children chose elephants and the rest chose other animals.

How many children chose 'other' animals and how many degrees would they represent on a pie chart?



## Problem Solving 1

Annie is creating a pie chart about the favourite animals of Year 6.

In a class of 90, 25 children chose tigers, one third of the class chose monkeys, 12 children chose elephants and the rest chose other animals.

How many children chose 'other' animals and how many degrees would they represent on a pie chart?



**23 children chose other. They would represent  $92^\circ$**

## Reasoning 2

Raj has created a table of information which he wants to convert into a pie chart.



The sum of the numbers in my survey is 100. I need to divide 100 by 360 in order to find out how much each participant is worth in degrees.

Do you agree with Raj's method? Explain why?

## Reasoning 2

Raj has created a table of information which he wants to convert into a pie chart.



The sum of the numbers in my survey is 100. I need to divide 100 by 360 in order to find out how much each participant is worth in degrees.

Do you agree with Raj's method? Explain why?  
Raj is incorrect because...



## Reasoning 2

Raj has created a table of information which he wants to convert into a pie chart.



The sum of the numbers in my survey is 100. I need to divide 100 by 360 in order to find out how much each participant is worth in degrees.

Do you agree with Raj's method? Explain why?

**Raj is incorrect because he has swapped which way round he should divide. He should divide 360 by 100, not 100 by 360.**

# Well done! It's over to you now.

Go to Part 4 and choose your Star Challenge! Normal rules apply: page 1 will give you an easier challenge, page 2 will be about the same as what we've just practised and page 3 will be more of a stretch.

You only need to do the first set of questions on your chosen Star Challenge – the 'A' questions. If you want extra practice, you can then do the next set of questions – the 'B' questions. When you finish, don't forget to mark your answers before sharing, so I can see where you need help.