## Introduction

Which two representations below show the same data?


|  | Men | Women | Total |
| :---: | :---: | :---: | :---: |
| Running | 11 | 42 | 53 |
| Gym | 48 | 55 | 103 |
| Swimming | 16 | 32 | 48 |
| No exercise | 25 | 12 | 37 |

## Introduction

Which two representations below show the same data?


## Varied Fluency 1

Use the table to answer the questions about favourite colours.

|  | Green | Red | Yellow | Blue | Purple |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jane | $\checkmark$ |  |  |  |  |
| Mark |  |  |  | $\checkmark$ |  |
| Michael |  |  |  | $\checkmark$ |  |
| Charlotte |  | $\checkmark$ |  |  |  |
| Emily |  |  |  |  | $\checkmark$ |

A. Which colour was chosen Mark and Michael?
B. Which are Charlotte and Jane's favourite colours?
C. Who chose purple as their favourite colour?
D. Which colour wasn't chosen by anybody?

## Varied Fluency 1

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|  | Green | Red | Yellow | Blue | Purple |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jane | $\checkmark$ |  |  |  |  |
| Mark |  |  |  | $\checkmark$ |  |
| Michael |  |  |  | $\checkmark$ |  |
| Charlotte |  | $\checkmark$ |  |  |  |
| Emily |  |  |  |  | $\checkmark$ |

A. Which colour was chosen Mark and Michael?

## Blue

B. Which are Charlotte and Jane's favourite colours? Charlotte's favourite colour is red and Jane's is green.
C. Who chose purple as their favourite colour? Emily
D. Which colour wasn't chosen by anybody? Yellow

## Varied Fluency 2

The table below shows the results of football matches.

|  | Win | Draw | Lose |
| :---: | :---: | :---: | :---: |
| Northfield AFC | 6 | 2 | 1 |
| Wetherton Juniors | 4 | 1 | 4 |
| Jumpleby Town | 3 | 2 | 4 |

A. Which team won the fewest matches?
B. How many games had each team played?
C. Which two teams, when combined, had the same number of draws as Wetherton Juniors had won?
D. What is the difference between the total number of wins and the total number of draws?

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| Wetherton Juniors | 4 | 1 | 4 |
| Jumpleby Town | 3 | 2 | 4 |

A. Which team won the fewest matches?

Jumpleby Town
B. How many games had each team played? 9
C. Which two teams, when combined, had the same number of draws as Wetherton Juniors had won? Northfield AFC and Jumpleby Town
D. What is the difference between the total number of wins and the total number of draws?
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## Reasoning 1

Olly creates some questions about the table below.

|  | Eastlee | Southham | Westprom | Northend |
| :---: | :---: | :---: | :---: | :---: |
| Children | 19 | 45 | 28 | 54 |
| Adults | 20 | 12 | 52 | 30 |

A. How many people support Eastlee?
B. Which team has the most fans at every game?
C. How many more people support Northend than Southam?
D. How many more adults support Westprom than children?

Which of Olly's questions can't be answered using the table? Explain why not.

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C. How many more people support Northend than Southam?
D. How many more adults support Westprom than children?

Which of Olly's questions can't be answered using the table? Explain why not.
B can't be answered because the table does not show this information.

The table shows how many house points each pupil receives each time they do well at school. The number of points increase each time by 4 each time. They have a maximum of ten rewards.

| Rewards | $1^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ | $5^{\text {th }}$ | $6^{\text {th }}$ | $7^{\text {th }}$ | $8^{\text {th }}$ | $9^{\text {th }}$ | $10^{\text {th }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of house <br> points | 1 | 5 |  |  |  |  |  |  |  |  |

Complete the table and answer the questions.
A. How many house points will a child have in total when they receive six rewards?
B. How many more house points will a child that has received seven rewards have than a child who has three rewards?
C. Mrs Hudson only has five house point stickers left. How many more house point stickers will a child who has reached their fifth reward need?

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of house <br> points | 1 | 5 | 9 | 13 | 17 | 21 | 25 | 29 | 33 | 37 |

Complete the table and answer the questions.
A. How many house points will a child have in total when they receive six rewards? 66
B. How many more house points will a child that has received seven rewards have than a child who has three rewards? 76
C. Mrs Hudson only has five house point stickers left. How many more house point stickers will a child who has reached their fifth reward need? 12 stickers

## Problem Solving 2

Use Liberty's clues to find out how many dogs and cats live at three addresses.

- There are double the amount of cats than dogs on Lowdale Avenue.
- The total number of cats and dogs on Sunnydale Drive is 23.
- There is one more dog on Roseland Crescent than Sunnyvale Drive.
- The overall total of cats and dogs is 93.

|  | Lowdale Avenue | Sunnyvale Drive | Roseland Crescent |
| :---: | :---: | :---: | :---: |
| Dogs | 14 |  |  |
| Cats |  | 6 |  |
| Total |  |  |  |

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|  | Lowdale Avenue | Sunnyvale Drive | Roseland Crescent |
| :---: | :---: | :---: | :---: |
| Dogs | 14 | 17 | 18 |
| Cats | 28 | 6 | 10 |
| Total | 42 | 23 | 28 |

