



## DEEPENING UNDERSTANDING ANSWER SHEET

### YEAR 6 PIM – READ AND INTERPRET PIE CHARTS

#### Fluency 1

The pie chart shows the total number of different pets children in Key Stage 1 have.

The pie chart represents the **whole**.

Each part represents a **value**.

The **blue** parts represent the number of **dogs**.

The **orange** parts represent the number of **cats**.

The **grey** part represents the number of **hamsters**.

The **yellow** part represents the number of **rabbits**.

The **purple** part represents the number of **fish**.

#### Fluency 2

The value of the whole is **56**.

It is split into **8** equal parts.

$$56 \div 8 = 7$$

The value of each part is **7**.

There are **2 blue** parts.  $2 \times 7 = 14$ . **14** of the children have a **dog**.

There are **3 orange** parts.  $3 \times 7 = 21$ . **21** of the children have a **cat**.

There is **1 grey** part.  $1 \times 7 = 7$ . **7** of the children have a **hamster**.

There is **1 yellow** part.  $1 \times 7 = 7$ . **7** of the children have a **rabbit**.

There is **1 purple** part.  $1 \times 7 = 7$ . **7** of the children have a **fish**.

#### Fluency 3

Red – 26, Blue – 39, Green – 13, Yellow – 13, Pink – 26, Purple – 13



## Fluency 4

1/5 of the children chose red.

13 more children chose pink than green.

Blue was the most popular colour.

If 290 children had voted, the new proportions would be...

Red – 58, Blue – 87, Green – 29, Yellow – 29, Pink – 58, Purple – 29

## Reasoning 1

### Modelled DAB Reasoning Responses

**D** – I do not agree with Marlon.

**A** – Half of his teachers do not have brown eyes.

**B** – Three of the seven segments represent the teachers with brown eyes so 3/7 of the teachers had brown eyes.

## Reasoning 2

### Modelled DAB Reasoning Response

**D** – False

**A** – An equal number of teachers and children do not have blue eyes.

**B** – The same fraction of teachers and children have blue eyes but not the same number. 2/7 of the 21 teachers have blue eyes.  $21 \div 7 = 3$  and  $3 \times 2 = 6$  so 6 teachers have blue eyes. 2/7 of the 63 children have blue eyes.  $63 \div 7 = 9$  and  $9 \times 2 = 18$  so 18 children have blue eyes.

**Download our 'DAB' posters to support reasoning in your classroom:**

<https://www.deepeningunderstanding.co.uk/product/dab-reasoning-posters/>

## Problem Solving 1

Green – fantasy (96 votes), Blue – Sci-Fi or Fairy Tales (72 votes), Grey – Sci-Fi or Fairy Tales (72 votes), Yellow – Mystery (48 votes).

288 children took the survey in total.

