# 

| Question | Answer   |
|----------|--|
| 1        | a) 2,156 = 2,000 + 100 + 50 + 6<br>b) 5,308 = 5,000 + 300 + 8<br>c) 6,120 = 6,000 + 100 + 20                                       |
| 2        | 3,472 = 3,000 + 400 + 70 + 2<br>3,472 = 2,000 + 1,400 + 70 + 2<br>3,472 = 1,000 + 2,400 + 70 + 2                                   |
| 3        | a) 2,000 600 50 in any order<br>b) 7,000 30 9 in any order   |
| 4        | a) 3 hundreds, 4 tens, 8 ones b) 5 thousands, 0 hundreds, 7 tens, 2 ones c) 2,760 d) 8,002 e) 5 tens, 4 ones f) 2 hundreds, 8 tens |
| 5        | a) 9<br>9<br>1,009<br>b) 56<br>7,100<br>7,150  |
| 6        | 1 thousand is made up of 10 hundreds so 20 hundreds make 2 thousands.  |
| 7        | 7,219<br>7,912   |
| 8        | a) Card D b) Any statement that is equal to 4,600 e.g. 2,000 + 2,600   |

# \$ 'Fhe number line to 10,000 Answers

| Question | Answer   |
|----------|--|
| 1        | 3,000 6,000 9,000<br>0 1,000 2,000 7,000 10,000<br>4,000 8,000   |
| 2        | 9,000<br>9,000<br>10,000<br>5,000<br>9,500<br>9,500<br>9,500   |
| 3        | 3,000 5,000<br>500 7,000   |
| 4        | a) 1,600<br>b) 7,130   |
| 5        | 2,600 2,800  |
| 6        | 1,000 2,500 4,500  |
| 7        | a) A = 2,000 B = 7,500 C = 9,990<br>b) Any three numbers between 2,000 and 7,500   |
| 8        | If it went up in 1,000s there would be 10 intervals between 0 and 10,000 There are 20 intervals on the number line so it goes up in 500s.  |
| 9        | <ul> <li>a) Various possible answers as long as they are an equal distance from 2,400 e.g. 2,300 and 2,500, 2,390 and 2,410, 1,400 and 3,400</li> <li>b) Various possible answers as long as 2,400 is approximately <sup>3</sup>/<sub>4</sub> of the way between e.g. 2,100 and 2,500, 2370 and 2,410</li> </ul> |

| Question | Answer  |
|----------|---|
| 1        | <ul> <li>a) Annie has made the number 315</li> <li>b) 100 more than Annie's number is 415</li> <li>c) 10 more than Annie's number is 325</li> <li>d) 1 more than Annie's number is 316</li> </ul>   |
| 2        | The number represented is 492 a) 100 more than the number is 592 10 more than the number is 502 1 more than the number is 493 b) 100 less than the number is 392 10 less than the number is 482 1 less than the number is 491                     |
| -3       | a) 800<br>b) 485<br>c) 690<br>d) 147  |
| 4        | a) 372<br>b) 190<br>c) 713<br>d) 705  |
| 5        | a) 779<br>b) 235<br>c) 290<br>d) 394  |
| 6        | a) 100 more than 763 is 863<br>b) 865 is 100 more than 765<br>c) 403 is 100 less than 503<br>d) 1 less than 300 is 299<br>e) 10 less than 109 is 99<br>f) 962 is 10 less than 972<br>g) 698 is 1 less than 699                                    |
| 7        | Tom's number could have been 502, 412 or 403  |
| 8        | 100 mere     10 more     1 more     number     1 less     10 less       573     483     474     473     472     463     373       398     308     299     298     297     288     198       1,000     910     901     900     899     890     800 |
| 9        | 990 is 10 less than Kim's number.   |

# \$&ž"+ž\$'\$' #000 more or less Answers

| Question | Answer   |
|----------|--|
|          | 1,000 less number 1,000 more   |
|          | 2,400 4,400  |
| 1        | 1,315  |
| 2        | a) 6,000 8,000<br>b) 2,918 4,918<br>c) 203 2,203   |
| 3        | <ul> <li>a) 1,000 more than 4,192 is 5,192</li> <li>b) 100 more than 4,192 is 4,292 100 less than 4,192 is 4,092</li> <li>c) 10 less than 4,192 is 4,182 10 more than 4,192 is 4,202</li> <li>d) 1 less than 4,192 is 4,191 1 more than 4,193</li> </ul> |
| 4        | a) 1,900<br>b) 1,990<br>c) 1,999   |
| 5        | a) 1,000 more than 7,163 is 8,163<br>b) 2,460 is 100 more than 2,360<br>c) 1,800 is 100 less than 1,900<br>d) 1 less than 1,500 is 1,499<br>e) 10 less than 109 is 99<br>f) 1,972 is 1,000 more than 972<br>g) 5,980 is 10 less than 5,990               |
| 6        | 1,790 1,800 1,810 1,820<br>2,365 4,365 5,365 6,365   |
| 7        | Sometimes true, e.g. 100 more than 2,360 is 2,460 but 100 more than 2,960 is 3,060   |
| 8        | a) 5,290 f) 6,205<br>b) 1,395 g) 2,970<br>c) 7,080 h) 802<br>d) 7,100 i) 4,900<br>e) 3,962 j) 1,103  |
| 9        | a) 6,741<br>b) 6,842   |

# 25, 09, 2020 Answers

### **Reasoning 1**

### **Modelled DAB Reasoning Responses**

**D** – Jane is correct.

$$A - 7,000 + 400 + 20 + 6 = 5,000 + 2,300 + 120 + 6$$

$$\mathbf{B} - 5,000 + 2,000 = 7,000, 300 + 100 = 400$$
 and then  $20 + 6$ 

## **Reasoning 2**

## **Modelled DAB Reasoning Response**

**D** – Ranjit has made a mistake.

A – He has not represented the base 10 correctly in the part whole model.

**B** – The base 10 represents the number 1,204. The part whole model shows the number 124. The part whole model should look like this:

#### Problem Solving 1

Answers will vary.

Examples for Asha:

Two 1,000 pieces, eleven 100 pieces, eight 10 pieces and seven 1 pieces.

One 1,000 piece, twenty-one 100 pieces, eight 10 pieces and seven 1 pieces.

Examples for Caleb:

Three 1,000 pieces, seventeen 10 pieces and seventeen 1 pieces.

Three 1,000 pieces, sixteen 10 pieces and twenty-seven 1 pieces.

# **Reasoning 1**

# **Modelled DAB Reasoning Responses**

**D** – The number 2245 will be in a different place on each number line.

A – This is because each number line has a different start and end

number. **B**-



# **Problem Solving 1**

0 - 22548

5000 - 7548

5600 - 5748

0 - 5164

3000 - 4164

3800 - 3900

9900 - 10,000

8000 - 11,900

9000 - 10,900

## **Reasoning 11**

### **Modelled DAB Reasoning Response**

**D** – Ranjit is incorrect.

**A** – Adding or subtracting 1,000 does not change the number between odd and even.

**B** – The hundreds, tens and ones digits will never change when adding or subtracting 1,000. The ones digit decides if a number is odd or even. Since the ones digit won't change, the number won't change between odd and even.

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

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

### **Problem Solving 1**

There are many possible answers, for example:

Jerry = 10,000

Millie = 9,500

Jane = 7,500

Alfie = 8,500