

Reasoning and Problem Solving – Place value answers

1.

Daily High	Temperature expected to drop	Daily Low
14°C	13°C	1°C
12°C	14°C	-2°C
15°C	14°C	1°C
11°C	15°C	-4°C
10°C	12°C	-2°C
11°C	13°C	-2°C
9°C	10°C	-1°C

The professor will need 5 pairs of socks.

2.

Item	Currently have	Round up
Buckets	58	60
Spades	37	40
Shovels	49	50
Brushes	26	30
Picks	65	70

3. **Perimeter: 350m. 14 coils.**

4.

XX	+	XX	=	<u>XL</u>
VIII	+	VI	=	<u>XIV</u>
XXI	-	XVII	=	<u>IV</u>
XLI	+	IX	=	<u>L</u>
XXV	-	XX	=	<u>V</u>
XXIII	-	XIX	=	<u>IV</u>
LXXX	+	XX	=	<u>C</u>
XX	-	XV	=	<u>V</u>

The cipher clue is **GREATEST**.

5. **In any order: 4,749, 4,794, 4,758, 4,785, 4,767, 4,776**

6. **4,749, 4,758, 4,767, 4,776, 4,785, 4,794. Code is 4,794**

7.

Contents	Number of items	Actual weight	Rounded to nearest 100g
Bag 1 – sapphires	5	464g	500g
Bag 2 – rubies	9	1615g	1600g
Bag 3 – emeralds	7	734g	700g
Bag 4 – pearls	14	1399g	1400g
Bag 5 – diamonds	8	781g	800g
Bag 6 – gold coins	12	1989g	2000g

8. **It is not correct. There are 5 sapphires, 7 emeralds, and 6 diamonds: 18 jewels in total. 18 lots of £1,000 = £18,000.**