Activity 4 Reasoning Problems

Q1.

Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.

How many **chocolates** did Ken buy altogether?

Show your method	chocolates

2 marks

Q2.

Write the three missing digits to make this **addition** correct.

```
    5  3  2  □  9
+      7  4  2  □
  ─────────────────
  □     0  6  7  6
```

Q3.

Complete this table with the missing numbers.

One row has been done for you.

Number	1,000 more
3,500	4,500
85	
	9,099
	15,250

Q4.

This table shows the number of people living in various towns in England.

Town	Population
Bedford	82,448
Carlton	48,493
Dover	34,087
Formby	24,478
Telford	166,640

What is the **total** of the numbers of people living in Formby and in Telford?

What is the **difference** between the numbers of people living in Bedford and in Dover?

Q5.

Circle two numbers that add together to equal **0.25**

0.05   0.23   0.2   0.5

Q6.

The numbers in this sequence increase by 14 each time.
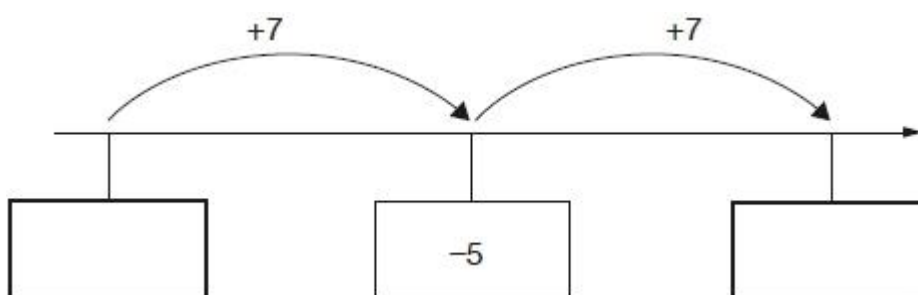
Write the missing numbers.

	82	96		124	138	

2 marks

Q7.

Here is part of a number line.

Write the missing numbers in the boxes.

2 marks

Q8.

Circle the number closest to 500

525   491   511   408   550

1 mark

Q9.

Write in the missing number.

$$1 + 10 + \boxed{} = 100$$

1 mark

Q10.

These are some prices in a fish and chip shop.

Fish £2.30	Peas 35p
Sausage £1.80	Curry sauce 40p
Chips (small bag) 60p	Bread roll 30p
Chips (large bag) 90p	Pickled onion 28p

Alfie buys one fish, a large bag of chips and a pickled onion.

How much does he pay?

£ _____

1 mark

Megan buys a sausage and a bread roll.

Chen buys a small bag of chips and a curry sauce.

How much **more** does Megan pay than Chen?

Show your method

£ _____

2 marks

Q11.

The numbers in this sequence increase by the same amount each time.

Write the two missing numbers.

_____   610   650   690   _____

2 marks

Q12.

Circle the number that is closest to 300.

338   3030   288   313   130

Q13.

The table shows the cost of a new football kit.

Item	Cost
Shirt	£8.75
Shorts (1 pair)	£5.95
Socks (1 pair)	£4.15

Altogether, how much does the complete football kit cost?

£

Q14.

Here are six digit cards.

1   2   3   4   5   6

Use **four** of the cards to make this addition correct.

☐☐ + ☐☐ = 40

Q15.

Write the correct sign =, > or < in each circle.

$$9 \times 3 \quad \bigcirc \quad 8 \times 4$$

$$9 - 3 \quad \bigcirc \quad 8 - 4$$

$$9 + 3 \quad \bigcirc \quad 8 + 4$$

$$9 \div 3 \quad \bigcirc \quad 8 \div 4$$

2 marks