

Calculators permitted but all working needs to be shown.

Essential knowledge:

1. Write down the ratio of ladybirds to flowers in the picture opposite



2. Simplify the ratio: 4 : 20

3. The ratio of boys to girls in a class is 4:5. If there are 12 boys in the class, how many girls are there?

4. Share £40 in the ratio of 2 : 3

5. If 12 bottles of water cost £9.60, how much would 1 cost?

6. Jack exchanged £2000 into Australian Dollars. The exchange rate was £1 = AU\$1.58. How much did Jack receive?

Unit level:

7. If it takes 10 people to complete a job in 6 days, how long will it take 15 people (at the same rate) to complete the same job?

8. Lauren went to USA and took 250\$ with her. She spent an average of 25\$ on each of the 7 days she was there. On her return home, she changed her remaining Dollars back to Pounds Sterling. The bank would only change the money in multiples of 10\$ (£1 = 1.47\$). How much, in Pounds Sterling, will Lauren get for her remaining Dollars? **Give your answer to the nearest penny.**

- 9.(a) A ferry has 360 seats but 3 grades of seating - Class A seats, class B seats and Class C seats. The price of the seats A:B:C is in the ratio 3:2:1. If a class C seat costs £10, what is the cost of Class A and class B seats?

- (b) If the ferry was full and the number of seats is given by the ratio 2:5:5, how much money was taken by the ferry company?

Assessment level:

- 10.** Mary gave some money to four of her nieces.
It was shared in proportion to their ages.

Name	Age
Jane	4
Heather	11
Laura	9
Kate	6

Kate's share is £1950.

Calculate the total amount Mary gifted her nieces.

- 11.** In the 1st half of 2012, the pound was lowest in March (£1=1.1984 €) and highest in July (£1=1.2637 €). How many **more** euros would you receive for £500 using these rates?
- 12.** If it takes 12 people, 20 days to erect a fence, how many more people would be needed to get the job done 5 days earlier?