Key Stage 3 Maths Trail Answers

1. (with prices at time of writing)
a) A family ticket would be cheaper (a family ticket @ £21.50 including 3 children + 1 additional child @ £5.50 = <u>£27</u> / 1 adult @ £7.50 + 4 children @ £5.50 = <u>£29.50</u>

b) £2.50 (£29.50 - £27)

2. Saturday (knowledge of 7 times table and number of days in month)

3. a) & b) Depends (on time of year, time of day, outside weather etc.)

4. South

5. 254 (4 rows of 18 long bricks + 4 rows of 34 short bricks + 46 in top row)

6. 14 (9 individual rhombi + 1 whole rhombi + 4 rhombi containing 4 individual rhombi)

7. 80,000 mL (= 400,000 ÷ 5)

8. 200 two-litre bottles (= (400,000 ÷ 1000) ÷ 2)

9. 60 (2 panels of 4x4 + 1 panel of 7x4)

10.   Octagon

11.   a) 62.5 (or 63 full panels): 75 m ÷ 1.2 m

       b) £1,055.25 (63 panels needed x £16.75)

12.   38.8 g per bird: ((28 kg)28,000 g ÷ 103 birds) ÷ 7 days

13.   32.97 days (2 d.p.): ((30 m)3,000 cm ÷ 91 cm)

       (as tall as a 9-storey building in just over a month!)