

**With these questions be prepared to say how you got your answers.
Use a calculator if you need to.**

1. Is 600 000 seconds more or less than one whole week?

How did you work this out?

Write down three things that would take you more than 300 000 seconds, but less than 500 000 seconds.

2. Which of these could you do in 16 000 000 seconds or less?

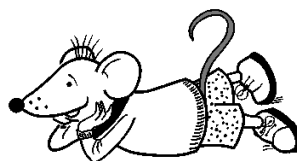
- a) walk 160 Km at 1 Km per day
- b) swim the English Channel (20 Km approximately)
- c) have a skiing holiday of one month
- d) say all your tables 10 000 times
- e) watch the Moon go round the Earth 10 times.

How did you decide?

3. If you wanted to transport 1 000 000 two penny coins, all at the same time, would you need

- a) a paper bag
- b) a bucket
- c) a shopping trolley
- d) a lorry
- e) a large aeroplane.

**That's a lot of money!
Don't call us, we'll call you.**



How did you decide?

4. How many two penny coins would you need to reach 1Km when placed side by side?

Explain how you worked it out?

5. How many two penny coins would you need to reach from the Earth to the Sun (150 000 000 Km) when placed side by side?

Explain how you worked it out.

6202-04 Large numbers (pg 2) Answers

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1. Less (6.94 days)
2. a) b) (given a good swimmer) c) d) (26.6 mins each set non-stop)
because 16 000 000 seconds is approx. 185 days.
(Moon takes more than 270 days for 10 orbits of Earth)
3. One coin is 2.6 cm diameter and 1.2 mm thick.
The pile could be 100 x 100 x 100 coins.
This would be approx. 2.6m x 2.6m x 12cm, so lorry required.
4. Approx 38 per metre. So 38 000 per Km.
5. $150\,000\,000 \times 38\,000 = 5\,700\,000\,000\,000$ (Five trillion, seven hundred billion).
As this number will not fit onto a calculator, children may need some help with this one. Try 150×38 on calculator and add nine zeroes!