



**University of Reading
Mathematics Support Centre**

PRACTICE QUESTIONS FOR QTS NUMERACY SKILLS TEST ...
MISCELLANEOUS (1)

- If I worked 40hrs/week @ £8.50 / hr, what would be my weekly wage?
- If I was then taxed at a rate of 15%, how much would I receive?
- What mark out of 20 is equivalent to 85%?
- You are trying to organise a school trip to a local museum. You want to take a class of 25 pupils, and the museum requires a pupil : staff ratio of at most 10 : 1. How many staff must go on the trip?
- The school gives you a budget of £120. Entry fees to the museum are £3/child and £5/adult. The price for a 30 – seater coach is £20. Can you afford the trip, assuming these are your only costs?
- The coach journey to and from the museum lasts 30 mins and it will take 3 hours to go around the museum. Leaving an hour for lunch, and 30 mins for general loss of time, what time must you leave in order to be back at school for 3pm?
- 1/5 of the class require a vegetarian meal for their lunch. How many vegetarian lunches should you order?
- For a chemistry experiment, you require 8kg of a certain chemical. This chemical must be imported from a company in America, which requires the order to be in pounds. Using the conversion 1kg = 2.2 lbs, how much should you order?
- For a class activity, each pupil requires ten 5cm pieces of string. If there are 30 pupils in the class, string comes in balls of 5m in length, and each ball costs £1.50, how much must you spend?

<u>Mark</u>	<u>No. of pupils</u>	<u>Mark</u>	<u>No. of pupils</u>
10	1	4	5
9	2	3	3
8	1	2	3
7	4	1	0
6	3	0	2
5	6		

- For the above test, what was the a) mean score? (answer to 1d.p.); b) the modal score? c) the median score?
- You decide to give prizes to the top 10% in the test. What mark did pupils need to win a prize?
- Travelling to a conference 75 miles away, and averaging 50 miles / hr, how long does it take you to get to the conference, in minutes?
- A parent at parents' evening who forgot to book an appointment asks for a meeting. The time now is 18.00 and you have twelve 6 minute interviews remaining (no gaps between meetings). When should you ask the parent to return?

ANSWERS

- £340
- £289
- 17
- 3
- Yes (total costs are £110)
- 09.30
- 5
- 17.6 lbs
- £4.50
- a) 4.9 b)5 c) 5
- 9
- 90 minutes
- 19.12 (or 19.15 say).