Test - Place value, ordering and rounding

Year: Year 7 · Duration: 45 minutes · /20

Name:	Date:	**Mark: /20**

Question	1	2	3	4	5	Total
marks	4	4	4	4	4	**20**
Mark						

Show your working.

Question 1 (4 marks)

Question 1 – Place value

Answer each part.

a. Write "two million, forty thousand and six" in figures. (1 mark)
b. What is the value of the 6 in 6 305 000? (1 mark)
c. Work out 4.07×1000. (1 mark)
d. Put 0.45, 0.405, 0.5, 0.054 in order, smallest first. (1 mark)

Question 2 (4 marks)

Question 2 – Rounding

Round each number as asked.

a. 7 849 to the nearest hundred (1 mark)
b. 0.0763 to 2 decimal places (1 mark)
c. 48.35 to 1 decimal place (1 mark)
d. 134 509 to 2 significant figures (1 mark)

Question 3 (4 marks)

Question 3 – Estimating

(a) Estimate $\dfrac{49.2 \times 5.1}{0.52}$ by rounding each number to 1 significant figure. (3 marks)

(b) Is your estimate bigger or smaller than the exact answer? Explain. (1 mark)

Question 4 (4 marks)

Question 4 – Problem: the holiday

The Khan family are saving for a holiday that costs £2 480. After 6 months they have saved £1 235.50. They plan to save the same amount each month.

a. Round their savings and the cost to the nearest £100. (1 mark)
b. Use your answer to (a) to estimate how much they save each month. (1 mark)
c. Work out the exact monthly saving, to the nearest penny. (1 mark)
d. How many months in total will they need to reach £2 480? Round up to a whole number of months. (1 mark)

Question 5 (4 marks)

Question 5 – Problem: planet distances

The distance from the Earth to Mars at its closest is 54 600 000 km. A spacecraft travels at 20 000 km per hour.

a. Write the distance in words. (1 mark)
b. Round the distance to 1 significant figure. (1 mark)
c. Estimate the number of hours the spacecraft needs. (1 mark)
d. Work out the exact number of hours, then the number of days to the nearest day (1 day = 24 hours). (1 mark)