

National 5 Final Exam Practice	
Numerical Skills	Rounding and Significant Figures
Average Score	1 / 2 Marks

1. A cargo ship weighs approximately 647 000 tonnes when full. What is its weight if it is only one third full? Give your answer in kilograms correct to 2 significant figures.  

[1 tonne = 1000kg]
- 2a. A holiday website company claims to offer deals on 457 836 hotels. For advertising purposes, it wants to round this figure to 4 significant figures. How many hotels should the advert state are on offer?
- 2b. The company wants to promote more sales and considers rounding the number of hotels to 1 significant figure instead, but would risk losing customers if the advert becomes misleading.  
Should the company change their advertising? Explain your answer.
- 3a. Copy and complete : Significant figures are a measure of A \_\_\_\_\_ Y.
- 3b. Give two examples where the number 1000 has **not** been rounded to 1 significant figure.
4. Calculate the area of a circular coin with a diameter of 3.7cm. Round your answer correct to 3 significant figures.
5. Write down the 3<sup>rd</sup> significant digit in the number 0.004352.
6. True or false: 5.644674 rounded to 4 significant figures is 5.645000.
7. The weight of a piece of paper is measured precisely as  $3.75854 \times 10^{-4}$  grams. Write this number in full, and round it to 3 significant figures.
8. Work out the volume of a cuboid measuring 3.54m by 5.63m by 2.21m. Round your final answer correct to 3 significant figures.
- 9a. A concert is attended by 64 648 people. A security firm charge the organisers £1.50 per person. Work out the total cost due to the security firm.
- 9b. The organisers think they could save money by not reporting the exact number of people, but by rounding it to only 2 significant figures. Would this be a good idea? Explain your answer fully.
10. A stock cube has a length of 2.3cm. Find the volume of the cube, giving your final answer correct to 3 significant figures.