ROUNDING TO SIGNIFICANT FIGURES

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1. 42 to 1 s.f.

2. 567 to 1 s.f.

3. 789 to 1 s.f.

4. 123 to 2 s.f.

5. 456 to 2 s.f.

6. 789 to 2 s.f.

7. 1234 to 2 s.f.

8. 5678 to 2 s.f.

9. 999 to 2 s.f.

10. 1001 to 2 s.f.

11. 0.123 to 1 s.f.

12. 0.456 to 1 s.f.

13. 0.789 to 1 s.f.

14. 0.123 to 2 s.f.

15. 0.456 to 2 s.f.

16. 0.789 to 2 s.f.

17. 1.234 to 2 s.f.

18. 5.678 to 2 s.f.

19. 9.999 to 2 s.f.

20. 0.00123 to 1 s.f.

21. 100.5 to 3 s.f.

22. 9999 to 3 s.f.

23. 0.009876 to 2 s.f.

24. 123456 to 3 s.f.

25. 0.0005678 to 2 s.f.

26. 3.456×10^3 to 2 s.f.

27. 2.345×10^{-2} to 2 s.f.

28. 9.876×10^5 to 1 s.f.

29. 6.789×10^{-3} to 1 s.f.

30. 5.432×10^4 to 3 s.f.

MASTER QUESTIONS

M1. The length of a rod is 2.345 metres. Round this to 2 significant figures.

M2. The mass of a compound is 0.0054321 grams. Round this to 2 significant figures.

M3. The Earth-Moon distance is 384400 km. Round this to 3 significant figures.

M4. Light travels at 299792458 m/s. Round this speed to 3 significant figures.

M5. A circle has radius 5.678 cm. Using π=3.14, find its area to 3 significant figures.

M6. A hydrogen atom's radius is 0.000000000037 m. Round this to 1 significant figure.

M7. A voltage reading is 12.345 volts. Round this to 3 significant figures.

M8. Human hair diameter is 0.000081 metres. Round this to 1 significant figure.

M9. A field measures 12345.67 m^2. Round this area to 4 significant figures.

M10. A car travels 567.89 km in 12.3 hours. Find its average speed to 3 significant figures in km/h.