Lesson 11: Scientific Notation

Year 10 Mathematics Unit 1 — Block B | Worksheet

Name _____ Date _____ Class _____

Multiple Choice

Q1. Which of the following is written in correct scientific notation?

A) 45 x 10^3 B) 0.8 x 10^5 C) 5.2 x 10^(-4) D) 9 x 10^3.5

Q2. Write 0.000073 in scientific notation.

A) 7.3 x 10^(-4) B) 7.3 x 10^(-5) C) 73 x 10^(-6) D) 0.73 x 10^(-4)

Q3. Evaluate (3 x 10^4) x (2 x 10^3), giving your answer in scientific notation.

A) 6 x 10^7 B) 5 x 10^7 C) 6 x 10^12 D) 6 x 10^1

Q4. The mass of an electron is approximately 9.11 x 10^(-31) kg. Written as a decimal, this is:

A) 0.000...911 (30 zeros) B) 0.000...0911 (32 zeros) C) 0.000...00911 (30 zeros) D) 911000...

Q5. Which is larger: 5 x 10^(-3) or 2 x 10^(-2)?

A) 5 x 10^(-3) B) 2 x 10^(-2) C) They are equal D) Cannot tell

Short Answer

Q6. Write 5,670,000 in scientific notation. *(2 marks)*

Q7. Evaluate (4 x 10^5) / (8 x 10^2), giving your answer in scientific notation. *(3 marks)*

Q8. The population of Australia is approximately 2.6 x 10^7 and the population of Sydney is approximately 5.3 x 10^6. How many times larger is the Australian population than Sydney's? Give your answer to 1 decimal place. *(3 marks)*

Key Formulas

- Write any formulas you need here.