Sample Science/Tech Answer Key

Note: Each question is worth a total of **10 points**. Partial credit may be given **only** as noted below.

1. (Physics) How many centimeters are there in a meter?
   100

2. (Physics) Put the following number into Scientific notation: -315.47.
   -3.1547×10^2

3. (Chemistry) **Carefully** explain the difference between an **atom** and a **molecule**.
   Molecules are multiple atoms bound together chemically.
   Full credit if answer states that a molecule contains more than one atom.
   5 points if answer mentions molecules having bonds.

4. (Chemistry) What is the molecular formula for table salt?
   NaCl
   No need for proper uppercase/lowercase in answer.

5. (Geology) Approximately how old is the Earth? (Circle correct answer)
   a) 5000 years
   b) 5 million years
   c) 5 billion years
   d) 5 trillion years

6. (Geology) Ocean currents affect weather patterns. (**True** or **False**)

7. (Biology) What is the name of the process through which a tadpole becomes a frog and a caterpillar becomes a butterfly?
   Metamorphosis

8. (Biology) Order the following structures from smallest to largest:
   b) Organelle   (**smallest** structure)

   a) Cell

   c) Tissue

   d) Organ   (**largest** structure)

   3 points deducted for each term that must be moved to order answer correctly (using least moves).

9. (Tech) How many bytes are there in 1K bytes?
   1024
   5 points for 1000.

10. (Tech) Which of the following is the most common language used for developing web pages?
    (Circle correct answer)
    a) Java
    b) Hypertext Markup Language
    c) C++
    d) Unicode