

Introduction : Review-70

- 1) Define :
 - a) Model
 - b) Element
 - c) Compound
 - d) Mixture
 - e) Solution
 - f) Chemical Reaction
 - g) Law of Conservation of Matter
- 2) What is the difference between the melting point and freezing point of a substance?
- 3) Answer the following for the ion: ${}_{33}^{75}\text{As}^{3-}$
 - a) The name of the element is _____ .
 - b) The number of protons is _____ .
 - c) The number of electrons is _____ .
 - d) The number of neutrons is _____ .
- 4) Which is more metallic Ru or Rh?
- 5) Which is more metallic Zr or Lu?
- 6) Which element is named after Germany?
- 7) Which element is named after Einstein?
- 8) What is the melting point in degrees K of gallium? (see periodic table)
- 9) Name two elements that are liquids at room temperature.

10) What is true of all elements in a column?

11)a) Is Cl(g) diatomic? b) Is Kr(g) diatomic?

12) Which elements are non-reactive?

13) Which elements can be cut with a knife?

14) Is Si a metal, non-metal, or metalloid?

15) Which metal has the highest melting point?

16) Classify as: e (element), c (compound), s (solution), or mm (mechanical mixture).

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|------------|--------------------|-----------------|
| a) paper | f) coffee | k) lemon juice |
| b) starch | g) salt | l) cookie |
| c) plastic | h) honey | m) meat |
| d) radium | i) acid | n) alloy |
| e) mud | j) NO ₂ | o) aluminum can |

Answers : 1)a) It is a device to help us understand a theory., b) Elements are substances that can't be broken down. They are made up of one type of atom., c) It is a substance that is composed of two or more atoms in a definite proportion., d) It is two or more pure substances (elements or compounds) mixed together., e) It is a homogeneous mixture., f) It occurs when one or more compounds (or atoms) react to form one or more new compounds (or atoms)., g) Matter is never created or destroyed., 2) There is no difference., 3)a) arsenic, b) 33, c) 36, d) 42, 4) Ru, 5) Lu, 6) germanium, 7) einsteinium, 8) 302.9 K, 9) Br, Hg, 10) Elements in a column (group) have similar properties., 11)a) yes, b) no, 12) Inert gases (last group), 13) Group 1a, 14) metalloid, 15) tungsten, 16)a) mm, b) c, c) c, s, mm, d) e, e) mm, f) mm, g) c, h) s or mm, i) c, j) c, k) mm, l) mm, m) mm, n) s, o) e.