

## 14 Multiple choice questions

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- a solution in which no more solute can dissolve, excess solid settles on the bottom
  - thermal pollution
  - solution
  - saturated solution
  - surface tension
- a measure of a fluid's resistance to flow; e.g.. honey is more viscous than water, but petrol is less viscous
  - solution
  - viscosity
  - solute
  - solvent
- is the formation of a solid during a chemical reaction when liquids or gases react
  - surface tension
  - precipitation
  - solution
  - viscosity
- the amount of heat energy required to raise the temperature of 1 gram of the substance by 1C° (or by 1 K)
  - surface tension
  - viscosity
  - specific heat capacity
  - precipitation
- the release of heat into the environment, particularly pumping warm water from power plant cooling towers into rivers and lakes
  - solution
  - saturated solution
  - thermal pollution
  - precipitation
- the substance dissolved in a given solution; e.g.. sugar is the solute when it dissolves in water
  - solution
  - solvent
  - viscosity
  - solute

7. the physical and chemical breakdown of rocks
  - a. solute
  - b. solution
  - c. weathering
  - d. solvent
  
8. is a bond between two different elements; due to the unequal sharing of the electrons, there is a dipole between the two atoms of the bond
  - a. solvent
  - b. polar molecule
  - c. polar bond
  - d. solution
  
9. reactions where there is a forward reaction as well as a back reaction, e.g..  $N_2 + 3H_2 \rightleftharpoons 2NH_3$ 
  - a. surface tension
  - b. reversible reactions
  - c. thermal pollution
  - d. precipitation
  
10. in Australia, as well as the majority of the world, temperature is measured in degrees Celsius; a minority of countries including the US, use Fahrenheit temperature;  $^{\circ}C = 5/9(^{\circ}F - 32)$ ; absolute temperature, measured in kelvin, is used in scientific work, especially where calculation are involved
  - a. polar molecule
  - b. temperature scales
  - c. polar bond
  - d. weathering
  
11. a substance, present in the larger quantity, which dissolves a solute, forming a solution; e.g.. water is a solvent for sugar
  - a. solute
  - b. polar bond
  - c. solution
  - d. solvent
  
12. is one that has an overall dipole; it has dipoles associated with polar bonds that do not cancel as it lacks symmetry; examples are water and ammonia
  - a. solution
  - b. polar molecule
  - c. solute
  - d. polar bond

13. when a gas, liquid or solid is dispersed homogeneously in a liquid; salt dissolved in water forms a solution
- polar bond
  - solvent
  - solution
  - solute
14. the force near the surface of a liquid due to unbalanced molecular forces; it causes the surface to assume a minimum area
- precipitation
  - saturated solution
  - surface tension
  - solution