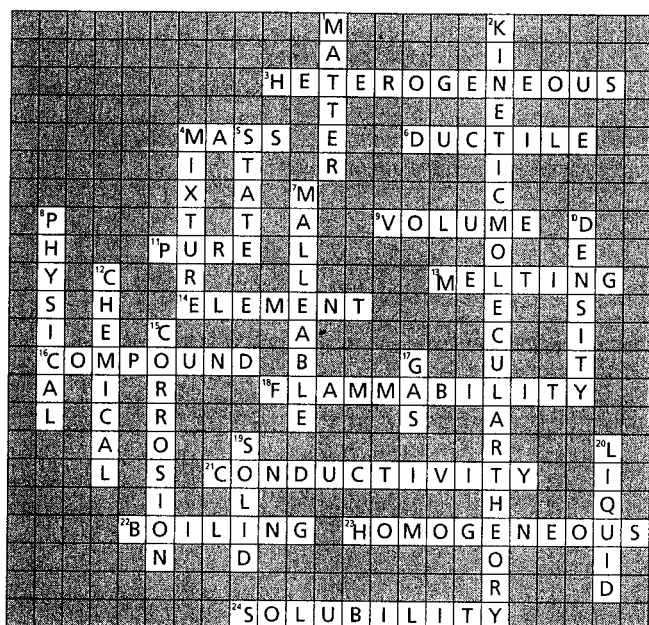


- No. The particle does not have heat, since thermal energy is the motion of particles. It is really kinetic mechanical energy at a microscopic level.
- The motion of a greater number of particles pushes with greater pressure on the tire. If too many particles are pushed into the tire, the tire can rupture or even explode.
- No. "Dissolve" does mean disappear if by disappear we mean "can't be seen." But it does not mean that the sugar is gone, it has just become separated into particles too small to be seen.
- When the temperature drops, the particles of the fluid in the thermometer lose energy to the outside and slow down. This means that they take up less space, and the fluid in the thermometer moves to a lower point on the scale.
- You sense the particles of the cologne itself. This means that when you smell a poisonous material, the bad chemical is entering your nose!

WS 5.0-1 Matter and Change Crossword



Chapter 5 Quiz

Part A: Matching

1. A: (g), B: (d), C: (f), D: (j), E: (e), F: (b), G: (h),
H: (i), I: (a), J: (c)

Part B: Sentence Completion

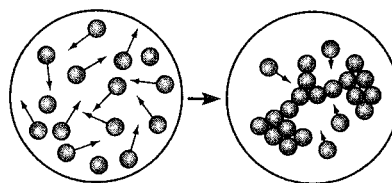
- less
- past
- do not
- snow
- physical; chemical
- malleable; physical
- corrosion; chemical

Part C: Multiple Choice

9. (d); 10. (d); 11. (c); 12. (b); 13. (c); 14. (b);
15. (a); 16. (b)

Part D: Short Answer

17. There might be several answers, but two sensible suggestions could be
- Put all the mixture in water or warm water, pour off, and save the liquid. Wash the sand, saving each washing with the other liquid. Dry the sand. Evaporate the other liquid, leaving the salt.
 - Use a magnifying glass and tweezers to separate the salt crystals from the sand crystals. Use ultraviolet light, if necessary, to show the difference between the salt and sand. Alternatively, the salt could be dissolved in water, and then recrystallized by evaporating the water.
18. Answers will vary, but essentially the water cools the fire initially and as it is turned into steam. This will, hopefully, cool the chemicals below their ignition temperature. The steam is denser than oxygen and so displaces the oxygen from the flames, preventing the burning.
19. As the gas particles cool, they slow down and the attraction between them increases, so that they begin to join together to form a solid. The size and shape of the particles determines the structure of the crystals.



20. (a) high internal reflection (sparkle and fire), hardness
(b) hardness

WS 6.1-1 History of Chemistry Word Scramble

- Chemistry
- Metals
- Metallurgy
- Middle Ages
- Spiritual
- Philosopher's Stone
- Alloys
- Elements
- Compounds
- Proportion