

# Unit 2: Properties of Matter

## Reading Assignments

*Modern Chemistry* (2006), Chpt. 1

## Supplementary Reading

“The Brazil nut effect gets more jumbled”, *Science News* v160 #20

## Homework/Activities

- |                                                  |            |
|--------------------------------------------------|------------|
| 9 Worksheet: States of Matter                    | Due: _____ |
| 9 Sect. Review (Chpt. 1, Sect. 2) (p.14) #1-3, 5 | Due: _____ |
| 9 Article: Brazil nuts                           | Due: _____ |
| 9 Chapter Review (Chpt. 1) 6-7, 11-15            | Due: _____ |
| 9 TBA: _____                                     | Due: _____ |

## Concepts/Topics

- |                                                                                                                                                                                                                                                                                                                        |           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 9 Matter: mass & volume                                                                                                                                                                                                                                                                                                | [p.6]     |
| 9 Matter: physical properties/changes vs. chemical properties/changes<br>Physical properties: density, b.p., m.p., solubility, electrical, magnetic, size<br>Physical changes: states of matter, temperature, kinetic-molecular theory<br>Signs of chemical changes: color change, gas, precipitate, odor, heat, light | [p.7-11]  |
| 9 Pure substances: elements, compounds; Mixtures: heterogeneous, homogeneous<br>Using physical properties to separate mixtures: devices & procedures                                                                                                                                                                   | [p.11-13] |
| 9 Percent composition by mass                                                                                                                                                                                                                                                                                          |           |
| 9 Conservation of mass                                                                                                                                                                                                                                                                                                 | [p.68-69] |

## Web Resources

- |                                               |                                                                                                                                                |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Elmhurst College: Mixtures                    | <a href="http://www.elmhurst.edu/~chm/vchembook/106Amixture.html">www.elmhurst.edu/~chm/vchembook/106Amixture.html</a>                         |
| Science Geek: Phase Diagrams                  | <a href="http://www.sciencegeek.net/Chemistry/taters/phasediagram.htm">www.sciencegeek.net/Chemistry/taters/phasediagram.htm</a>               |
| Teacher Bridge: Physical vs. Chemical Changes | <a href="http://www.teacherbridge.org/public/bhs/teachers/Dana/chemphys.html">www.teacherbridge.org/public/bhs/teachers/Dana/chemphys.html</a> |
|                                               | <a href="http://www.ric.edu/faculty/ptiskus/chemical/">www.ric.edu/faculty/ptiskus/chemical/</a>                                               |