

Physical and Chemical Properties Practice – Student Worksheet (Answer Key)**Part A: Match the physical properties with a correct description.**

- | | |
|---------------------|---|
| 1. H - odour | a. the resistance of a liquid to flowing |
| 2. C - state | b. the 'feel' of a substance to the fingers |
| 3. A - viscosity | c. the condition of being a solid, liquid, gas |
| 4. J - hardness | d. how 'shiny' or 'dull' an object is |
| 5. I - malleability | e. the ability to be stretched into a wire |
| 6. E - ductility | f. how well a substance dissolves in water |
| 7. G - conductivity | g. the ability of a substance to conduct electricity |
| 8. D - lustre | h. the 'smell' given off by an object |
| 9. B - texture | i. the ability of an object to be hammered into thin sheets |
| 10. K - clarity | j. the resistance to being scratched |
| 11. F - solubility | k. the ability of light to pass through an object |

Part B: Identify the physical property described in each of the following cases:

1. copper is used to wire our homes - DUCTILITY
2. a variety of motor oils is available - VISCOCITY
3. sandpaper is rough to the touch - TEXTURE
4. glass and water allow light to pass through - TRANSPARENCY
5. copper II sulfate dissolves in water - SOLUBILITY
6. aluminum can be used to wrap sandwiches - MALLEABILITY
7. oil floats on the surface of water - DENSITY
8. diamonds are used in drill bits - HARDNESS
9. Earth is the only planet where water is in 3 forms - STATE
10. gold is used in jewelry because of these properties - MALLEABILITY

Part C: Use a check mark to indicate whether the description listed refers to a chemical property, qualitative physical property, or quantitative physical property.

Description	Chemical Property	Physical Property	
		Quantitative	Qualitative
wood burns	✓		
the boiling point of water is 100°C		✓	
sodium reacts violently with water	✓		
nitrogen is a colourless gas			✓
the action of a drain cleaner on a clog	✓		
diamonds are one of the hardest substances			✓
water has a density of 1.0 g/mL		✓	
an iodine solution kills bacteria	✓		
oxygen supports combustion	✓		