

PHYSICAL PROPERTIES & CHANGES

Part 1 - Matching

- | | |
|----------------------|---|
| 1. Physical property | a. how easily a substance dissolves in another substance |
| 2. Solubility | b. an objects attraction to another object (magnetic, electric) |
| 3. Density | c. an observable characteristic without modifying the object. |
| 4. Physical change | d. a change in state (solid, liquid, gas) of an object |
| 5. Polarity | e. how tightly of loosely atoms are packed in a substance. |

Part 2 - Ways matter physically changes

(<http://chemistry.about.com/od/matter/a/10-Physical-Change-Examples.htm>)

Physical changes involve states of matter and energy. A state of matter can be a solid, a liquid or a gas. No new substance is created during a physical change, although the matter takes a different form. The size, shape, and color of matter may change. Also, physical changes occur when substances are mixed, but don't chemically react. One way to identify a physical change is that such a changes may be reversible, especially phase changes. For example, if you freeze an ice cube (solid), you can melt it into water again (liquid). This is a list of 10 examples of physical changes.

- | | | | |
|---------------------------------|-------------------------------|--------------------|--------------------------|
| 1. crushing a can | 2. melting an ice cube | 3. boiling water | 4. mixing sand and water |
| 5. breaking a glass | 6. dissolving sugar and water | 7. shredding paper | 8. chopping wood |
| 9. mixing red and green marbles | 10. sublimating dry ice | | |

- List 5 actions to physically change matter: _____
- True or False: Physical changes *may* be reversible. Circle: True False
- True or False: A new substance is created during a physical change. Circle: True False
- Think of 1 example (other than ice cube to water and back) that can be classified as a physical change.

Part 3 - Sentence completion

- We tested the _____ of sugar by observing if it could dissolve in water after 5 minutes.
- Color, size, shape, smell and texture are all examples of _____.
- Depending on an objects' _____ that object will sink or float in water.
- We witnessed _____ when the magnet attracted iron filings in our mixture lab.
- An object undergoes a _____ when it is melted, burnt, mixed, crushed, boiled, etc.

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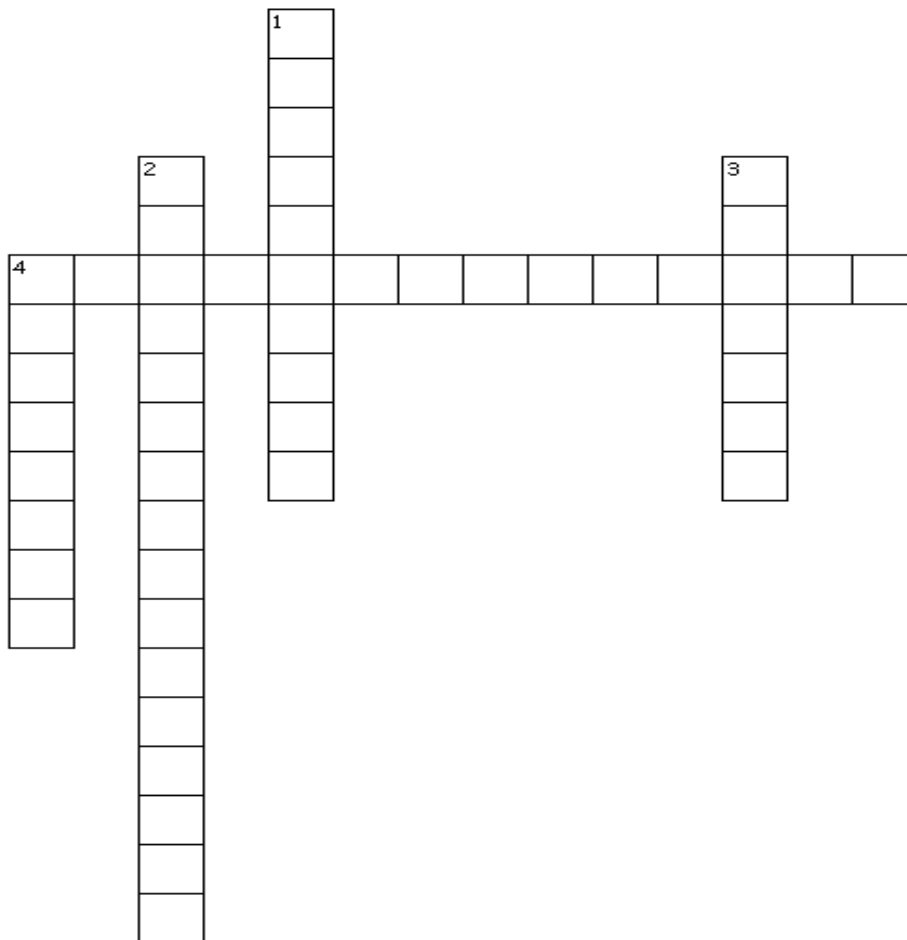
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Part 4 - Real Life Application

	Object	Physical Properties	1 way you could physically change it?
1.			
2.			
3.			
4.			
5.			

Part 5 - Crossword Puzzle



Across

4. modifying the object while retaining the substance's atomic makeup

Down

1. an object dissolving in another object

2. observed without changing the object

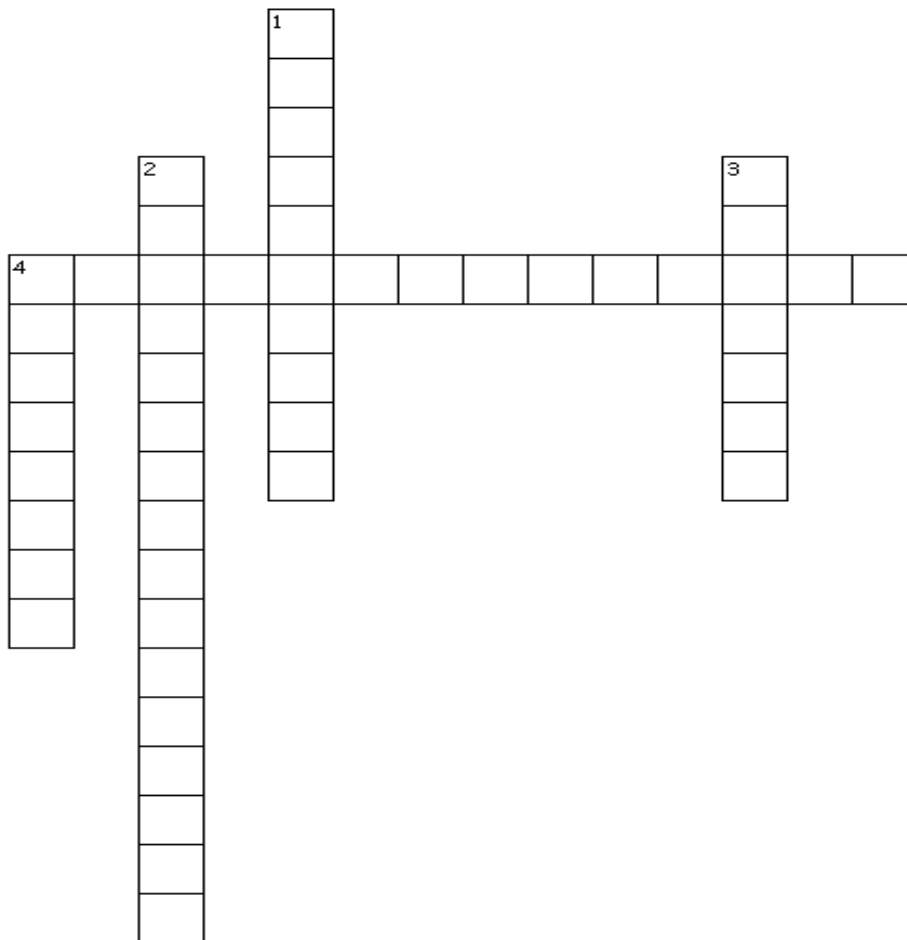
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4. attraction towards a particular direction

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