

Physical & Chemical Changes Review

I. Choose the correct vocabulary terms

1. Changes from a solid to liquid _____
2. Changes from a liquid to a gas _____
3. Solid changes directly to a gas _____
4. Changes from a gas to a liquid _____
5. Vaporization at the surface of a liquid _____
6. Changes from a liquid to a solid _____
7. Vaporization from both the surface & inside a liquid _____

II. Physical & Chemical Changes: Using Main Ideas

- _____ 1. A bicycle left out in the rain begins to rust.
- _____ 2. A match burns, leaving only charred wood.
- _____ 3. A copper wire is cut into five smaller pieces.
- _____ 4. An ice cube melts.
- _____ 5. A glowing splint placed in a test tube causes a loud “pop”.
- _____ 6. Food coloring is added to cake icing to make it pink.
- _____ 7. Gasoline burns in a car engine.
- _____ 8. Antifreeze is added to a car radiator to lower the freezing point.
- _____ 9. A spoonful of sugar is dissolved in a cup of coffee.
- _____ 10. A silver knife and fork tarnish when they are exposed to air for several weeks.
- _____ 11. Leaves of a maple tree turn bright red as winter approaches.
- _____ 12. A water molecule gains enough energy to enter the vapor phase.

III. Phase Change

Type of Physical Change

Change in Molecular Movement



1. _____



2. _____



3. _____



4. _____

Identifying physical and chemical changes is an important science skill. **Table A** provides several examples or situations in which a substance undergoes a change. Decide if it is a physical or a chemical change. Write your answers in the appropriate box. Briefly state why you made your choice.

Table A	Type of change	Reason
1. While you are filling the gas tank on your minibike, a small amount of gasoline spills but soon disappears.		
2. As the minibike runs, less gasoline remains in the gas tank as carbon dioxide leaves the exhaust.		
3. After swimming in the ocean and resting on the beach, you are no longer wet, but your skin has a salty film on it.		
4. After stirring the sugar you added to some iced tea, the sugar disappears but the tea tastes sweet.		

Table B provides several substances that can undergo both physical and chemical changes. In the appropriate box, describe what could be done to the substance to bring about these changes.

Table B	Physical Change That could Happen	Chemical Change That Could Happen
1. Raw egg		
2. Pencil		
3. Antacid tablet (Tums, Rolaids)		
4. Green plant		
5. Bicycle frame		