

Physical and Chemical Changes

Physical Changes

- Are changes in form or changes of state
- The substance stays the same chemically
- Most physical changes can be reversed
- Examples – melting an ice cube, dissolving sugar in water, crushing a can



Chemical Changes

- The original substances are changed into different substances
- The change may be difficult to see
- Most chemical changes are difficult to reverse
- Four clues can help you identify when a chemical change has occurred:
 - A new **colour** appears
 - **Heat** or **light** is produced
 - **Bubbles** of gas are formed
 - A **solid** material (called a **precipitate**) is formed
- Examples – burning paper, metal rusting, digesting food, silver tarnishing

Are the following changes physical (P) or chemical (C)?

1. Water boiling
2. Lighting a match
3. Baking cookies
4. Fireworks exploding
5. Melting ice cream
6. Breaking a stick in two
7. Cutting grass
8. Stretching a rubber band

