# 🔥 WORKSHEET ON CHEMICAL VS PHYSICAL PROPERTIES AND CHANGES

**Keep this in your binder as a study guide!  You will have a quiz on this next class!**

**Background**:  Keeping the difference between physical and chemical properties as well as changes can be a challenge!  This worksheet will help you do this.  First, use the book to define the following terms.

| VOCABULARY WORD | DEFINITION |
|---|---|
| Physical Property | |
| Physical Change | **Change in which the identity of the substance does NOT change** |
| Chemical Property | |
| Chemical Change | |

## Part One:  Physical or Chemical Property?  Fill in the chart using the vocabulary words or phrases provided.

**Vocabulary words**

| Boiling point | Ability to rust | Melting point | Brittleness | Reactivity with vinegar |
|---|---|---|---|---|
| elasticity | Flammability | Density | Transparency | ductility |

**Each word is used once.  Define the word when done!**

| Chemical Property↓ | Definition |
|---|---|
| | • **The ability to burn** |
| | • **Reacts with oxygen to produce rust** |
| | |

| Physical Property↓ | Definition |
|---|---|
| | • **The property of letting light pass through something** |
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## Part Two:  Physical or Chemical Change?  Indicate with a 'P' or a 'C' which type of change is taking place.

1. _____ glass breaking
2. _____ hammering wood together
3. _____ a rusting bicycle
4. _____ melting butter
5. _____ separate sand from gravel
6. _____ bleaching your hair
7. _____ frying an egg
8. _____ squeeze oranges for juice
9. _____ melting ice

10. _____ mixing salt and water
11. _____ mixing oil and water
12. _____ water evaporating
13. _____ cutting grass
14. _____ burning leaves
15. _____ fireworks exploding
16. _____ cutting your hair
17. _____ crushing a can
18. _____ boiling water

**Physical and Chemical Properties**
**Extensive and Intensive Properties**

Name: _____

| Property | Physical Property | Chemical Property | Extensive Property | Intensive Property |
|---|---|---|---|---|
| magnetic | | | | |
| malleable (can be hammered thin without breaking) | | | | |
| temperature | | | | |
| flammable | | | | |
| red color | | | | |
| reacts violently with sodium | | | | |
| length | | | | |
| mass | | | | |
| produces a different gas when heated | | | | |
| dissolves in water | | | | |
| soluble in alcohol | | | | |
| blue color | | | | |
| rough texture | | | | |
| sweet taste | | | | |
| density | | | | |
| reacts with acid to form hydrogen | | | | |
| sour taste | | | | |
| melting point | | | | |
| boiling point | | | | |
| hardness | | | | |
| luster (how shiny it is) | | | | |
| odor | | | | |