

## Science 9-Chemistry

### Worksheet 5-1—Household Chemicals



10

Name _____	
Due Date _____	
Show Me <input type="checkbox"/>	Hand In <input type="checkbox"/>
<b>Correct and Hand In Again By</b> _____	

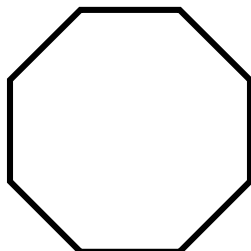
*Read pages 80-93 of SP to help you answer the following questions:*

1. What information is supplied by labels on products that you buy in the store?  
\_\_\_\_\_
2. What types of compounds cannot be removed by using water alone? \_\_\_\_\_  
\_\_\_\_\_
3. In a molecule of a **soap** or **detergent** molecule, one end is attracted to \_\_\_\_\_ and the other end is attracted to \_\_\_\_\_ material.
4. The soap or detergent breaks big droplets of grease or oil into \_\_\_\_\_
5. **Acids** taste \_\_\_\_\_, are \_\_\_\_\_ in water and have \_\_\_\_\_ that are similar.
6. **Bases** taste \_\_\_\_\_, feel \_\_\_\_\_ and react with \_\_\_\_\_.
7. Substances which are neither acids nor bases are said to be \_\_\_\_\_
8. What is an **acid-base indicator**? \_\_\_\_\_  
\_\_\_\_\_
9. Name **six** substances which can be used as acid-base indicators. (See data tables on p. 85)  
\_\_\_\_\_  
\_\_\_\_\_

*Now, turn to page 87 and continue*

10. In what ways can **strong acids** be dangerous? \_\_\_\_\_  
\_\_\_\_\_

11. What household products are **strong bases** found in? \_\_\_\_\_
12. **Weak acids** like orange juice can sting if you get them in your eyes, but are they really harmful? \_\_\_\_\_
13. Draw the label that you might see in materials containing strong acids or bases. (On p.87)



14. When an acid and base are mixed together, there is a reaction called \_\_\_\_\_
15. In the process of **neutralization**, an acid and a base form \_\_\_\_\_ and a \_\_\_\_\_
16. Write a word equation which shows the reaction between **hydrochloric acid** and **sodium hydroxide**.  
\_\_\_\_\_
17. What common **weak acid** can be used to neutralize spills of strong bases? \_\_\_\_\_
18. What common **weak base** is used to neutralize acid spills? \_\_\_\_\_
19. Name some common household products that are useful because they are **NOT** chemically reactive. \_\_\_\_\_
20. What is meant by a **reactive chemical**? \_\_\_\_\_  
\_\_\_\_\_
21. Name four examples of types of compounds which are useful because they **ARE** reactive.  
\_\_\_\_\_
22. Where might you first look for first-aid treatment which might be used with a household product? \_\_\_\_\_  
If you can't find it there, who could you contact? \_\_\_\_\_
23. Tell what each of the following **WHIMIS** symbols stand for?



Answer \_\_\_\_\_



b) Answer \_\_\_\_\_



c) Answer \_\_\_\_\_



d) Answer \_\_\_\_\_



e) Answer \_\_\_\_\_



f) Answer \_\_\_\_\_

24. What are three **immediate** effects of **sulphuric** (battery) acid? \_\_\_\_\_  
\_\_\_\_\_

25. Leaded gasoline contains a compound called **tetraethyl lead**. What are three effects of this chemical? \_\_\_\_\_  
\_\_\_\_\_

Do these effects happen immediately? \_\_\_\_\_

26. Why are factory wastes sometimes easier to deal with than household wastes? \_\_\_\_\_  
\_\_\_\_\_

27. What element were workers in **Cominco** in Trail B.C. contaminated with recently?  
\_\_\_\_\_.

**Use Table 5.4 on p. 91 to help you with the following questions:**

28. What is the actual chemical name of “**caustic soda**” \_\_\_\_\_  
Where is it used? \_\_\_\_\_

29. The initials “PCP” stands for **pentachlorophenol**. Where it is used? \_\_\_\_\_  
What is the problem with it? \_\_\_\_\_

30. What is the name of “Ca(ClO)<sub>2</sub>” \_\_\_\_\_  
Where might it be used in the home? \_\_\_\_\_

31. The chemical name for “**wood alcohol**” is \_\_\_\_\_. What is it used for in the home? \_\_\_\_\_
32. What is the name of a compound used in **nail polish remover**? \_\_\_\_\_  
What is its chemical formula? \_\_\_\_\_  
How is it harmful? \_\_\_\_\_
33. “**Muriatic acid**” is also called \_\_\_\_\_  
What is it used for? \_\_\_\_\_  
What are its main hazards? \_\_\_\_\_
34. What household products use **petroleum** products? \_\_\_\_\_  
\_\_\_\_\_
- What are the two main hazards of these? \_\_\_\_\_
35. What is the name of compound found in **contact cement**? \_\_\_\_\_  
What is its chemical formula? \_\_\_\_\_

Make a nice drawing here if you want.

