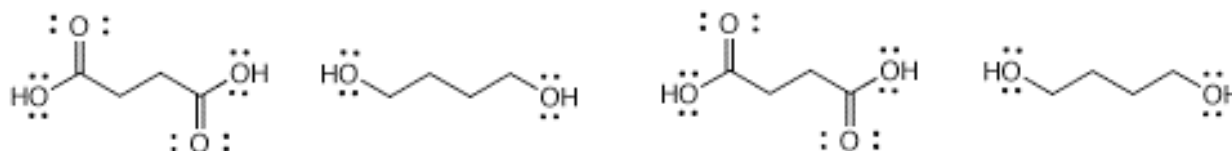


Review Questions for Unit 3  
Chem 1010

1. Draw the polymer that would result from the following monomers. Which of the polymers above is a condensation polymer, and which is an addition polymer? Are either of them copolymers?



addition polymer, not a copolymer



condensation polymer, copolymer

2. Give the correct formula for each of the following compounds.

magnesium sulfide

cobalt(II) iodide

potassium nitrate

yttrium(III) carbonate

radium iodide

zirconium (I) sulfate

3. Describe what is wrong with each of the following names.

vanadium oxide

potassium (I) cyanide

scandium (+3) chloride

calcium (II) oxide

calcium difluoride

4. Name the following compounds, and write out the ions that are present.

$K_2O$

$Mo_2(SO_4)_3$

$Ba_3(PO_4)_2$

$AuCl_3$

$RbCl$

5. Fill in the blanks in the following sentences or chose the correct word.

\_\_\_\_\_ are good at dissolving grease.

\_\_\_\_\_ acid is used in the manufacture of fertilizers and explosives.

\_\_\_\_\_ has a strong odor and is often found in floor and window cleaners.

\_\_\_\_\_ are mild bases that neutralize stomach acid.

\_\_\_\_\_ is used to make cookies rise, absorb odors, and put out fires.

A \_\_\_\_\_ base reacts partially with water to form hydroxide ions.

A blue color on pH paper indicates a \_\_\_\_\_ solution.

A substance that reacts with water to form hydronium ion ( $H_3O^+$ ) is called \_\_\_\_\_.

A substance that reacts with water to form hydroxide ion ( $OH^-$ ) is called \_\_\_\_\_.

Acetic acid is a \_\_\_\_\_ acid.

Acid rain contains \_\_\_\_\_ acid and \_\_\_\_\_ acid.

Acids have a \_\_\_\_\_ taste.

Acids react with \_\_\_\_\_ to form hydrogen gas and an ionic compound.

All acids react with \_\_\_\_\_ or \_\_\_\_\_ to form carbon dioxide gas and water.

Ammonia is a \_\_\_\_\_.

An \_\_\_\_\_ is a compound that changes color depending on the pH of the solution.

Bases have a \_\_\_\_\_ taste and are \_\_\_\_\_ to the touch.

Citric acid is found in \_\_\_\_\_.

\_\_\_\_\_ is sold under the name "muriatic acid" in hardware stores.

If bleach and ammonia are mixed together, \_\_\_\_\_ gas is produced.

In order to remove hard water deposits, you should use an \_\_\_\_\_ cleaning solution.

In the reaction  $4 \text{Fe} + 3 \text{O}_2 \rightarrow 2 \text{Fe}_2\text{O}_3$ , the iron atoms are \_\_\_\_\_ electrons.

Limestone rocks are made up of \_\_\_\_\_.

Litmus paper turns \_\_\_\_\_ in the presence of an acid.

Oven cleaners typically contain \_\_\_\_\_.