

Name: _____

Date: _____

Worksheet 11A Acids & Bases (Nelson p.190-93)

- 1) What **ion** in an acid gives its **acidic properties**? _____
- 2) What **ion** in a base gives its **basic properties**? _____
- 3) List 3 properties of **acids**.

- 4) List 3 properties of **bases**:

- 5) A substance is tested with red and blue litmus paper. The **red litmus turns blue** and the **blue litmus stays blue**. Is the substance as **an acid or a base**?

- 6) **Classify** each of the following substances as acid or base. **Give reasons** for your answers.

| Chemical | Acid (A) or Base (B) | Chemical | Acid (A) or Base (B) |
|--------------------------------|-----------------------------|---------------------|-----------------------------|
| KOH | | NaOH | |
| HNO ₃ | | Al(OH) ₃ | |
| H ₂ SO ₄ | | | |

7) Summarize the following:

| Property | Acids | Bases |
|----------------------------|-------|-------|
| Physical Properties | | |
| Solubility in water | | |
| Electrical Conductivity | | |
| Texture | | |
| Taste | | |
| Chemical Properties | | |
| React with metals | | |
| React with living tissue | | |
| Acid-Base Indicator | | |
| Red Litmus | | |
| Blue Litmus | | |
| Bromothymol blue | | |
| Phenolphthalein | | |
| pH value | | |

8) Classify each of the following compounds as an **acid (A)**, **base (B)** or **salt (S)**.

| Compound | A / B / S | Compound | A / B / S |
|-----------------------------------|-----------|---------------------------------|-----------|
| HNO ₃ | | CaCl ₂ | |
| NaOH | | H ₃ PO ₄ | |
| NaNO ₃ | | Na ₂ SO ₄ | |
| HCl | | Mg(OH) ₂ | |
| KCl | | H ₂ CO ₃ | |
| Ba(OH) ₂ | | NH ₄ OH | |
| KOH | | NH ₄ Cl | |
| H ₂ S | | HBr | |
| Al(NO ₃) ₃ | | FeBr ₃ | |
| H ₂ SO ₄ | | HF | |