

An Alien Spaceship crashes leaving the space traveler frustrated and **HUNGRY!**

The strange alien being must **EAT!**

He finds and eats the following items:

A banana

A tomato

A bar of soap

He washes it down with with a nice glass of vinegar!

He gets a stomach ache and comes to see you, Dr. Ion.

You must diagnose him!



### 86 The acid/base files

Dr. Ion's notes:

Consumed:           pH   Acid or base?

Banana

Tomato

Soap

Vinegar

I predict Hydronium Being's stomach will be **Acidic** or **Basic** because....

What would the pH in his stomach be?

Neutralization (picture pg. 278). What would he need to neutralize extra acid in stomach?

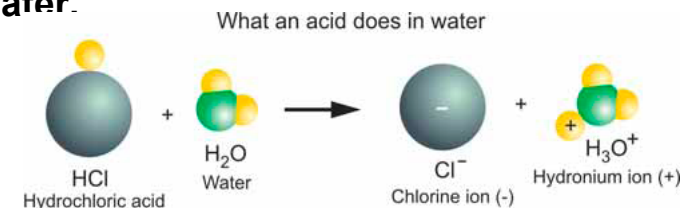
Read page 188-189 with your partner:

A) Acids turn litmus \_\_\_\_\_.

B) Bases turn litmus \_\_\_\_\_.

### PROPERTIES OF ACIDS

- They taste sour (**Never taste acids in the science lab!**).
- They turn litmus & universal indicator **red**
- Acids react with metals (they form **H<sub>2</sub> gas** )
- Acids can be **Corrosive** (eat away metals, etc.)
- All acids form **hydronium ions (H<sup>+</sup>)** when mixed **in water**.



### Properties of Bases:

- They taste bitter (**Never taste bases in the science lab!**).
- They turn litmus paper & universal indicator **blue**.
- They feel slippery.
- Bases can also be **Corrosive** (eat away metals, etc.)
- All bases form hydroxide ions (OH<sup>-</sup>) in water**.