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- T or F All atoms of a given element are identical
- T or F Isotopes are particles that have gained or lost electrons and acquired a + or - charge
- T or F An equal sharing of electrons results in a bond that is nonpolar
- T or F Hydrogen bonds are chemical bonds formed between adjacent water molecules
- T or F Water has a high heat capacity and changes temperature slowly when heat is added
- T or F Substances are considered "basic" if they have a hydroxide ion in their structure and have a low pH

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Review the following questions as a class: (this is a review of basic concepts from CP/Honors Chemistry!)

1. What determines the identity of an atom?
2. What determines the chemical properties of an atom?
3. What is an isotope? How are they similar/different from one another?
4. What four elements make up most of your body's mass?
5. How many bonds can each of these elements form? What determines this?
6. Explain the difference between an ionic and a covalent bond:
7. How might covalent bonding contribute to molecular diversity?

Essential Question: What are the unique properties of water that allow it to serve as the "solvent of life"? (Sections 2.9-2.14)

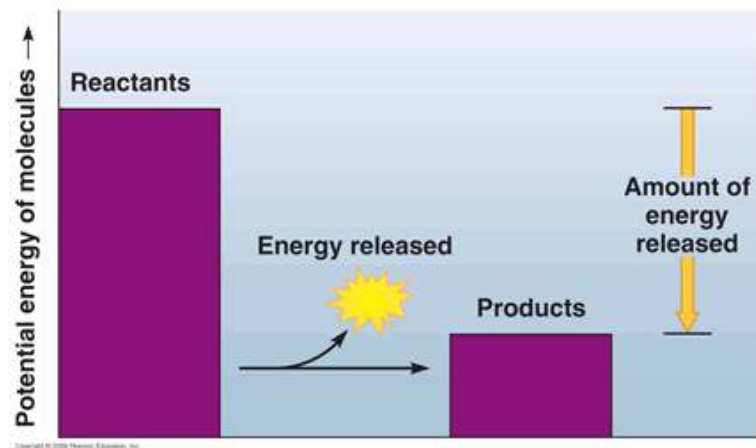
1. What makes a water molecule (or any molecule, for that matter) polar?
2. What are hydrogen bonds? Are they true chemical bonds? Why/why not?
3. What makes water the "solvent of life"?
4. How does water help regulate temperature?
5. What is pH? How is life affected by changes in pH?

Essential Question: How do Biologists describe a basic chemical reaction?

1. What is the basic "anatomy" of a chemical reaction?
2. What are exergonic reactions? (p.82) Give an example.
3. What are endergonic reactions? (p.82) Give an example.

I thought it was exo*thermic*? ...endo*thermic*?

Exergonic



Endergonic

