General questions and activities

Chapter1: Biologically important molecules.

# Atoms:

1. Using the following data in the periodic table COMPLETE the table below:



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Mass No.** | **Atomic No.** | **No. of electrons.** | **No. of protons** | **No of neutrons.** |
| **H** |  |  |  |  |  |
| **Li** |  |  |  |  |  |
| **Na** |  |  |  |  |  |
| **K** |  |  |  |  |  |
| **Ba** |  |  |  |  |  |
| **N** |  |  |  |  |  |
| **F** |  |  |  |  |  |

1. Connect column A to the suitable respond of column B:

|  |  |
| --- | --- |
| Column A | Column B |
| 1. Positive part of an atom
 | 1. Nucleus
 |
| 1. Negative part of an atom
 | 1. Proton
 |
| 1. Neutral part of an atom
 | 1. Electron
 |
| 1. Found in the middle of the atom and contains both protons and neutrons.
 | 1. Neutron
 |

1. What do you know about
2. Atom
3. Molecule
4. Proton
5. Neutron
6. Electron
7. Acid
8. Base
9. Atomic number
10. Mass number
11. Ion
12. Isotop
13. Complete the following statements:
	1. Carbohydrates are composed of …………… , …………………… and ……………………….
	2. The subunit ………………… can be repeated ………………… many times to form different molecules.
	3. Carbohydrates are important in ……………………………………. And ………………………………………
14. Look at the figure and mention the name of the compound:

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………………………………………

………………………………………

1. What is the name of each of the following sugars:

A-

B-

C-

1. Write the chemical formula of each of the following:
	1. Trioses
	2. Pentoses
	3. Hexoses
2. Complete the following statements:
	1. Removing water is called …………………………………………………… ( this is the reaction that joins 2 monosaccharides to form 1 disacharide) and adding water is called ……………………………………………………. (this is the reaction that breaks 1 disaccharide to form 2 monosacharide)
	2. 2 Monosaccharides are joined together to form a ………………………...
	3. If a reaction releases water it will be called a …………………………….. reaction
	4. The link between the monosaccharide rings as called a …. ………………………… bond.
	5. 2 glucoses makes 1 ………………………
	6. (Glucose + fructose = …………………..) found in ……………………..
	7. (Glucose + Galactose = …………………………….) found in.