IDENTIFY THE KINDS OF ATOMS FOUND IN EACH OF THE FOLLOWING

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Atoms that can be found | | | | | |
| MACROMOLECULE | C | O | H | N | S | P |
| PROTEINS AMINO ACIDS |  |  |  |  |  |  |
| CARBOHYDRATES |  |  |  |  |  |  |
| FATS |  |  |  |  |  |  |
| NUCLEIC ACIDS DNA,RNA |  |  |  |  |  |  |
| PHOSPHOLIPIDS |  |  |  |  |  |  |
| ATP |  |  |  |  |  |  |

The typical formula for simple carbohydrates is a 1:2:1 ratio (1 carbon;2 hydrogen:1 oxygen).   
EX: glucose (C6H12O6). Explain WHY the molecular formula for the DISACCHARIDE sucrose  
(table sugar - C12H22O11) does NOT show an exact 1:2:1 ratio.

Because molecules are invisible to the naked eye, scientists often study cell processes by   
labeling molecules with radioactive tags. Which kind of radioactive isotope could be used   
to distinguish proteins from nucleic acids, carbs, or lipids? EXPLAIN YOUR ANSWER  
  
  
  
  
Which kind of radioactive isotope could be used to distinguish nucleic acids from   
proteins, carbs, or lipids? EXPLAIN YOUR ANSWER.

SHOW WHAT YOU KNOW (SWYK) Add pictures, diagrams, Compare/contrast charts,   
Venns, concept maps, etc.