## Inorganic Vs. Organic A Worksheet

Standard: PS-3 Indicator: PS-3.2

Infer the practical applications of organic and inorganic substances on the basis of their chemical and physical properties.

## **Procedure:**

Fill in the following table of organic and inorganic compounds and answer the questions that follow.

Substance	Formula	Organic or Inorganic	Use
Octane	C <sub>8</sub> H <sub>18</sub>		
Starch	(C <sub>6</sub> H <sub>10</sub> O <sub>5</sub> )n		
Steel	Fe		
Butane	C <sub>4</sub> H <sub>10</sub>		
Baking Soda	NaHCO <sub>3</sub>		
Olive Oil	$C_{18} H_{34} O_2$		
Methane	C H <sub>4</sub>		
Vaseline	$C_{20} H_{42}$		
Neon	Ne		
Sodium	Na		
Lactose (milk)	C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>		
Ethyl alcohol	C <sub>2</sub> H <sub>5</sub> OH		
Steroid	$\mathrm{C}_{27}\mathrm{H}_{46}$		
Hydrogen peroxide	$H_2O_2$		
Propane	$C_3 H_8$		
Glycerin	$C_3H_8O_3$		
Fructose (fruit)	$C_6H_{12}O_6$		
Aluminum	Al		
Ammonia	$NH_3$		
Wax	$C_{25}H_{52}$		
Sodium Chloride	NaCl		
Isopropyl alcohol	$C_3H_7OH$		
Sand	$SiO_2$		
Sucrose	$C_{12}H_{22}O_{11}$		
Water	$H_2O$		
Canola oil	$C_{18}H_{30}O_2$		
Cellulose (wood)	$(C_6H_{10}O_5)n$		
Drano	КОН		
Glucose	$C_6H_{12}O_6$		

## **Questions:**

- 1. What element all organic compounds have in common? (C)
- 2. What is the most common use for most of the lightweight organic compounds (fewer than 10 carbon atoms)? (fuel)
- 3. Can you infer from their formulas which seem more complex, inorganic or organic compounds? Give some examples to defend your answer. (organic = many more elements, some with same formula)
- 4. How does the composition of organic foods compare to the composition of organic fuels? Explain. (Former tested foods contain C, H. and O; fuels only C and H).