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## CHEMISTRY.

1. What is meant by a chemical element? Classify the elements as solids, liquids and gases.
2. What is the nature of chemical affinity? Give an example of double decomposition.
3. Explain the terms, protoxide, peroxide, binoxide and dentonide, with examples.
4. The properties of an acid, a base and a salt. Distinguish between oxacids and hydracids, oxysalts and true salts.
5. Give the composition of the atmosphere by weight and by measure. Mention some of its properties and uses.
6. How is the specific gravity of solids, liquids and gases ascertained? A metal weighs oz. 64.5 in air, and oz. 61.5 in water, required its specific gravity. What is the metal?
7. Give the preparation and properties of oxygen, chlorine, phosphorous.
8. Give the composition of marble, clay, alum, starch acetic acid, chloroform, gunpowder and olifant gas.
9. What are:— $\text{ClO}^2$ ,  $\text{CaF}$ ,  $\text{AsO}^3$ ,  $\text{Hs}$ ,  $\text{CaOH}^2$
- 10 The chemical changes that occur in the processes of bread and soap making and the slaking of lime.