

The heating of magnesium in the crucible, when exposed to the air and when covered with sand, illustrates the difference between physical and chemical change. In the first case a substance with entirely new properties, or a *new* substance, is formed, and we call the change *chemical*; in the latter, although the magnesium becomes heated and changes in colour, size, etc., yet we recognize it as still the same substance; and we call the change a *physical* one.