

amorphous

materials usually characterised by certain areas of short-range order; as in crystals, does not exist in amorphous substances

antiseptic

against germs

aseptic

without germs

binary code

code based on two states such as 'on' or 'off', 'up' or 'down', 'true' or 'false'; if these two states are represented numerically the two options are the digits '0' or '1'

bioactive

materials that actively promote biological interaction

biocompatible

material that is
compatible with
biological processes

bioinert

materials that do not
promote or retard
biological interaction

biomedical

relating to biological
and medical systems

ceramic

a multi-phase material containing
phases composed of metals and
non-metals, ceramics are typically
hard and brittle with good
insulating properties

composite

multi-phase materials
formed from a combination
of materials, which differ in
composition or form

corrosion

an electro-chemical reaction that results in the conversion of metallic materials into oxides, salts or other compounds, metals that undergo corrosion lose strength, ductility and other important mechanical properties

fulcrum

point about which a lever arm moves

glass

a ceramic produced through the fusing of inorganic materials and cooled to a hard condition without any crystalline structure developing; it is amorphous

hydroxyapatite

the principle bone salt $\text{Ca}(\text{PO}_4)_3\text{OH}$ which provides the compressive strength of vertebrate bone

investment casting

casting process also known as lost wax casting

lever

a simple machine that can be used to magnify effort or motion

logic gate

items that act as digital switches in which an output of '0' or '1' is produced; depending on the combinations of these gates used, various operations can be performed in a circuit

nitinol

an alloy of nickel and titanium in almost equal proportions with shape memory properties

parallel circuit

circuits that form multiple pathways or branches that enable a range of separate paths for current flow

passivate

to treat or coat a metal in order to reduce the chemical activity of its surface