

OCN 201 glossary of chemical terms

Term	Definition
elements	basic chemical form of matter
compounds	a chemical combination of elements
ions	electrically charged element or compound
oxidation states	different chemical forms that elements may be in
mole	atomic (or molecular) weight of substance in grams
isotopes	atoms of the same element with different weights
isotope fractionation	separation of heavier and lighter isotopes during chemical or physical processes
g	abbreviation for gram (approx. 28 g = 1 ounce)
kg	abbreviation for kilogram (1,000 g = 1 kg)
salinity	amount of salt dissolved in sea water
density	mass (weight) per unit volume
major ions	Cl, Na, Mg, SO ₄ , Ca, K
conservative ions	an ion whose concentration varies only with salinity
residence time	the average amount of time that an element will spend in the ocean
soluble	means that a large amount can be dissolved
oversaturated	above the soluble limit
weathering	the process by which rain etc., breaks down rocks
photic zone	the upper waters in the ocean which receive enough sunlight for plankton to grow.
remineralsation	the process by which organic matter is broken back down
preserved	material that is not recycled
advective flow lines	the direction in which water is flowing
foraminifera	plants that live in the open ocean and build their skeletons with calcium carbonate
anthropogenic	introduced by human activity
upwelling	process of bringing material from deep to surface
chemical mass balance	the balance between the amount (mass) of a chemical entering or leaving a system
flux	amount of material being transported per unit time
end-member	pure form of a component in a system
geochronology	process of assigning dates to layers in sediments
half-life	time taken for 1/2 of a radioactive substance to decay
bioturbation	mixing of sediments by burrowing animals
interglacial	period of time between ice ages
manganese nodule	aggregates of manganese found on the sea floor