

1. scattered- spread out over an area. *Metallic nodules are scattered across the seabed.*
(adjective)
2. source- origin or starting point of something. *These nodules are a source of oxygen.*
(noun)
3. affect- to have an impact on something. *This finding could affect ocean mining plans.*
(verb)
4. industrial- related to industry or manufacturing. *These minerals are targets for industrial extraction.*
(adjective)
5. noticed- became aware of something. *He first noticed something strange in 2013.*
(verb)
6. measure- to determine the size, amount, or degree of something. *They measure oxygen flux on the seabed.*
(verb)
7. content- the amount or concentration of something. *The oxygen content was rising.*
(noun)
8. ignored- chose not to pay attention to. *He initially ignored the data.*
(verb)
9. approach- a way of dealing with something. *Using a different approach confirmed the result.*
(noun)
10. deduced- concluded after considering the facts. *They deduced that nodules were raising oxygen levels.*
(verb)
11. playing a role- contributing to something. *Nodules are playing a role in oxygen production.*
(phrase)
12. current- flow of electricity. *The nodules generate an electric current.*
(noun)
13. survive- continue to live or exist. *Oxygen helps organisms survive in deep water.*
(verb)
14. outstanding- not yet resolved; significant. *There are many outstanding questions.*
(adjective)
15. generate- to produce or create something. *Nodules generate oxygen through electrolysis.*
(verb)
16. conditions- specific situations or environments. *The reaction depends on certain conditions.*
(noun)

17. contribution- something given or added to help something else. *The contribution of "dark" oxygen is unclear.*
(noun)
18. sustain- to support or keep going. *"Dark" oxygen may help sustain ecosystems.*
(verb)
19. devoid- completely lacking something. *Deep-sea areas are devoid of sunlight.*
(adjective)
20. vents- openings that release substances. *Some life forms get energy from hydrothermal vents.*
(noun)
21. interpretation- understanding or explanation of something. *This interpretation might be a stretch.*
(noun)
22. necessary- required or essential. *Oxygen is necessary for manganese oxide production.*
(adjective)
23. alternative- another option or choice. *Nodules don't offer an alternative oxygen source.*
(adjective)
24. unlikely- not probable. *It is unlikely nodules affected the planet's oxygenation.*
(adjective)
25. strengthen- to make stronger. *The findings may strengthen calls to ban mining.*
(verb)