

STUDENT A

1. Read the text below and try to complete the missing words.
2. Listen to student B giving you the definitions of the missing words and fill the gaps.
3. Explain the words in bold to student B.

OXYGEN

Adapted from <http://en.wikipedia.org/wiki/Oxygen>

Oxygen is the element with 1. _____ and represented by the symbol **O**. At standard temperature and pressure, two atoms of the element bind to form dioxygen, a colorless, 2. _____, tasteless 3. _____ gas with the formula O₂. Oxygen is a member of the 4. _____ group on the 5. _____, and is a highly 6. _____ nonmetallic element that readily forms 7. _____ (notably oxides) with almost all other elements. By mass, oxygen is the third most abundant element in the universe after hydrogen and 8. _____ and the most abundant element by mass in the 9. _____, making up almost half of the crust's mass. Free oxygen is too chemically reactive to appear on Earth without the 10. _____ action of living organisms, which use the energy of sunlight to produce elemental oxygen from water. Elemental O₂ only began to accumulate in the atmosphere after the evolutionary appearance of these organisms, roughly 2.5 billion years ago. Diatomic oxygen gas constitutes 20.8% of the 11. _____ of air.

Oxygen comprises most of the mass of living organisms (for example, about 12. **two-thirds** of the human body's mass). All major classes of structural molecules in living organisms, such as 13. **proteins**, 14. **carbohydrates**, and fats contain oxygen, as do the major 15. **inorganic** compounds that comprise animal shells, teeth, and bone. Elemental oxygen is produced by cyanobacteria, algae and plants, and is used in 16. **cellular respiration** for all complex life. Oxygen is 17. **toxic** to obligately anaerobic organisms, which were the dominant form of early life on Earth until O₂ began to accumulate in the atmosphere. Another form (allotrope) of oxygen, 18. **ozone** (O₃), helps protect the biosphere from 19. **ultraviolet radiation** with the high-altitude 20. **ozone layer**, but is a pollutant near the surface where it is a 21. **by-product** of smog. At even higher low earth orbit 22. **altitudes** atomic oxygen is a significant presence and a cause of erosion for spacecraft.

STUDENT B

1. Read the text below and try to complete the missing words.
2. Explain the words in bold to student A.
3. Listen to student A giving you the definitions of the missing words and fill the gaps.

OXYGEN

Adapted from <http://en.wikipedia.org/wiki/Oxygen>

Oxygen is the element with **1. atomic number 8** and represented by the symbol **O**. At standard temperature and pressure, two atoms of the element bind to form dioxygen, a colorless, **2. odorless**, tasteless **3. diatomic** gas with the formula O_2 . Oxygen is a member of the **4. chalcogen** group on the **5. periodic table**, and is a highly **6. reactive** nonmetallic element that readily forms **7. compounds** (notably oxides) with almost all other elements. By mass, oxygen is the third most abundant element in the universe after hydrogen and **8. helium** and the most abundant element by mass in the **9. Earth's crust**, making up almost half of the crust's mass. Free oxygen is too chemically reactive to appear on Earth without the **10. photosynthetic** action of living organisms, which use the energy of sunlight to produce elemental oxygen from water. Elemental O_2 only began to accumulate in the atmosphere after the evolutionary appearance of these organisms, roughly 2.5 billion years ago. Diatomic oxygen gas constitutes 20.8% of the **11. volume** of air.

Oxygen comprises most of the mass of living organisms (for example, about **12. _____** of the human body's mass). All major classes of structural molecules in living organisms, such as **13. _____**, **14. _____**, and fats, contain oxygen, as do the major **15. _____** compounds that comprise animal shells, teeth, and bone. Elemental oxygen is produced by cyanobacteria, algae and plants, and is used in **16. _____** for all complex life. Oxygen is **17. _____** to obligately anaerobic organisms, which were the dominant form of early life on Earth until O_2 began to accumulate in the atmosphere. Another form (allotrope) of oxygen, **18. _____**, helps protect the biosphere from **19. _____** with the high-altitude **20. _____**, but is a pollutant near the surface where it is a **21. _____** of smog. At even higher low earth orbit **22. _____** atomic oxygen is a significant presence and a cause of erosion for spacecraft.