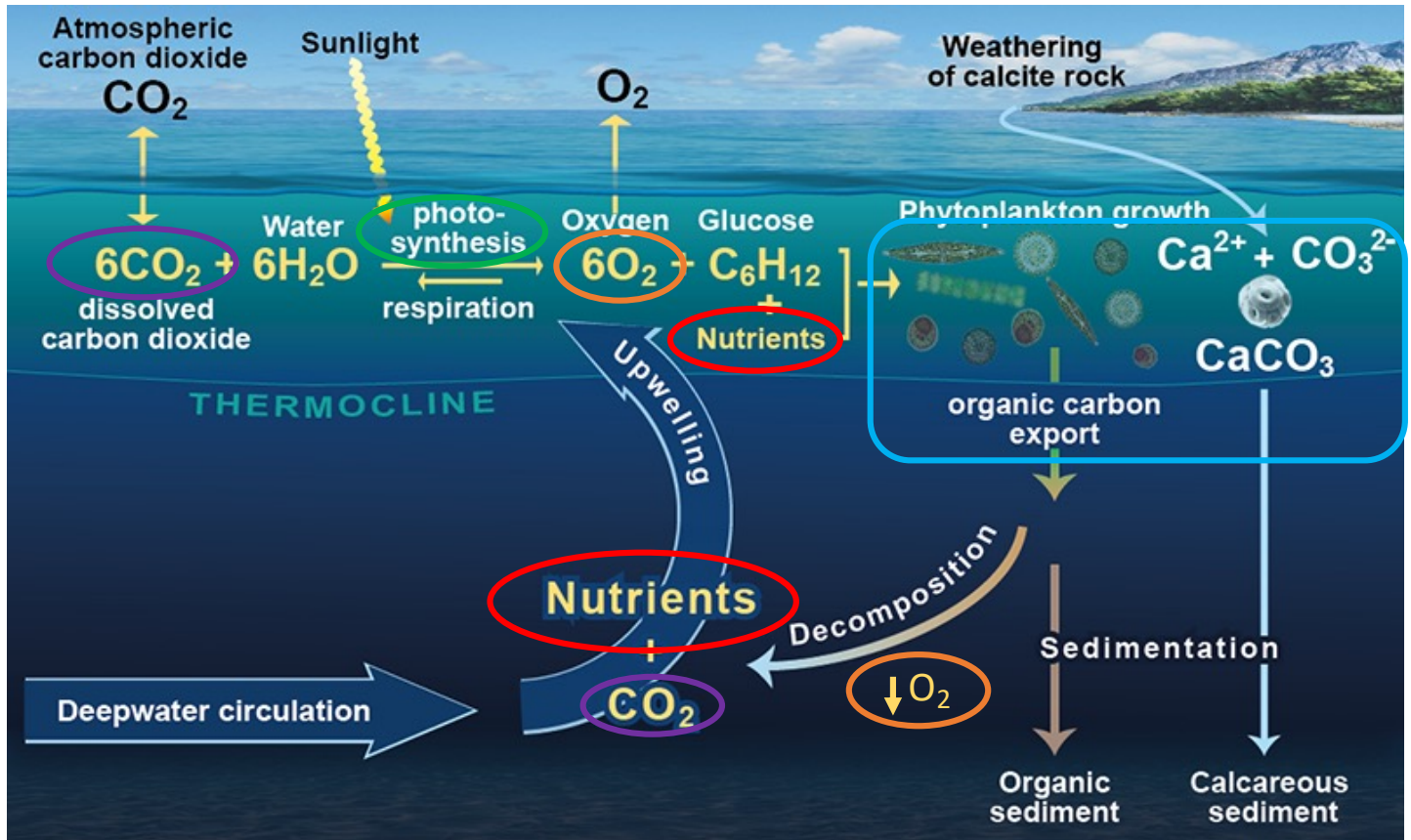


What do floats measure?



Particles:

Measuring the amount of particles in the ocean can help us understand the transfer of carbon from the surface to the deep ocean.

Chlorophyll:

phytoplankton use chlorophyll to capture energy from the sun. Measuring chlorophyll can be used to understand phytoplankton growth.

pH: when the ocean absorbs CO_2 , the pH decreases and the ocean acidifies. pH can also be used to estimate how much dissolved CO_2 is in the ocean, which is affected by air-sea exchange, biology, and ocean circulation and mixing.

NO_3^- Nitrate is an essential nutrient for photosynthesis. Nitrate, CO_2 , and other nutrients are consumed during photosynthesis, released back to the water column when organisms decompose, and transported by ocean circulation and mixing.

O_2 Oxygen is produced during photosynthesis and consumed when organisms are decomposed. Oxygen is also exchanged between the atmosphere and ocean surface. Oxygen is also transported by the ocean circulation and mixing.