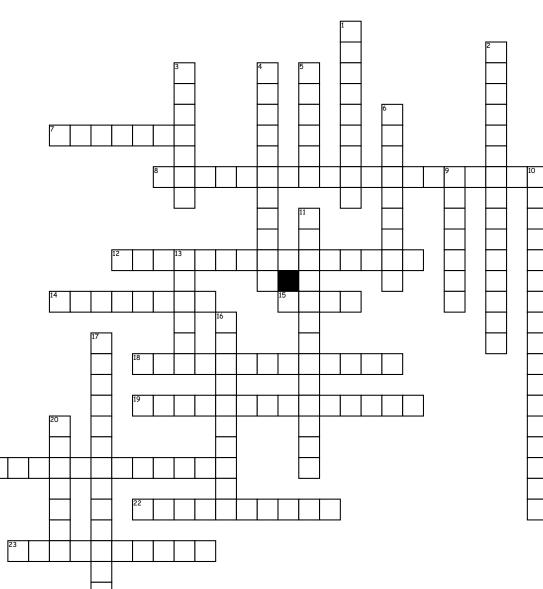
El Nino & La Nina



<u>Across</u>

7. a prolonged period of abnormally low rainfall; a shortage of water resulting from this.

8. is the water temperature close to the ocean's surface. The exact meaning of surface varies according to the measurement method used, but it is between I millimetre (0.04 in) and 20 metres (70 ft) below the sea surface.

12. large climate disturbances which are rooted in the tropical Pacific Ocean, and occur every 3 to 7 years. They have a strong impact on the continents around the tropical Pacific, and some climatic influence on half of the planet.

14. cover or submerge (a place or area) with water

15. describe both warm (El Niño) and cool (La Niña) ocean-atmosphere events in the tropical Pacific as well as the Southern Oscillation the atmospheric component of these phenomena.

18. a gradual increase in the overall temperature of the earth's atmosphere generally attributed to the greenhouse effect caused by increased levels of carbon dioxide, chlorofluorocarbons, and other pollutants. DD

19. abnormal weather pattern that is caused by the warming of the Pacific Ocean near the equator, off the coast of South America. This occurs when the normal trade winds weaken (or even reverse), which lets the warm water that is usually found in the western Pacific flow instead towards the east. 21. the largest of the Earth's oceanic divisions. It extends from the Arctic Ocean in the north to the Southern Ocean in the south and is bounded by Asia and Australia in the west and the Americas in the east.

22. a half of the earth, usually as divided into northern and southern halves by the equator, or into western and eastern halves by an imaginary line passing through the poles. a half of the celestial sphere.

23. a thing predicted; a forecast.

Down

 a mass of mud and other earthy material that is falling or has fallen down a hillside or other slope.

 $\ensuremath{\textbf{2}}$. process whereby the degree of hotness of a body (or medium) changes.

3. the state of the atmosphere at a place and time as regards heat, dryness, sunshine, wind, rain, etc.

4. the process of a liquid changing into a gas.

5. a cooling of the water in the equatorial Pacific that occurs at irregular intervals and is associated with widespread changes in weather patterns complementary to those of El Niño, but less extensive and damaging in their effects.

a rising of seawater, magma, or other liquid.
something that deviates from what is standard, normal, or expected

10. El Niño (La Niña) is a phenomenon in the equatorial Pacific Ocean characterized by a five consecutive 3-month running mean of sea surface temperature (SST) anomalies in the Niño 3.4 region that is above (below) the threshold of $+0.5^{\circ}C$ ($-0.5^{\circ}C$).

11. a continuous, directed movement of seawater generated by forces acting upon this mean flow, such as breaking waves, wind, the Coriolis effect, cabbeling, temperature and salinity differences, while tides are caused by the gravitational pull of the Sun and Moon. DDD

13. an irregularly occurring and complex series of climatic changes affecting the equatorial Pacific region and beyond every few years, characterized by the appearance of unusually warm, nutrient-poor water off northern Peru and Ecuador, typically in late December.

16. a wind blowing steadily toward the equator from the northeast in the northern hemisphere or the southeast in the southern hemisphere, especially at sea. Two belts of trade winds encircle the earth, blowing from the tropical high-pressure belts to the low-pressure zone at the equator.

17. the action or process of precipitating a substance from a solution. rain, snow, sleet, or hail that falls to the ground.

20. the weather conditions prevailing in an area in general or over a long period.