

THE EARTH'S ATMOSPHERE - KEY

1. What keeps the atmosphere near the surface of the earth ? **gravity**
2. How does the atmosphere protect us ? **it filters dangerous rays from the sun; it prevents heat from escaping**
3. How can the atmosphere change the skies ? **it creates rainbows, red sunsets, turns the sky blue**
4. What is the lower part of the atmosphere made up of ? **77% nitrogen and 21% oxygen; other gases in very small amounts**
5. What kind of gases do people create ? **methane, carbon monoxide, CFCs**
6. Why don't we collapse under the weight of the atmosphere ? **we have pressure inside us, so we don't feel it**
7. How far into the sky does the troposphere reach ? **19 km at the equator and 9 km at the poles**
8. How do temperatures change in the troposphere ? **they drop about 0.7° to 1.0 ° Celsius for every 100 metres.**
9. What is the jet stream ? **areas with very high wind speeds**
10. What do people have to wear when they climb high mountains ? Why ? **oxygen masks because the air gets thinner and it is harder to breathe**
11. Why do temperatures change in the stratosphere ? **ozone absorbs the ultraviolet light from the sun and changes it into heat**
12. What would happen without the ozone layer ? **it would cause skin problems, harm animals and plant life**
13. How far into space does the thermosphere reaches? What can we find there ? **about 400 km; satellites**
14. How does gravity change the farther into space you get ? **gravity gets weaker and particles are farther apart**
15. How can a volcanic eruption change our atmosphere ? **ash, lava and hot gases erupt and can block sunlight from getting to the surface; change in temperatures**
16. When was the ozone layer first discovered ? **by French scientists in the early 20th century.**
17. Which part of the Earth was especially damaged by a thinning ozone layer ? **the Antarctic continent.**
18. What is the Montreal Protocol? **an agreement signed by countries to ban CFCs and other dangerous chemicals**