Introduction to the subject

Description - of particular characteristics

THE ATMOSPHERE

READING, UNDERSTANDING AND RESPONDING

10. can read, understand and respond to a description

The atmosphere is a thin blanket of gases which is wrapped around our planet, Earth. The two main gases in the atmosphere are nitrogen (78%) and oxygen (21%). The remaining 1% includes a number of other gases and water vapour. Without the atmosphere, there would be no life as we know it on Earth.

There are four layers in the atmosphere. They are the troposphere, the stratosphere, the mesosphere and the thermosphere. The air gets thinner and colder as it goes up higher in the atmosphere.

The troposphere is the first layer. It reaches 12 kilometres above Earth and contains three-quarters of the atmosphere's gases. It is thick and like soup. Most weather is here in the troposphere.

The second layer is the stratosphere, which is found 12-50 kilometres above Earth. It contains a thin layer of ozone, a very important gas. Ozone protects our planet from the harmful ultraviolet rays from the Sun. The ozone layer in the stratosphere has been damaged by pollution from Earth. It is too hard for humans to breathe in the stratosphere, because there's not enough oxygen. To enable us to breathe at this height, the air must be pressurised, as it is in planes.

The third layer is the mesosphere which is 50-80 kilometres above Earth. Meteors from space burn up in the mesosphere.

The fourth layer is the thermosphere, 80-300 kilometres above Earth and beyond this is outer space.

Language Features

Use of nouns that refer to a particular thing, e.g. our planet, the Earth.

Use of technical nouns, e.g. stratosphere

Note. It is very important to learn that prefixes and suffixes can be used to help build understanding of word families - e.g. -sphere, stratos-

Use of pronouns to track the subject, e.g. it, us

Use of describing adjectives, e.g. thin, and determiners - e.g. other gases

Use of detailed noun groups/phrases, e.g. the two main gases, the harmful ultra-violet rays from the Sun (the prepositional phrase - from the Sun - is embedded in or part of, the noun phrase)

Use of relating verbs, e.g. is, has

Use of adverbial phrases, e.g. from Earth, above the Earth, at this height

Use of passive voice, e.g. It is found in 12-50 kms above the Earth, the air must be pressurised

Text organisation - Most sentences begin with a similar structure (ie. a similar grammatical theme) - which orders the information, first-fourth layer