

5. Composition and Structure of Atmosphere

Worksheet 1

(A) Fill in the blanks to complete the sentences:

1. The density of air _____ as one goes to high altitudes.
2. _____ and _____ are the two main gases in the atmosphere.
3. _____ is needed by plants for their survival.
4. _____ is responsible for all forms of condensation and precipitation.
5. Plants cannot use _____ directly and obtain it from the soil.
6. The strong winds in the stratosphere are called _____.
7. _____ are electrically charged particles in the _____, which is a part of the thermosphere.
8. Meteors entering Earth from space burn up in the _____.
9. The _____ merges with interplanetary space.
10. The air we breathe is only available in the _____.

(B) Why is the atmosphere important for the growth and development of life on Earth?

ANSWERS TO WORKSHEET 1

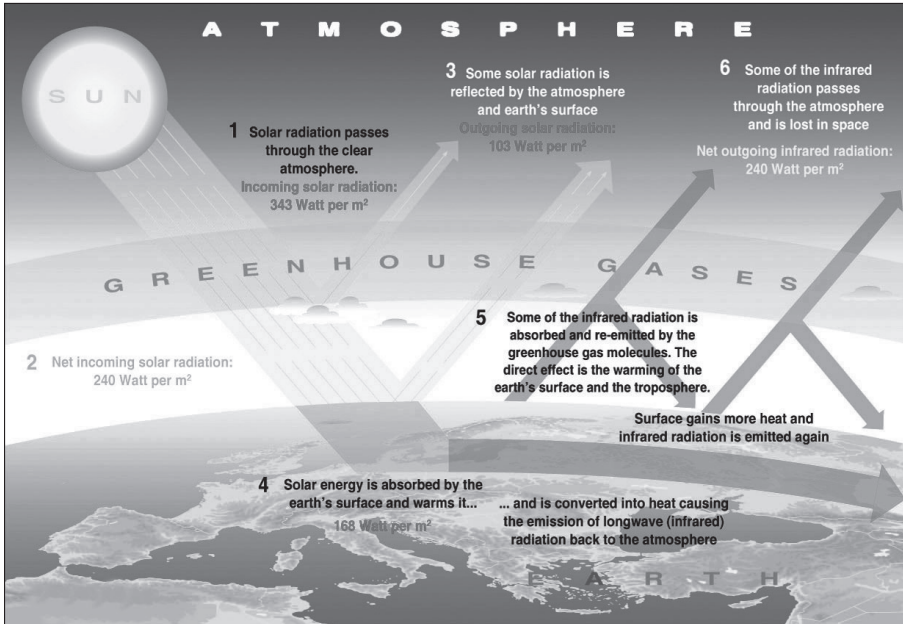


- A. 1. decreases 2. nitrogen; oxygen 3. carbon dioxide 4. water vapour 5. nitrogen
6. jet streams 7. ions; ionosphere 8. mesosphere 9. exosphere 10. troposphere
- B. The atmosphere is important for life to grow and develop on Earth because:
- (i) it protects us from the Sun's harmful ultraviolet rays.
 - (ii) it controls extremes of daytime and night time temperatures through the greenhouse effect.
 - (iii) it protects us from meteors from outer space.
 - (iv) weight of air and the pressure it exerts keeps it pressed down in contact with land and water.
 - (v) it is responsible for change in the weather.
 - (vi) gases like oxygen and carbon dioxide make life on Earth possible.
 - (vii) ionosphere helps wireless and long distance communication.

- (viii) sound waves can only travel through air.
- (ix) sun's energy makes atmosphere dynamic.

Worksheet 2

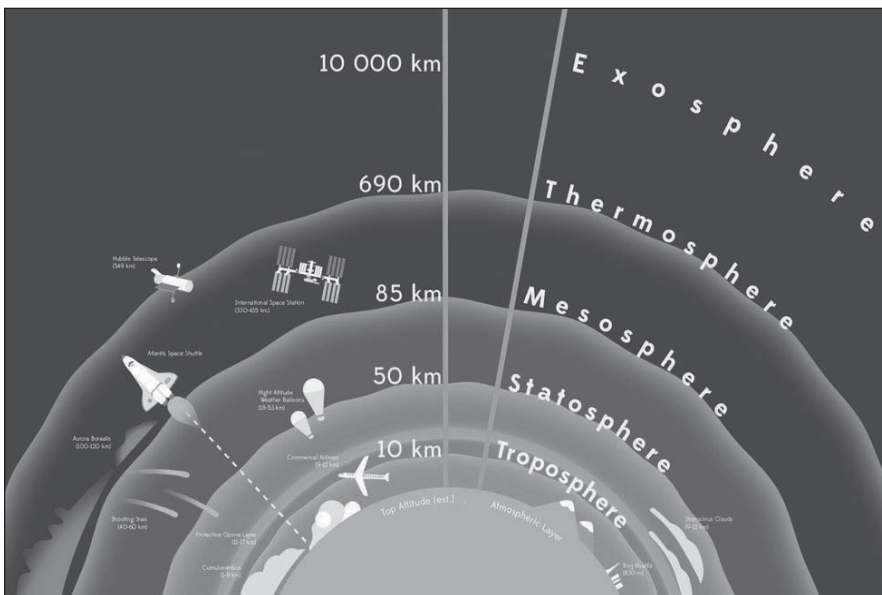
(A) Draw the vertical structure of the atmosphere.



(B) Below each of the pictures given below, write what they show about the effects of global warming:

ANSWERS TO WORKSHEET 2

A.



Vertical Structure of the Atmosphere

B.



Rise in sea levels



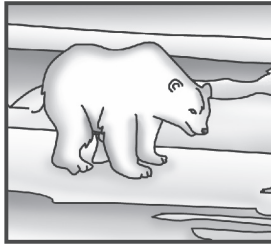
Extinction of animals



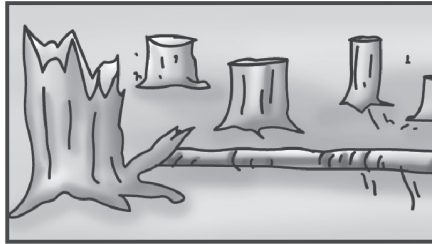
Flooding of low lying areas



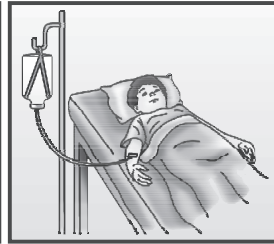
Loss of homes



Melting of the ice-caps of North and South poles



Extinction of plants



Spread of diseases