Homework - Chapter01 - The Earth's Atmosphere

1) List the four most abundant gases in today's atmosphere.
2) Which one of the four most abundant gases shows the greatest variation from place to place at the earth's surface? What are the maximum and minimum concentrations of this gas? Give answer in percent of total volume.
3a) Why does air pressure always decrease with increasing height above the surface?
4a) What atmospheric layer contains all of our weather?
4b) In what atmospheric layer do we find the highest concentration of ozone?
4c) In what atmospheric layer do we find the highest average air temperature?

5) List seven common weather elements.
6) How does weather differ from climate?
7) When someone says "the wind direction today is southerly," does this mean the wind is blowing towards the south or from the south?
is blowing towards the south of from the south:
8) Describe how surface winds generally blow around regions of low and high pressure in the Northern Hemisphere.
9) Weather systems in the middle latitudes tend to move in which compass direction? Towards the north, towards the east, towards the south, or towards the west?