

1-17 - See notes.

18. a) 240.7 K b) 127°C c) 371.4 K
d) -41.7°C

19. a) 69.4 kPa, ~~0.685~~ 0.685 atm, 0.685 bar, 685 mbar

b) 654.96 mmHg, 0.862 atm, 0.862 bar, 862 mbar

c) 2.3 atm, 2300 mbar, 232.99 kPa, 1748 mmHg

d) 1.4 bar, 1400 mbar, 141.82 kPa, 1064 mmHg

20. lungs expand (explode), lower pressure & higher temp = larger volume

21. ~~0.254~~ 254.6 ml

29. 0.72 atm -

22. 60 ml

30. 1058.75 K

23. 737.8 ml

31. 39.19 L

24. 2334.98 ml

$$32. \frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$

25. 894 K

$$V_2 = \frac{P_1 V_1 T_2}{P_2 T_1}$$

26. 1059.5 L

27. 102.4 kPa