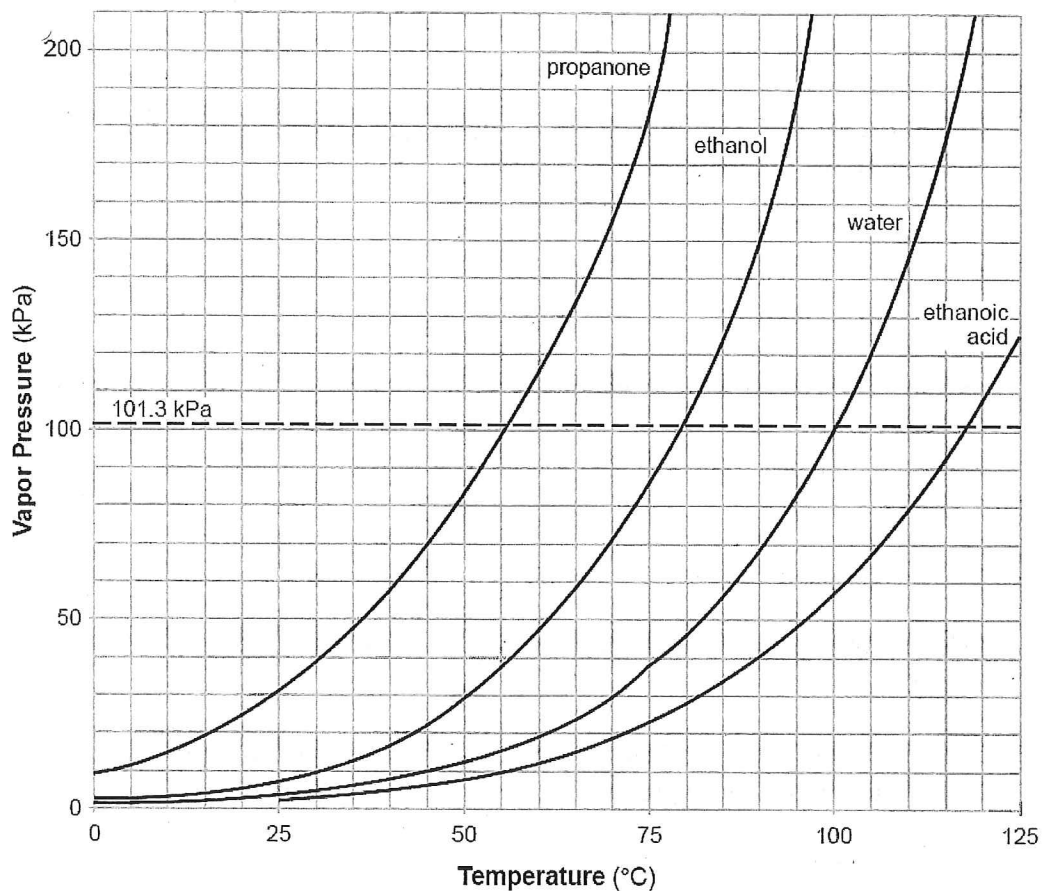


# Vapor Pressure of Liquids Worksheet

**Table H**  
**Vapor Pressure of Four Liquids**



1. What is the normal boiling point of each substance? Draw structural formulas for each substance below.

bp			

2. At what temperature will ethanol boil if the pressure is 50 kPa? \_\_\_\_\_
3. Which compound has the strongest intermolecular forces? \_\_\_\_\_
4. Which compound has the weakest intermolecular forces? \_\_\_\_\_

5. What is the change in the boiling point of water when the pressure is increased from 1 atm (101kPa) to 2 atm (202 kPa)?
6. What is the vapor pressure of each liquid at 75°C?
7. When we say that a compound has a “high vapor pressure”, what does that mean in terms of intermolecular forces?
8. When a compound has low vapor pressure, it is sometimes called “volatile”. Why?
9. When propanone boils at standard pressure, what is the vapor pressure of water?
10. When boiling water in a kettle is cooled to room temperature (25°C), what is the change in the vapor pressure?
11. When water boils at standard pressure, what is the vapor pressure of ethanoic acid?
12. At 50°C, what is the vapor pressure of each substance?

propanone	
ethanol	
water	
Ethanoic acid	

13. What temperature will each substance boil if the atmospheric pressure is 80 kPa?

propanone	
ethanol	
water	
Ethanoic acid	