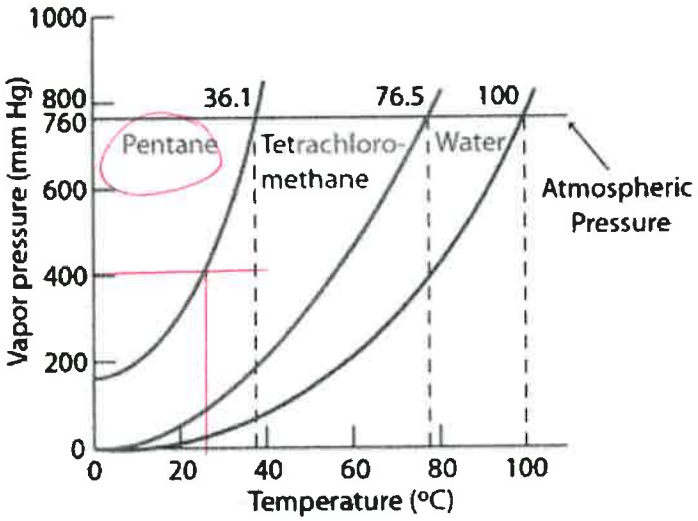
Quiz 8.3 – Liquids and Solids

Name: Key

**Question 1**

Use the chart of vapor pressures below to determine the chemical compound with the *weakest* intermolecular forces, and find the boiling point of that compound if the ambient barometric pressure is 400 $mmHg$




Pentane

about 24 °C

**Question 2**

Below are qualitative descriptions of five solids. Classify each solid as amorphous, ionic crystalline, molecular crystalline, metallic crystalline, or covalent network solid

- This solid has a high melting point and conducts electricity in both the liquid and solid phases

  Metallic

- This solid is an electrical insulator, and becomes soft and pliable over a temperature range rather than exhibiting a sharp melting point

  Amorphous

- This solid is composed entirely of non-metal atoms. It has a very high melting point and is very hard. It does *not* easily cleave along planes

  Covalent Network

- This solid is an insulator in both the solid and liquid phases. It has a moderate melting point

  Molecular

- This solid is an insulator, but conducts electricity when melted. It has a high melting point. The solid easily cleaves along planes

  Ionic