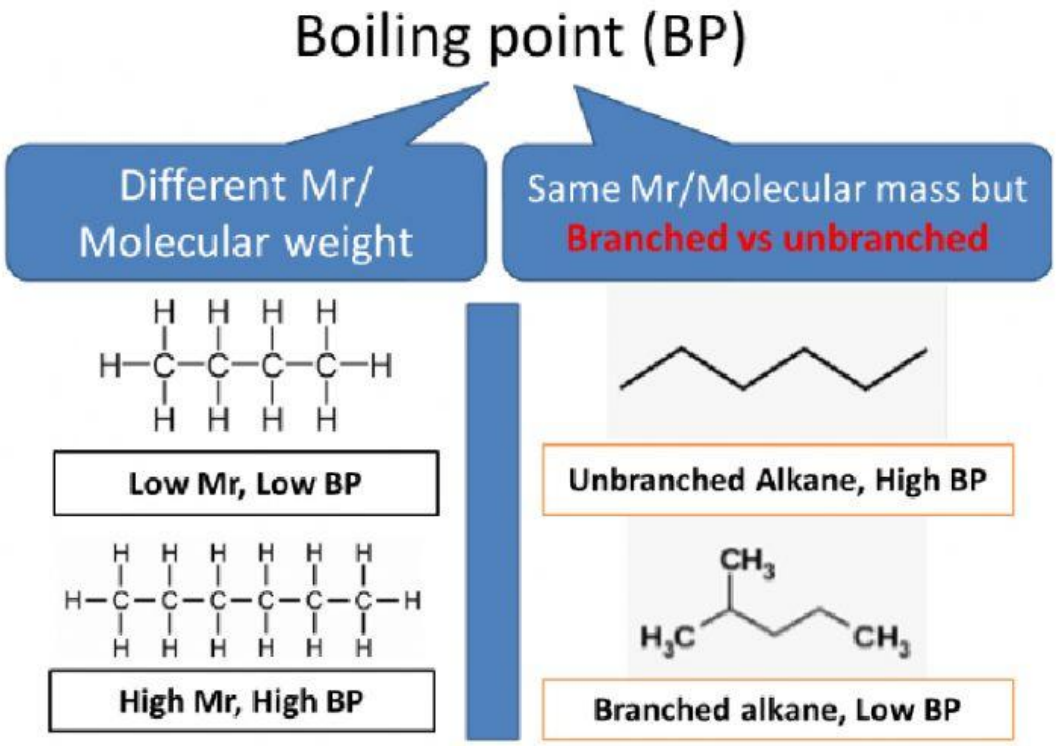
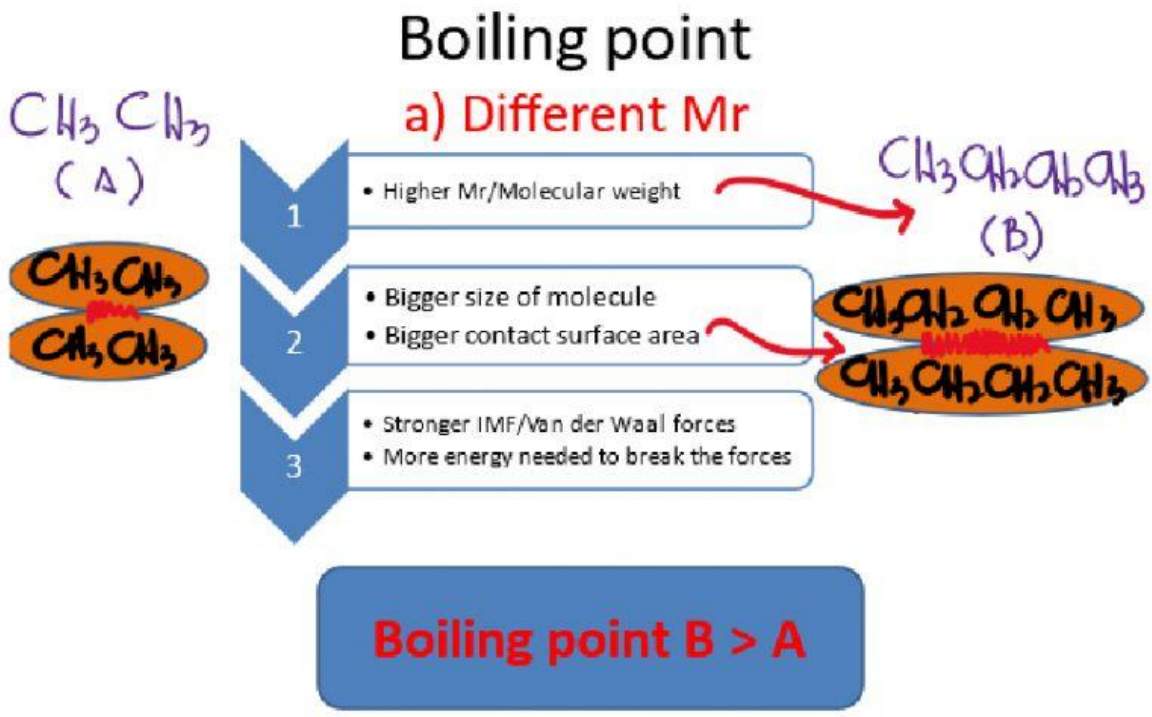
Tutorial Physical properties





Note: **Mr = Relative molecular weight**

All alkanes has London Dispersion forces as its IMF

Physical Properties

1. Arrange the following molecules ascending order of boiling point. Explain your answer.

a) octane and heptane

Octane has _____ Mr than heptane.

Octane has _____ molecule than heptane.

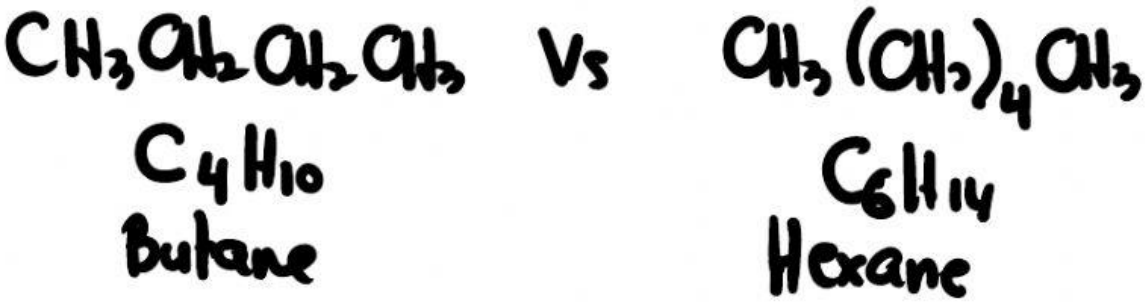
Octane has _____contact surface area than heptane.

_____ has stronger Intermolecular forces than _____.

_____energy is needed to break the forces in _____.

Higher boiling point for _____.

b) Butane and Hexane



Hexane has _____ Mr than butane.

Hexane has _____ molecule than butane.

Hexane has _____ contact surface area than butane.

_____ has stronger Intermolecular forces than _____.

_____energy is needed to break the forces in _____.

Higher boiling point for _____.

c) Cyclopropane vs Cyclopentane

Cyclopentane has _____ Mr than cyclopropane.

Cyclopentane has _____ molecule than cyclopropane.

Cyclopentane has _____ contact surface area than cyclopropane.

_____ has stronger Intermolecular forces than _____.

_____energy is needed to break the forces in _____.

Higher boiling point for _____.

d)

Pentane has _____ Mr than heptane.

Pentane has _____ molecule than heptane.

Pentane has _____ contact surface area than heptane.

_____ has stronger Intermolecular forces than _____.

_____energy is needed to break the forces in _____.

Higher boiling point for _____.