



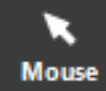
Class X Academic Program -2020

Chemistry

Prepared by : Sadat Ahmed Dipro

আজ থেকে ৫০০-৬০০ মিলিয়ন বছর আগে আমাদের পৃথিবী কেমন ছিল ?

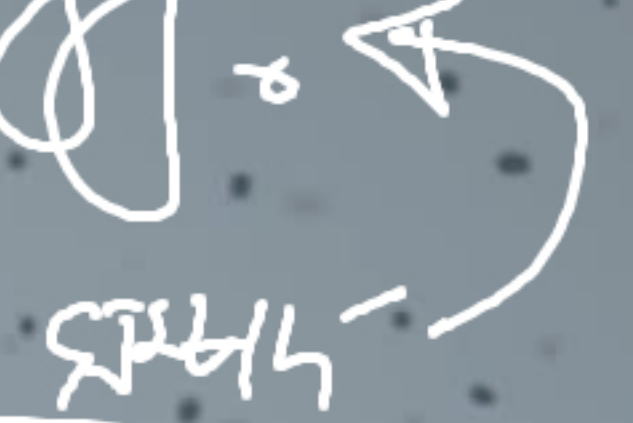




জীবশ্ম জ্বালানি

energy!

শক্তি সঞ্চয়



জীবাস্ম জ্বালানি তৈরি হতে কি কি প্রয়োজন ?



ORGANIC MATTER

জীব

তাপ



TEMPERATURE



TIME

Million years

চাপ



PRESSURE CONDITIONS



ଜୀବାશ୍ମ ଜ୍ୱାଳାନି କି କି ?



COAL

କଞ୍ଚା



OIL

ଫେଟ୍‌ସିଲିଭୁଅସ



NATURAL GAS

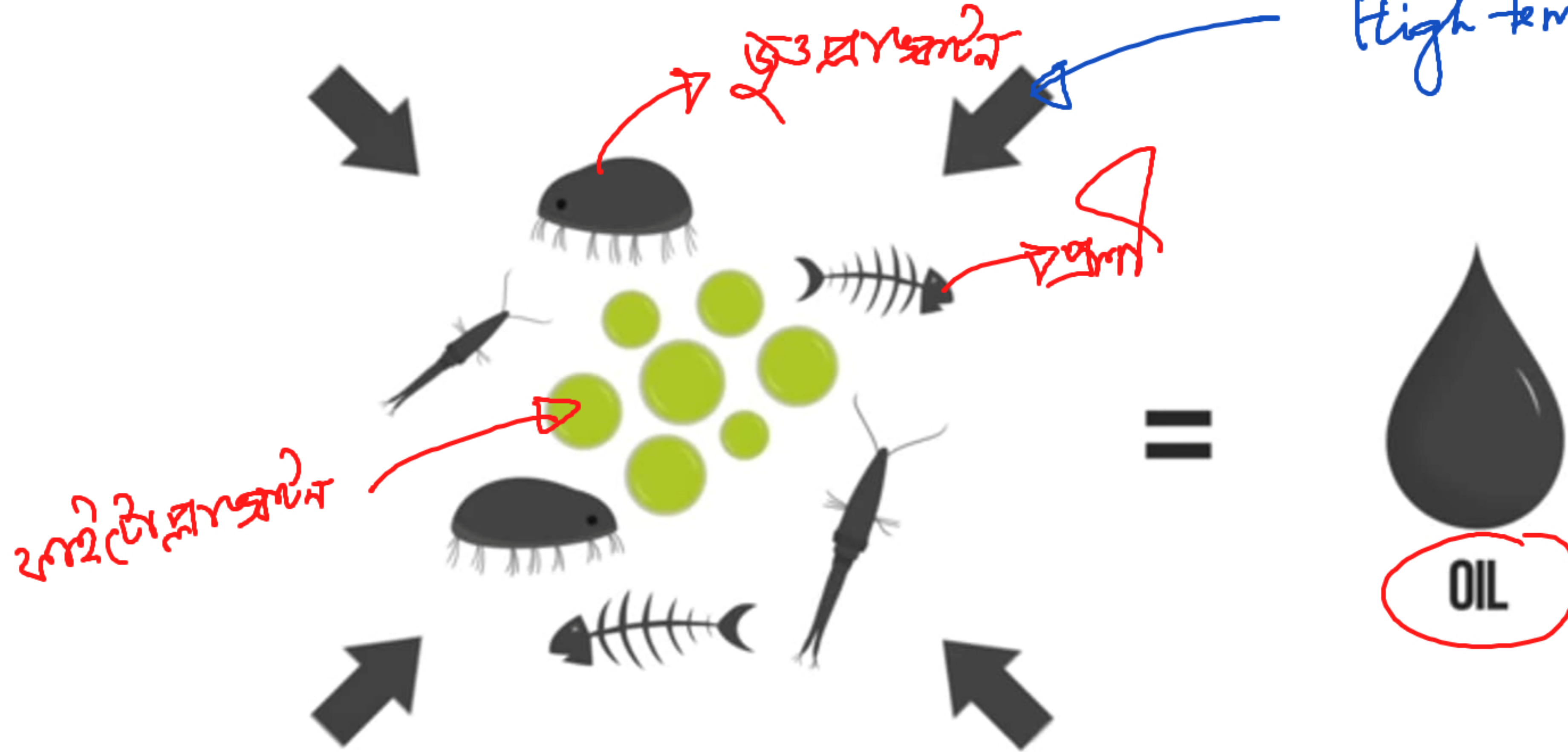


ଅନୁଜ (ଅ, ଅଂ)



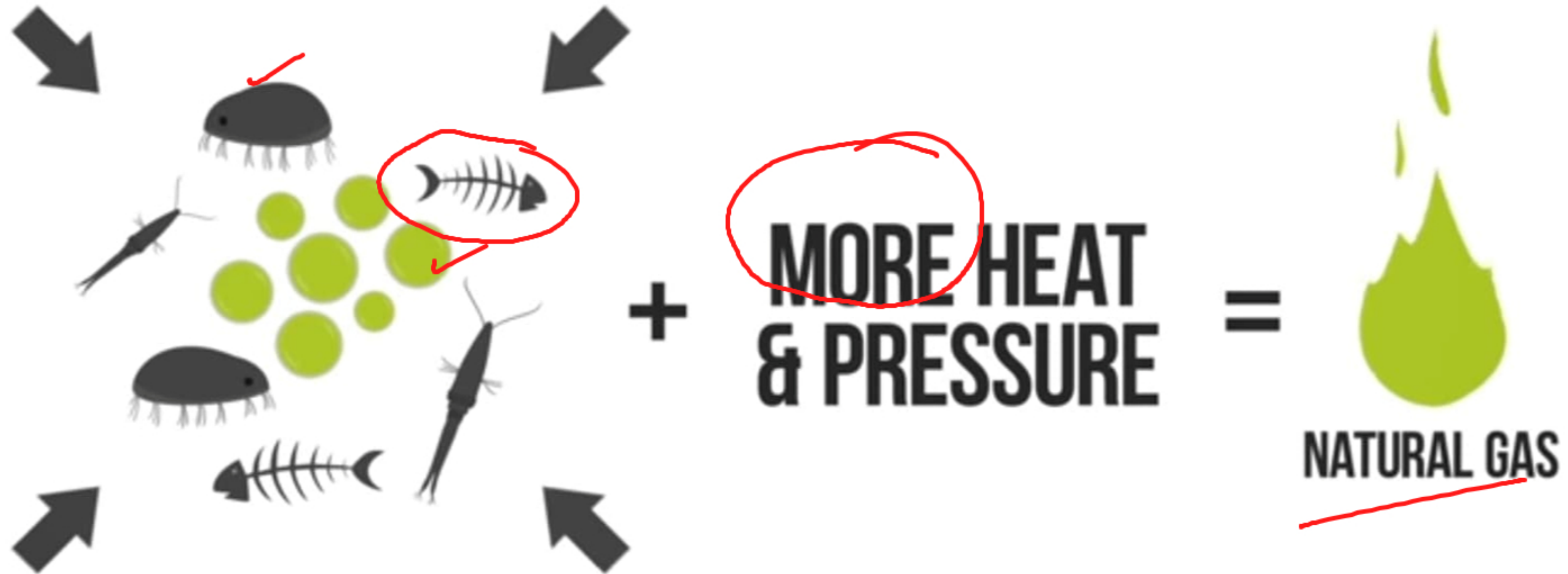


High temp. & pressure





same → soil



identify?
collect

জীবাস্ব জ্বালানি উত্তোলন

energy



Activate Windows
Go to Settings to activate Windows.



Mute



Start Video



Participants 531



Q&A 28



Polls



New Share



Pause Share



Annotate



Remote Control



More 54



Mouse



Select



Text



Draw



Stamp



Spotlight



Eraser



Format



Undo



Redo



Clear



Save

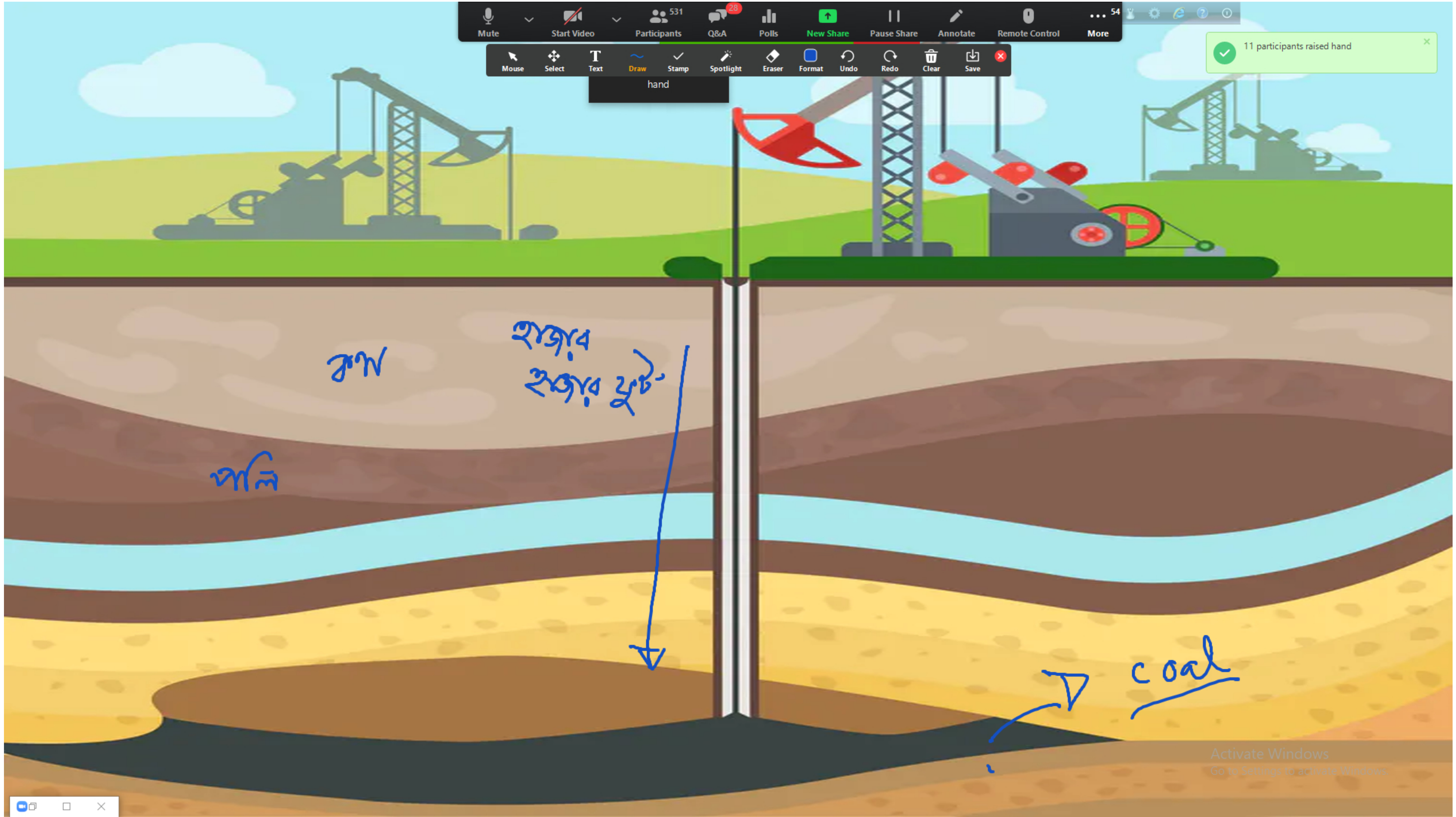


hand

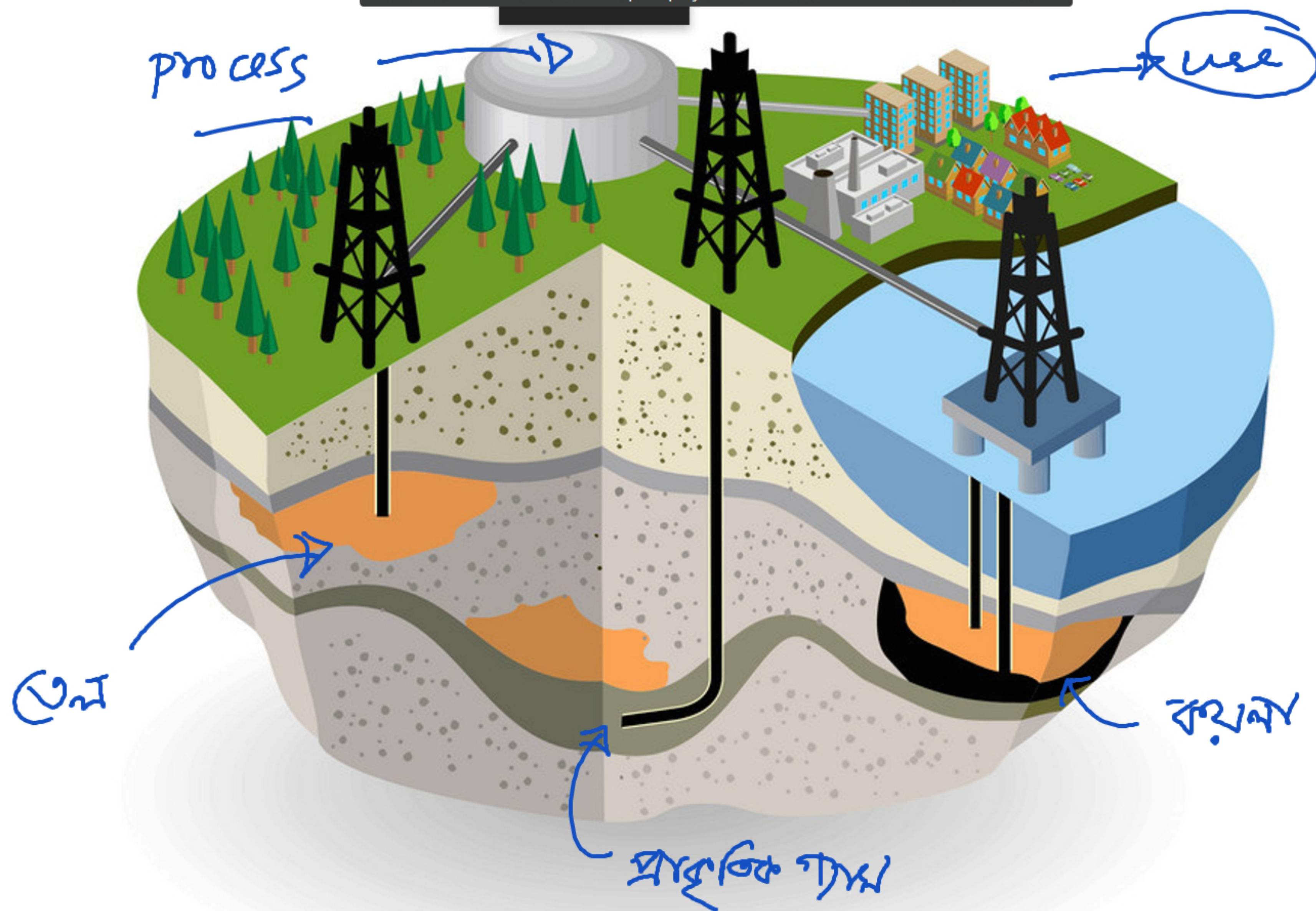


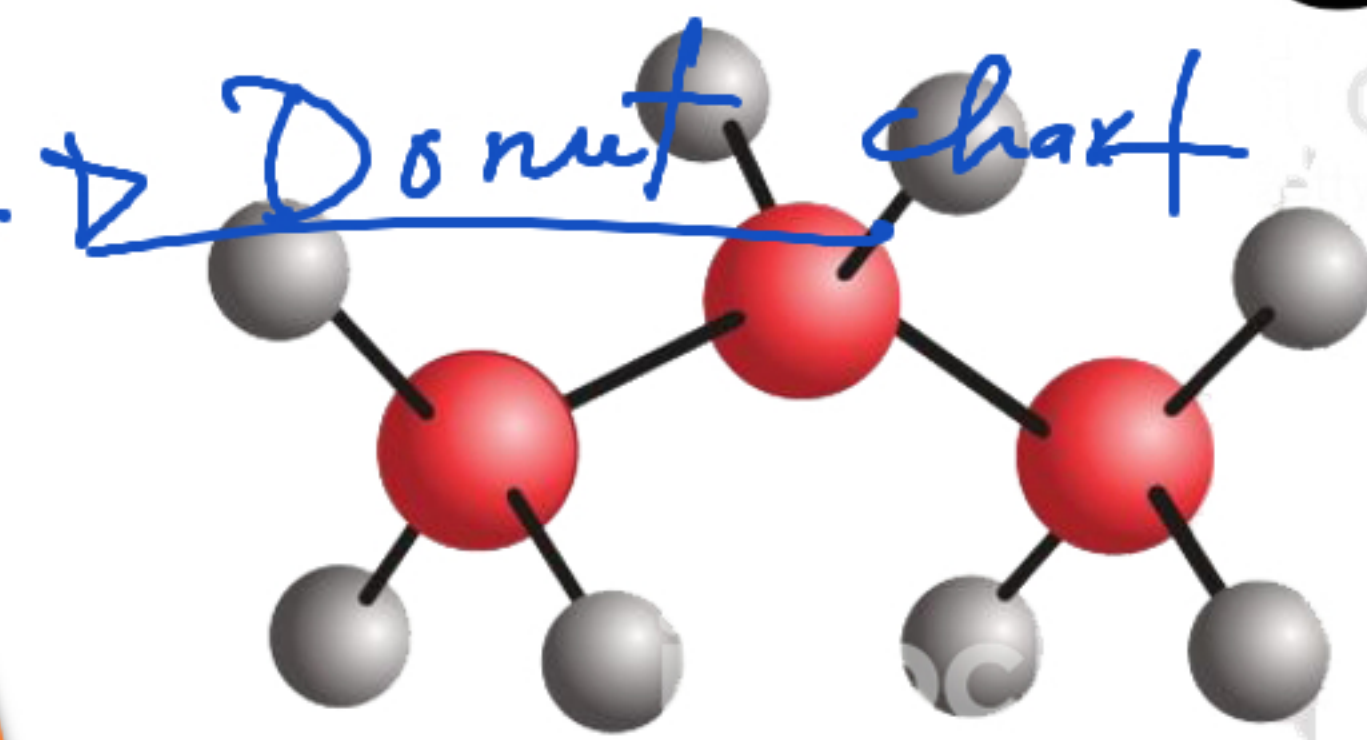
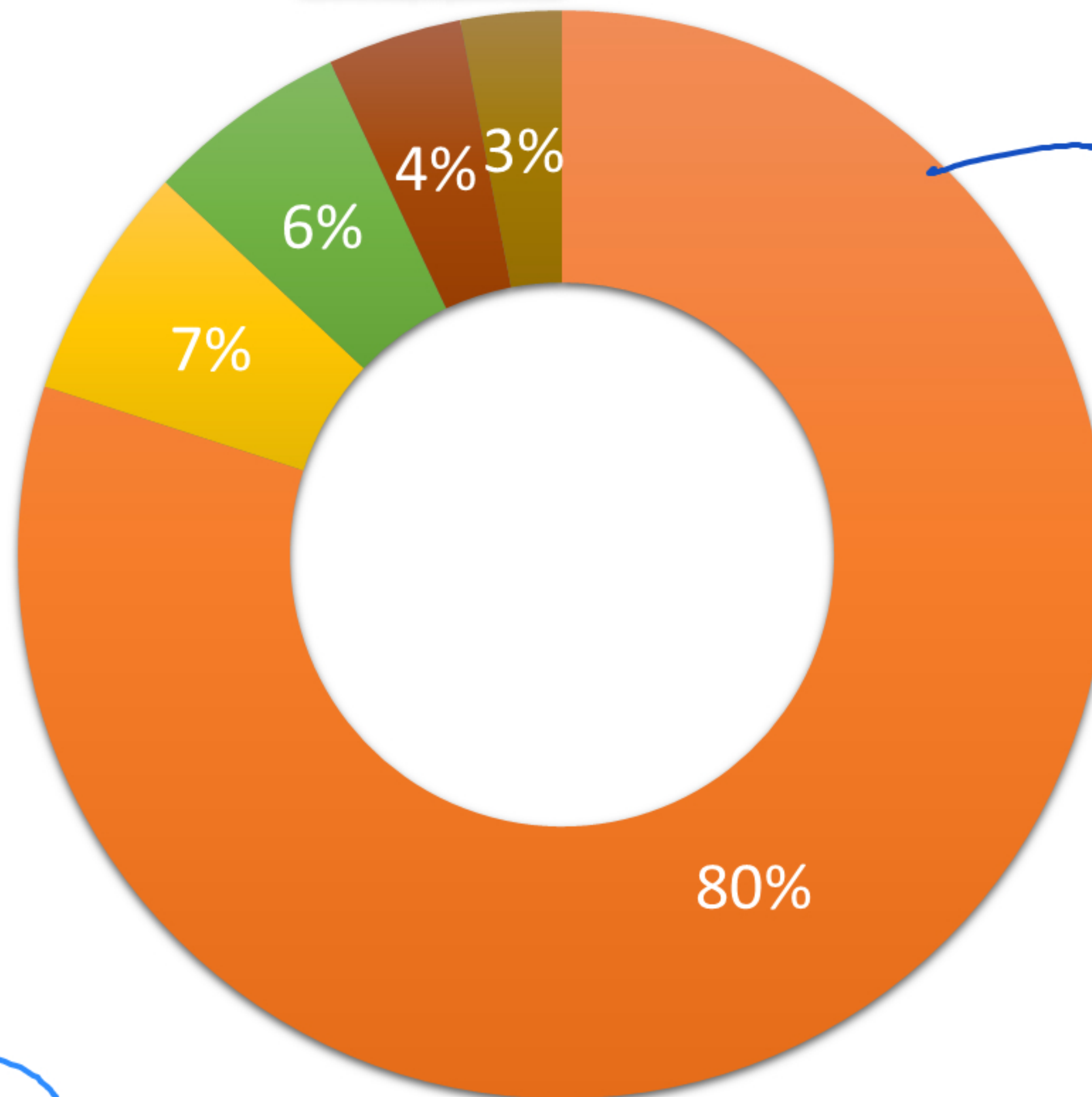
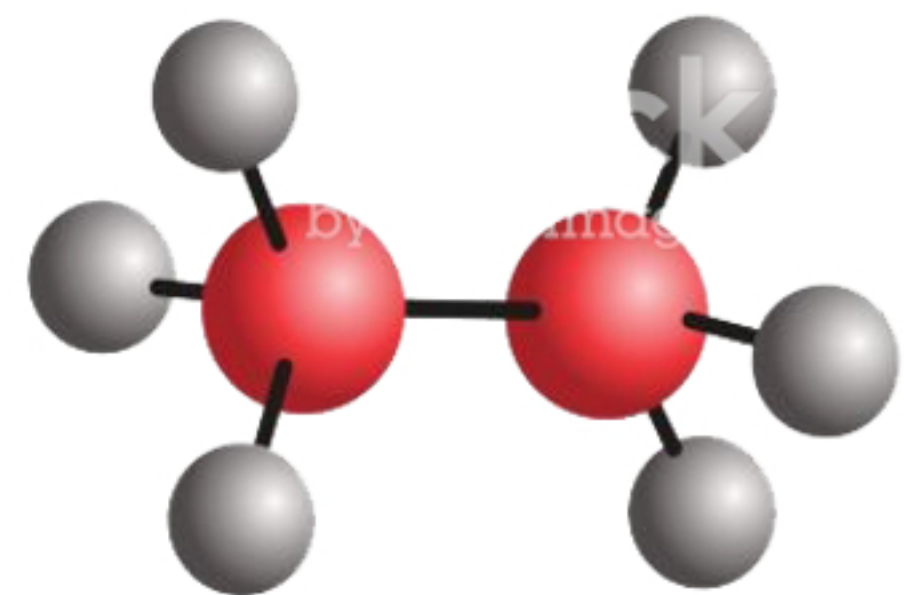
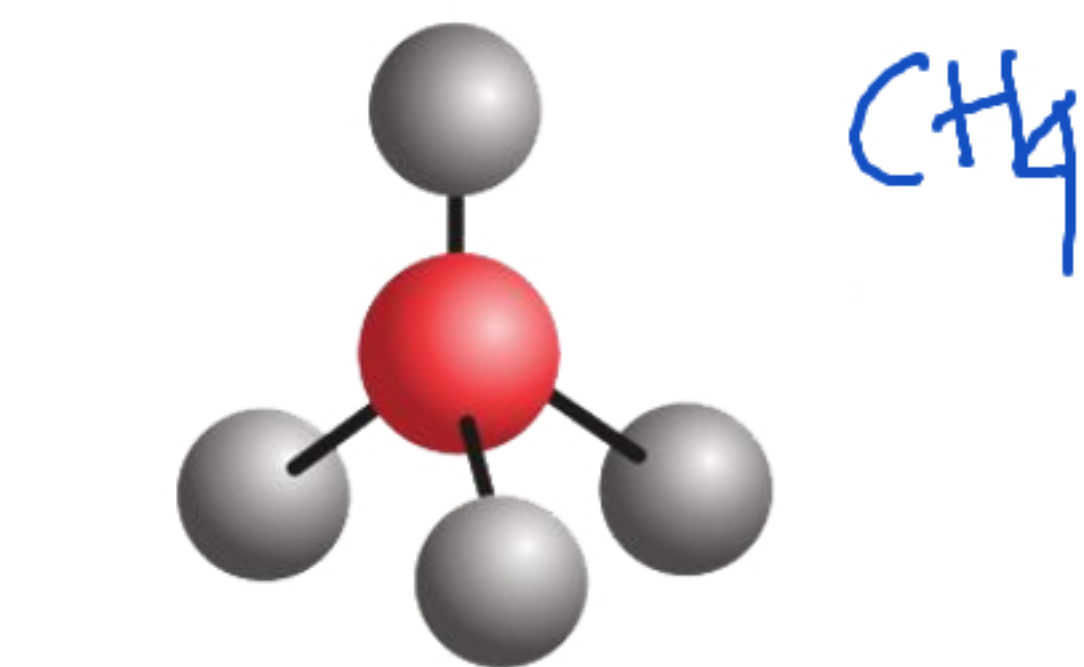
11 participants raised hand



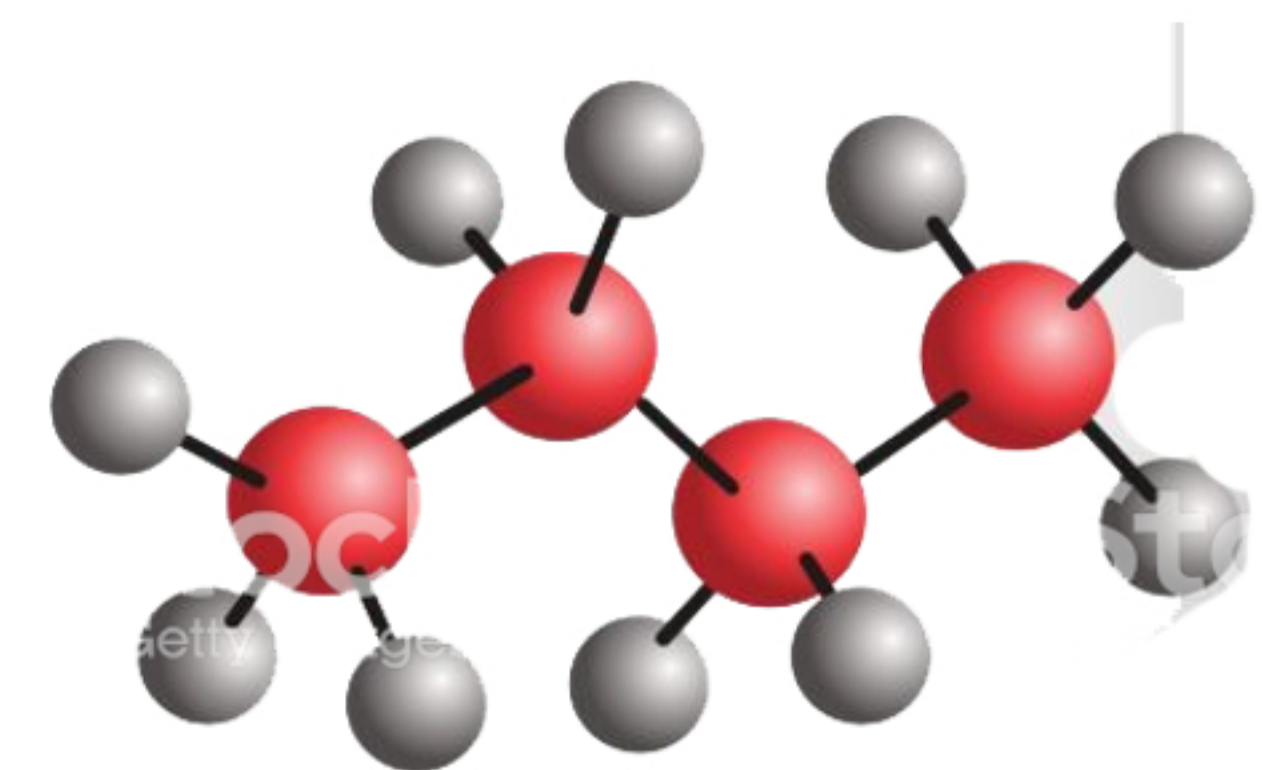


Activate Windows
Go to Settings to activate Windows.



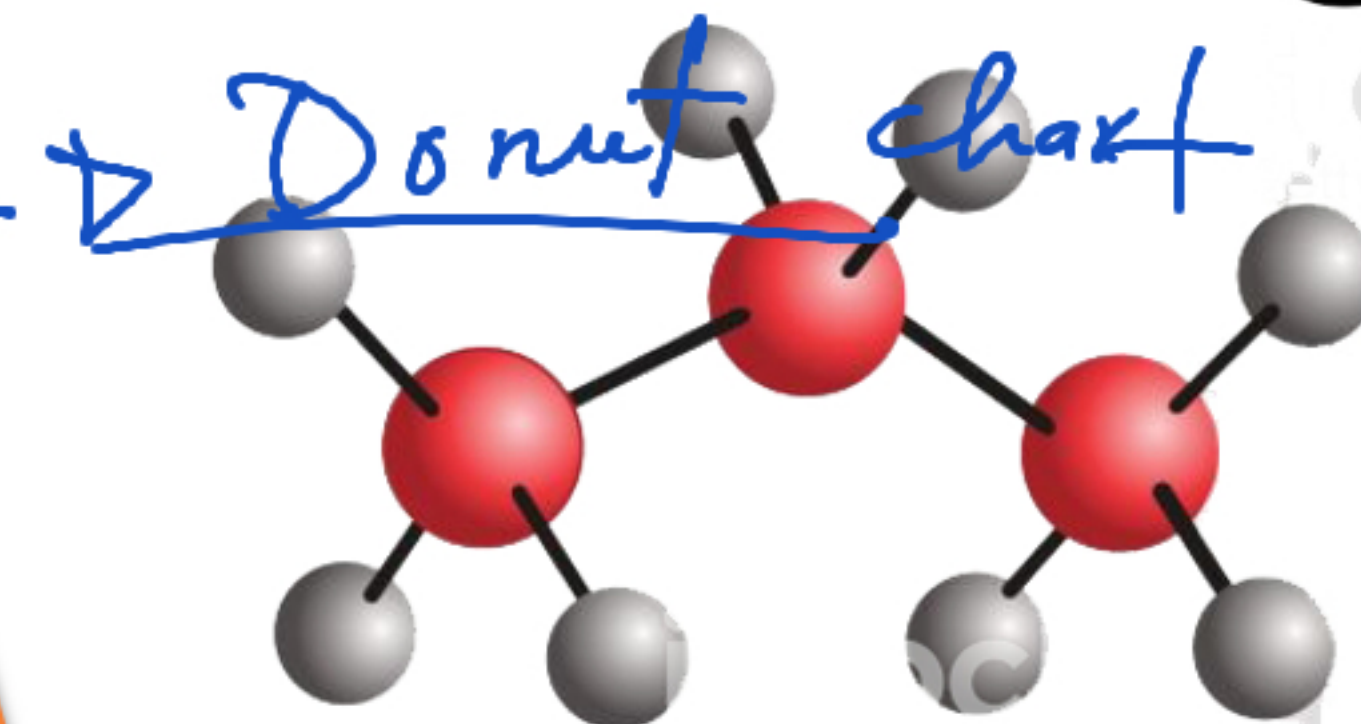
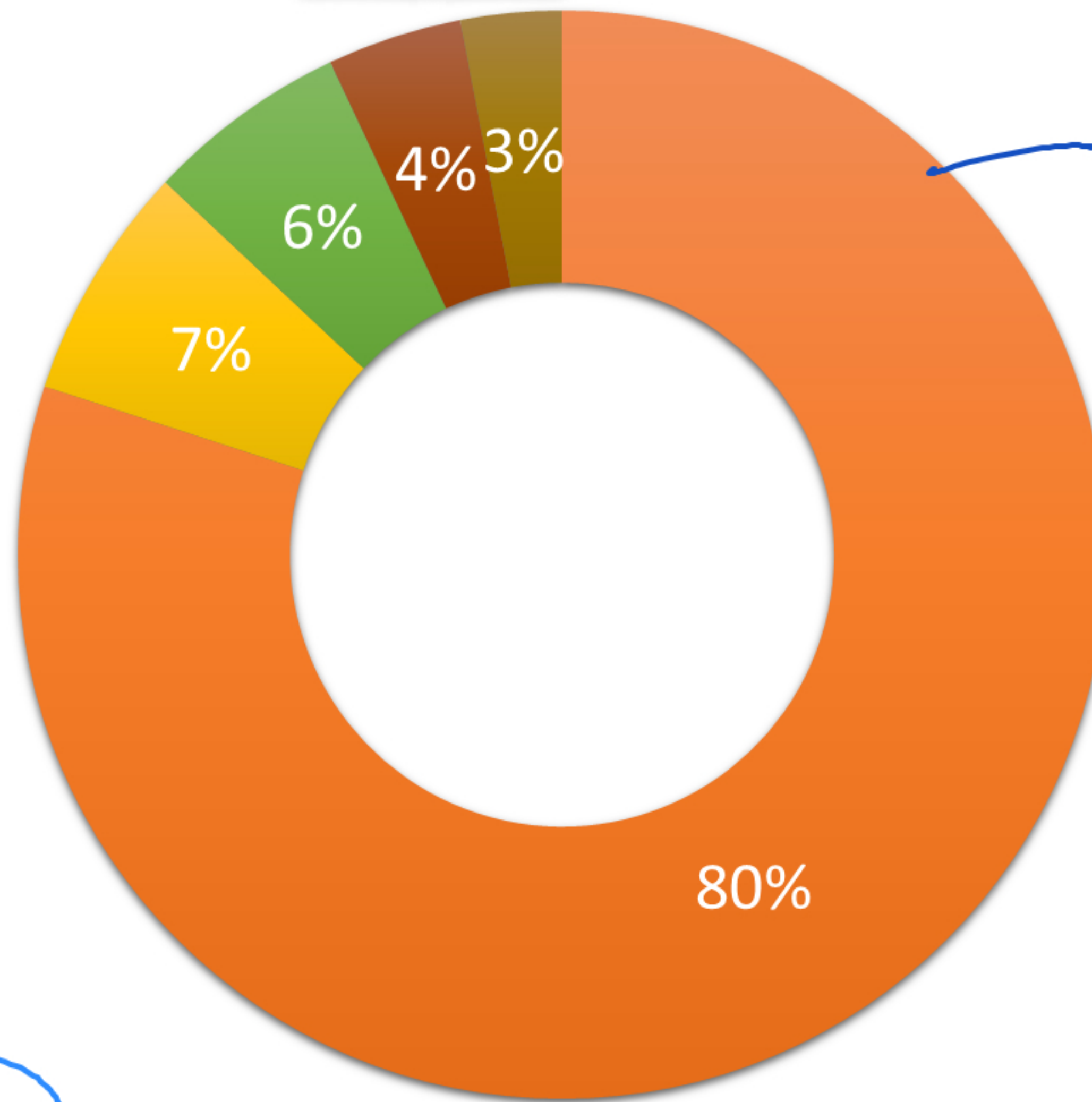
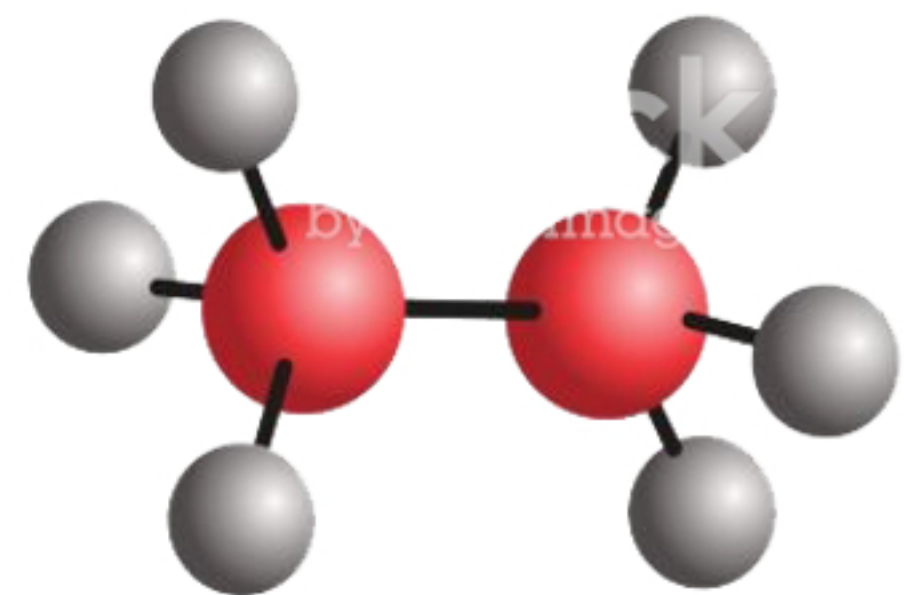
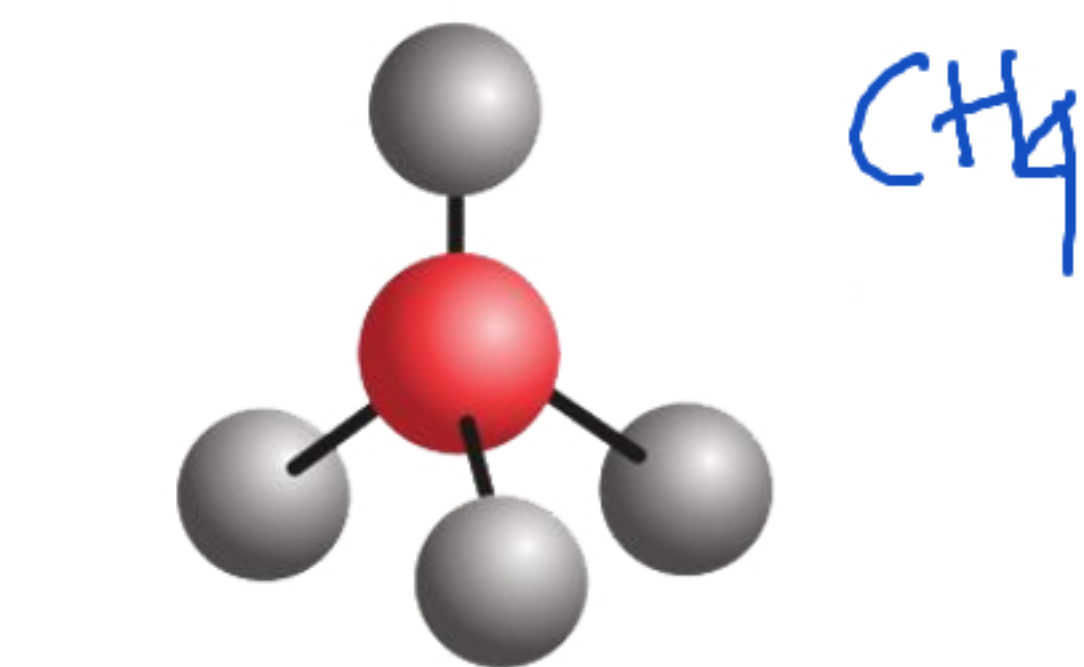


propane

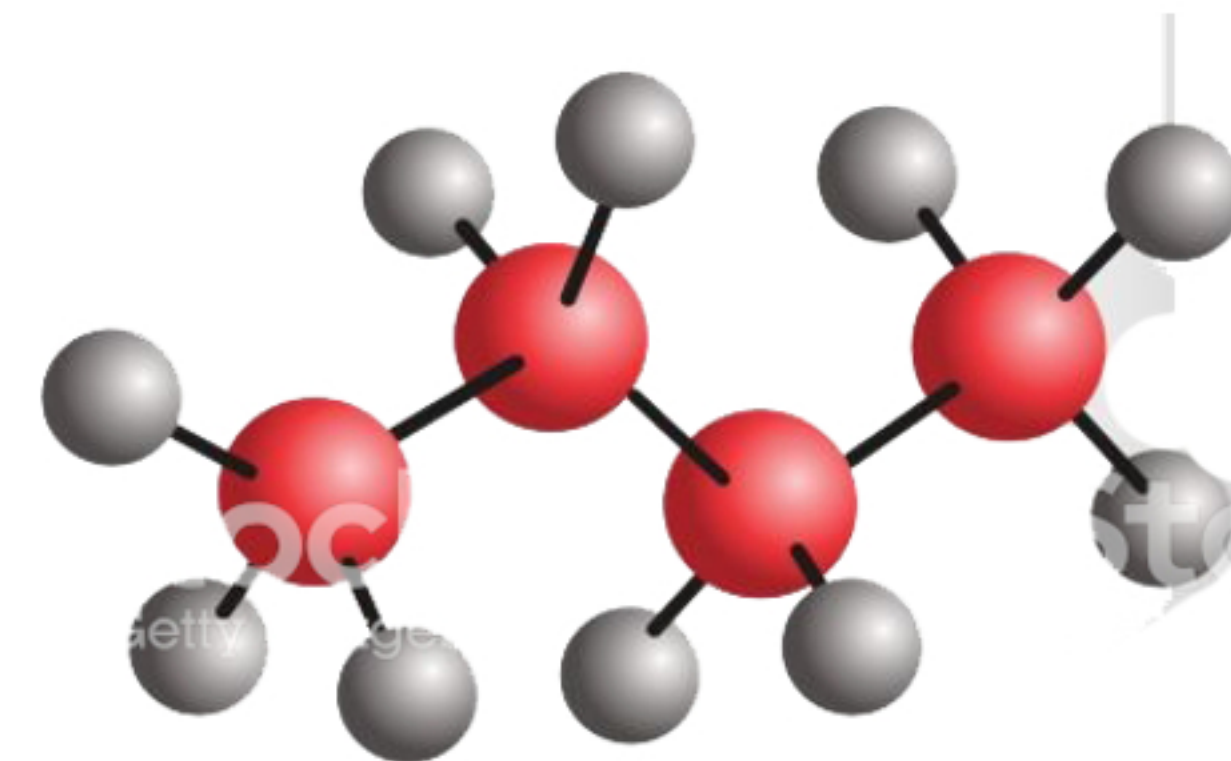


butane

- Methane ■ Ethane ■ Propane ■ Butane & Isobutane ■ Pentane



propane



butane

■ Methane ■ Ethane ■ Propane ■ Butane & Isobutane ■ Pentane

pure ন

petrol
টিন

পেট্রোলিয়াম

→ directly use
ব্যবহার

□ ৫০০০ ফুট বা তারও গভীরে পাওয়া যায়

□ Crude Oil / Unprocessed Oil

□ বিভিন্ন দৈর্ঘ্যের কার্বন শিকলের হাইড্রোকার্বনের মিশ্রণ

C_nH_m

C₁₀
C₅₀ different
use

□ আংশিক পাতনের মাধ্যমে পৃথক করা হয়

↘ কার্বোনিউম + গ্রানিউম

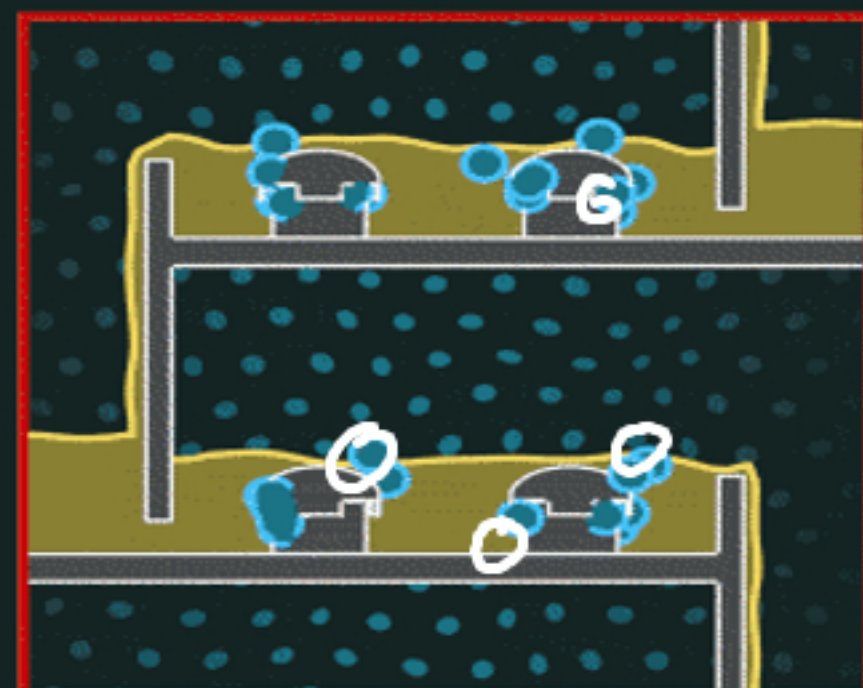
② → ③ → ④
crude oil

DISTILLATION

Crude oil contains a variety of **hydrocarbons** that have different boiling points. To separate these compounds, the oil is first sent to a boiler where it is heated into a super-hot mixture of liquid and vapour called the feed.

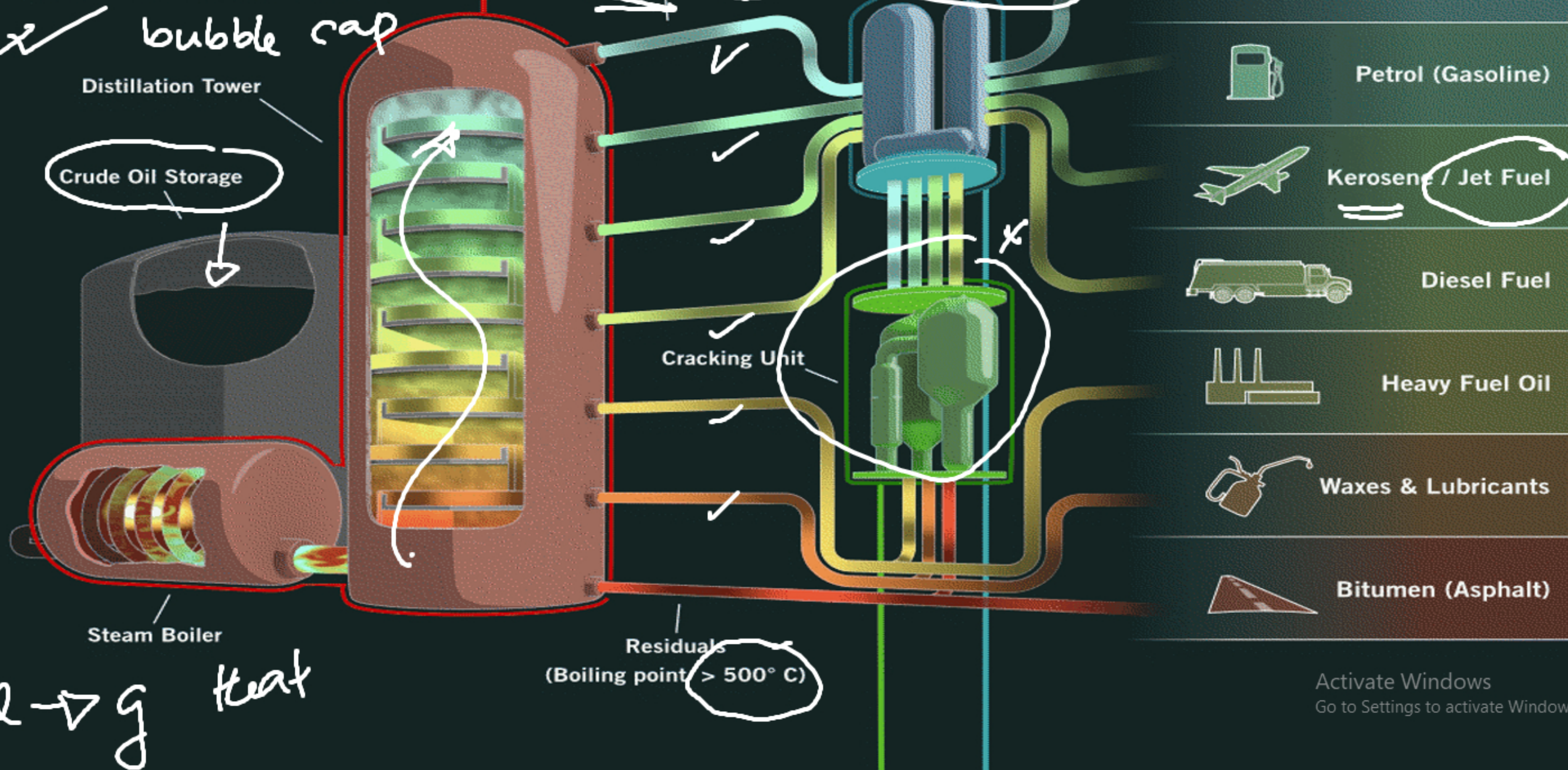
The mixture is then fed into a **distillation tower**. In here, the compounds with a lower boiling point rise up as vapours, while the compounds with a higher boiling point fall downwards as liquids.

The tower contains trays that allow the vapour to bubble upward through the liquid, helping to exchange heat and resulting in more effective separation.

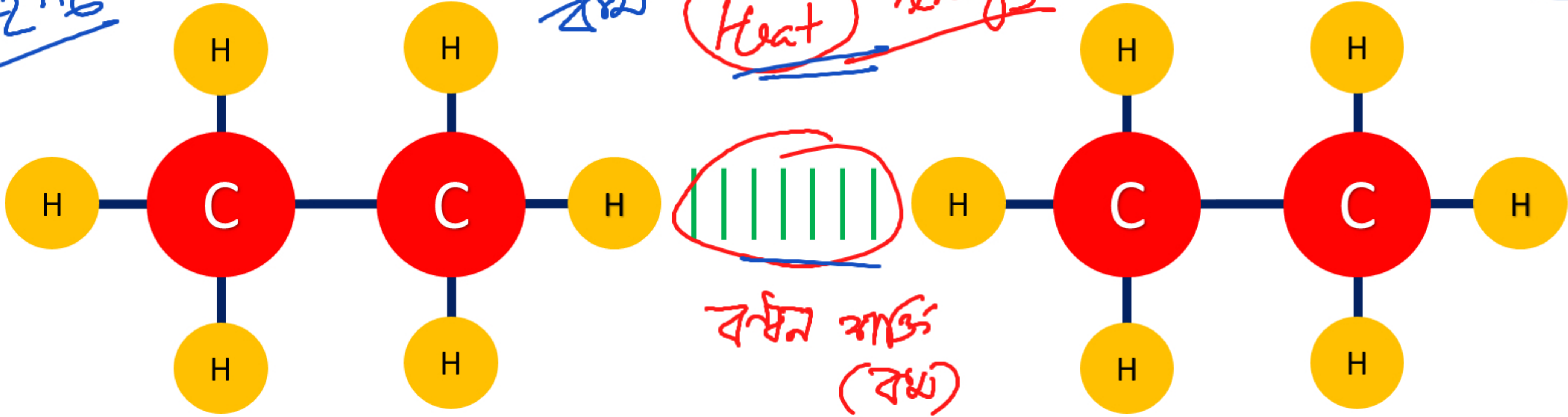


The distilled products are then piped off from the different levels of the tower. These separated products are called **fractions** or **distillates**.

This process may take place along multiple distillation towers.



(হান) $\rightarrow$ বন্ধ
 $\rightarrow$ ইথেন
 C_2H_6

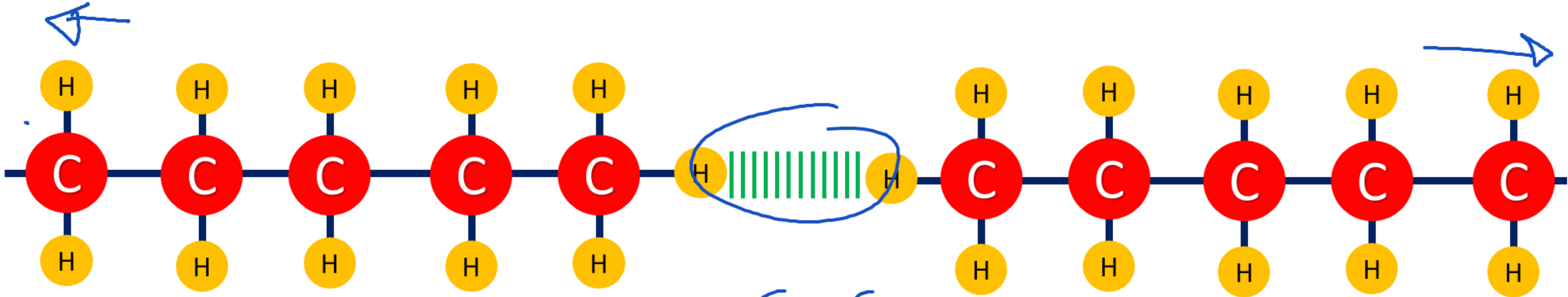


Liquid $\rightarrow$ Gas

আন্তঃআণবিক আকর্ষণ বল (বন্ধ)

স্ফুটনাঙ্ক (°C)

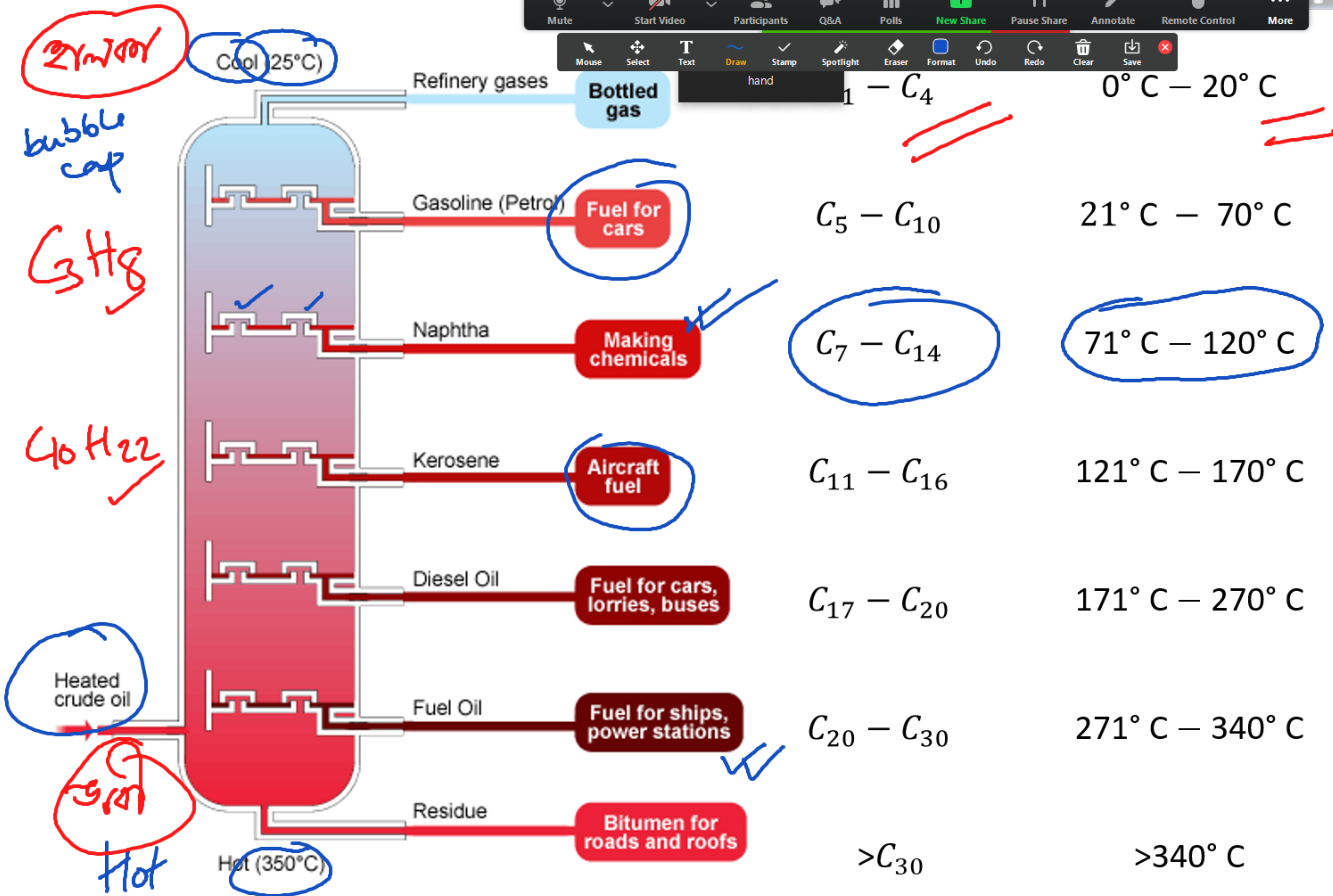
বন্ধ

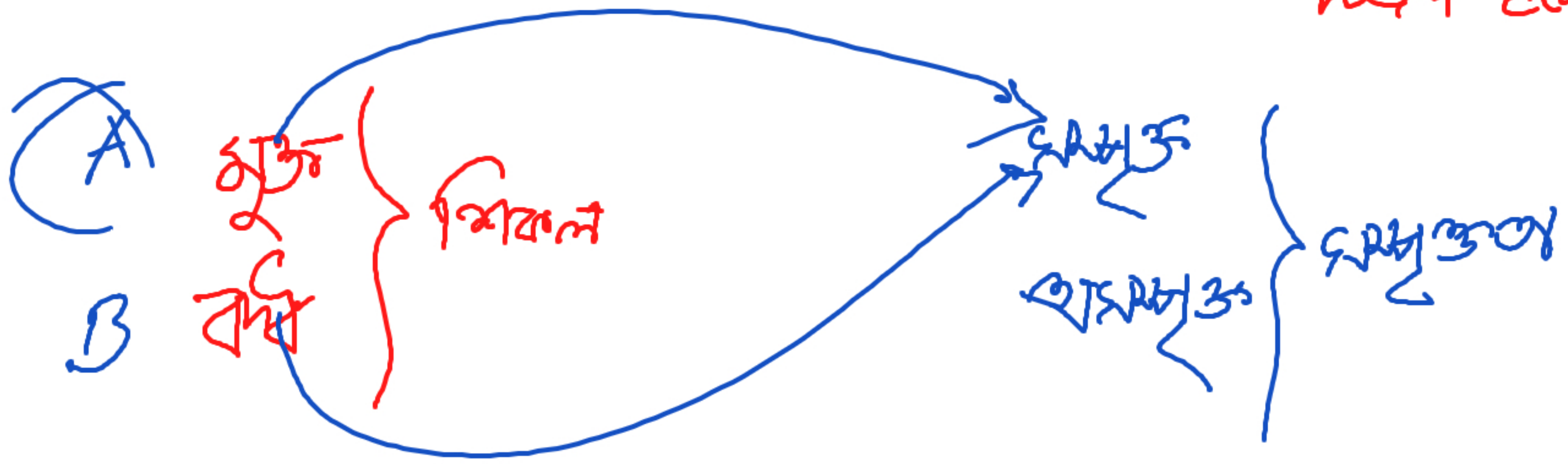


(বন্ধি সঞ্চিত)

আন্তঃআণবিক আকর্ষণ বল (বন্ধি)

স্ফুটনাঙ্ক (বন্ধি)

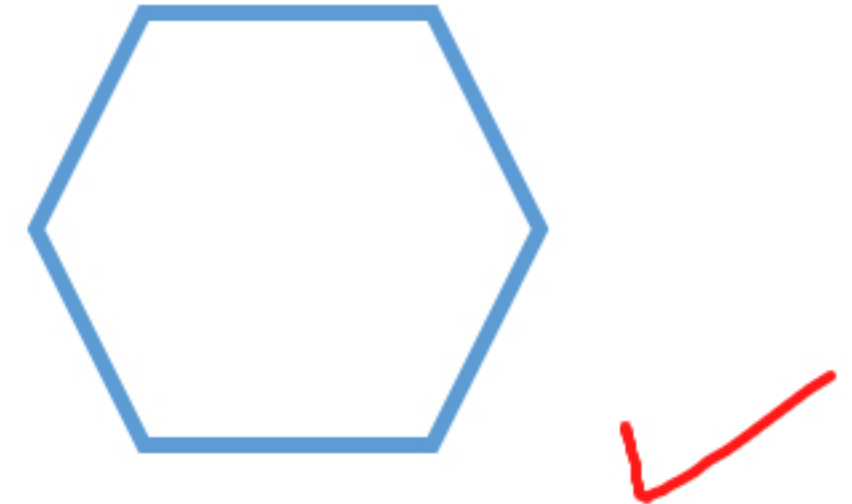
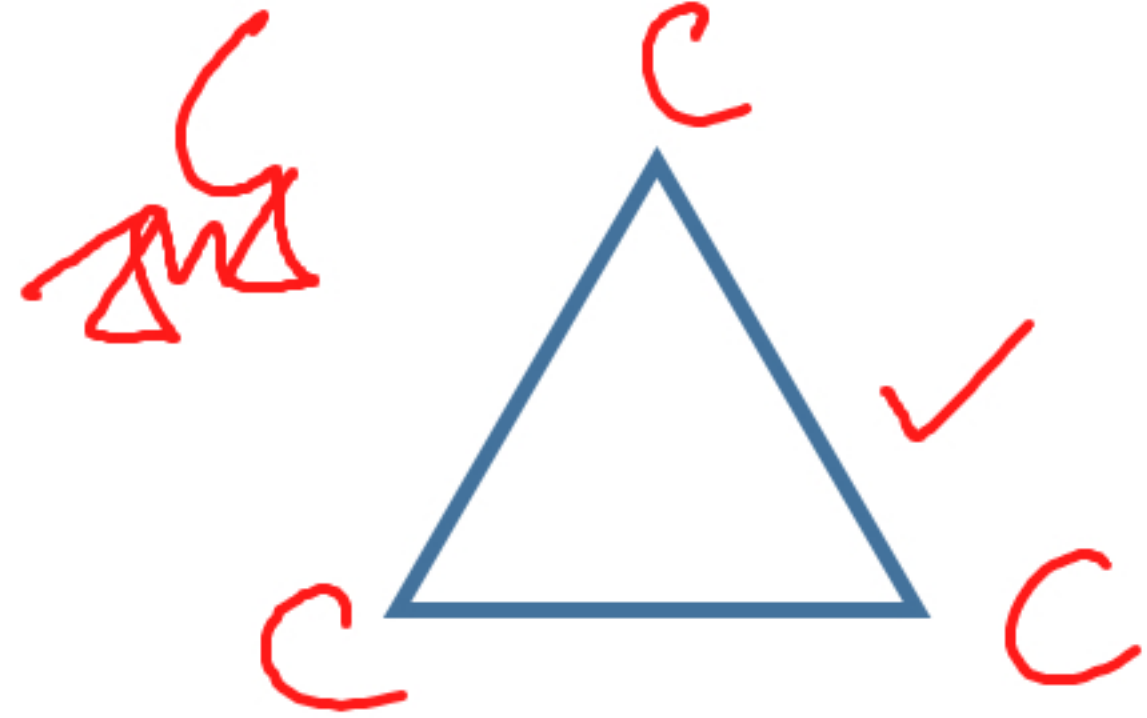
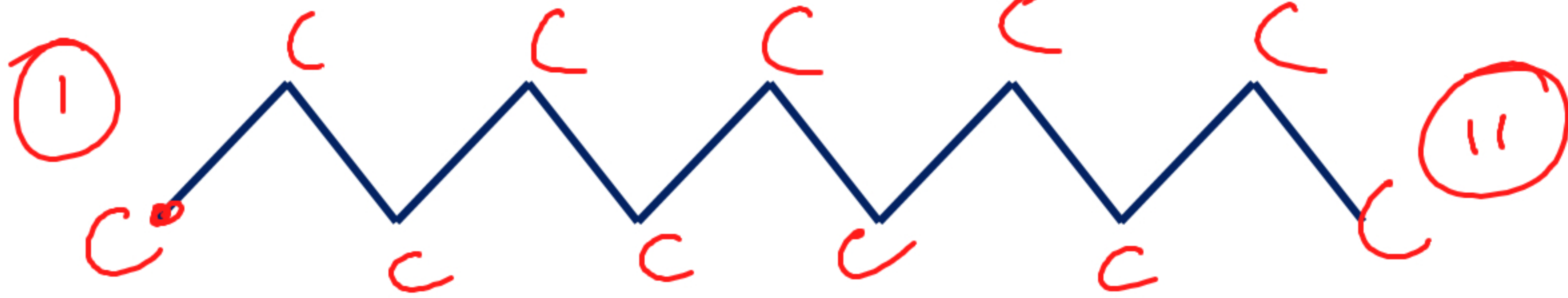






মুক্ত ও বদ্ধ শিকল হাইড্রোকার্বন

মুক্ত
start

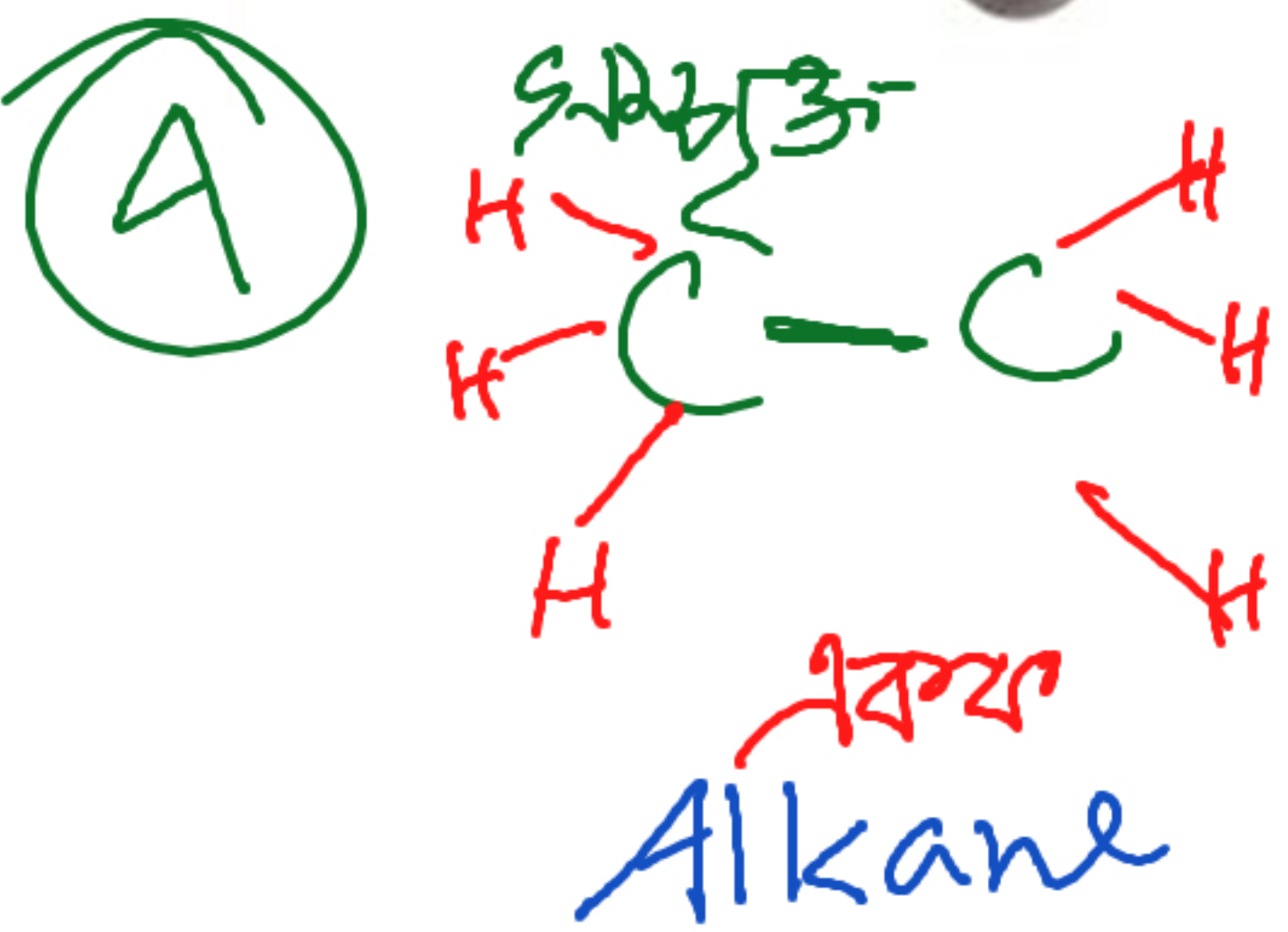
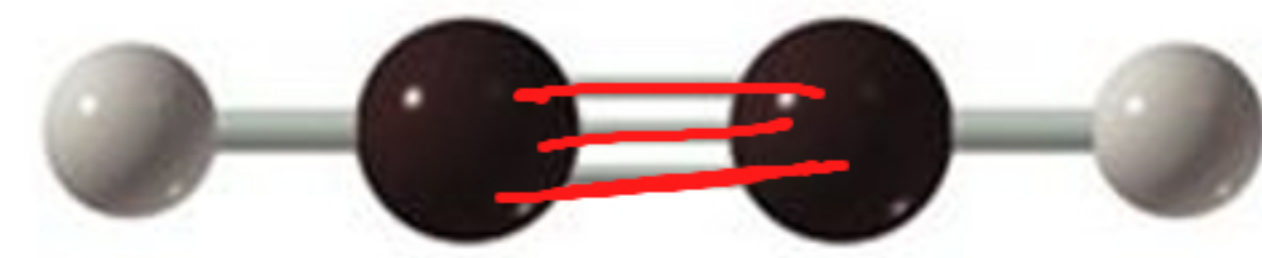
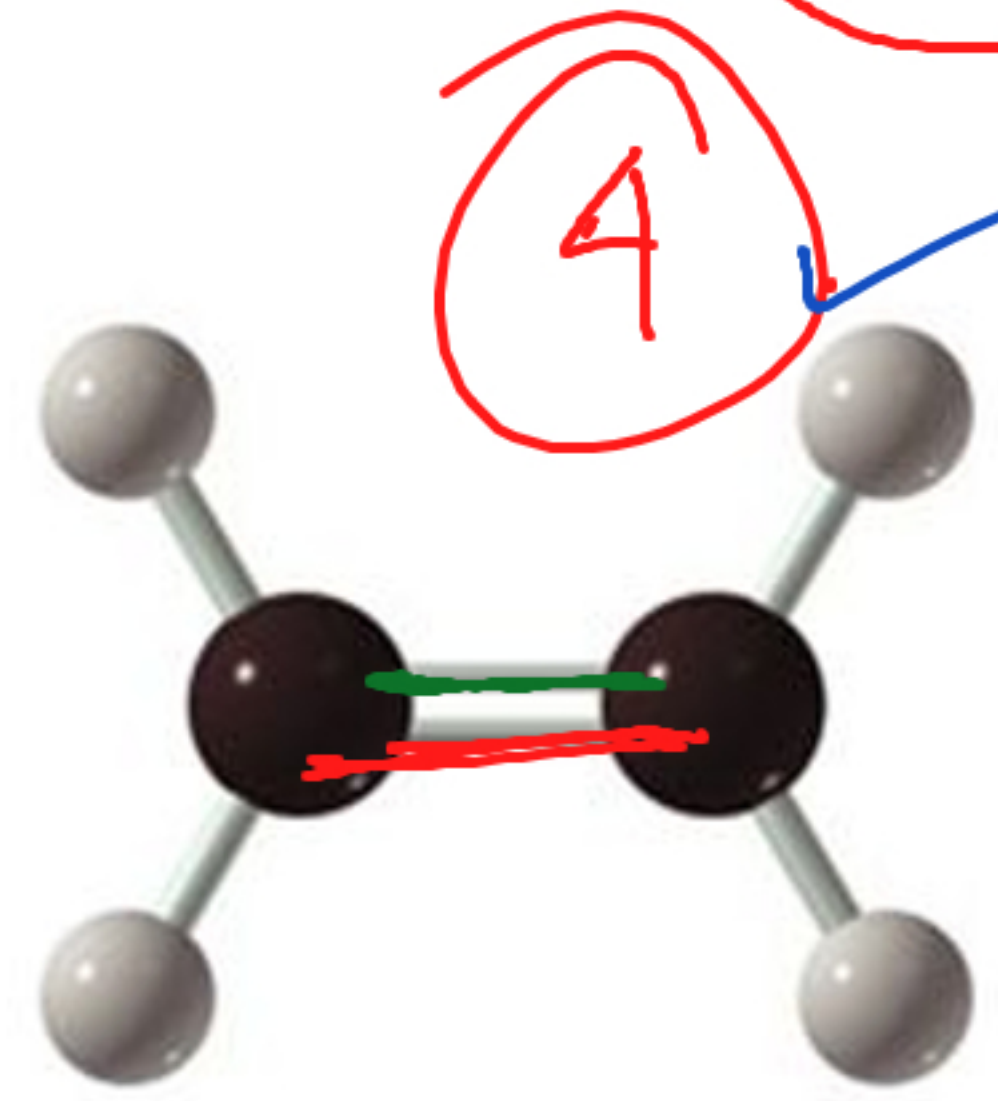
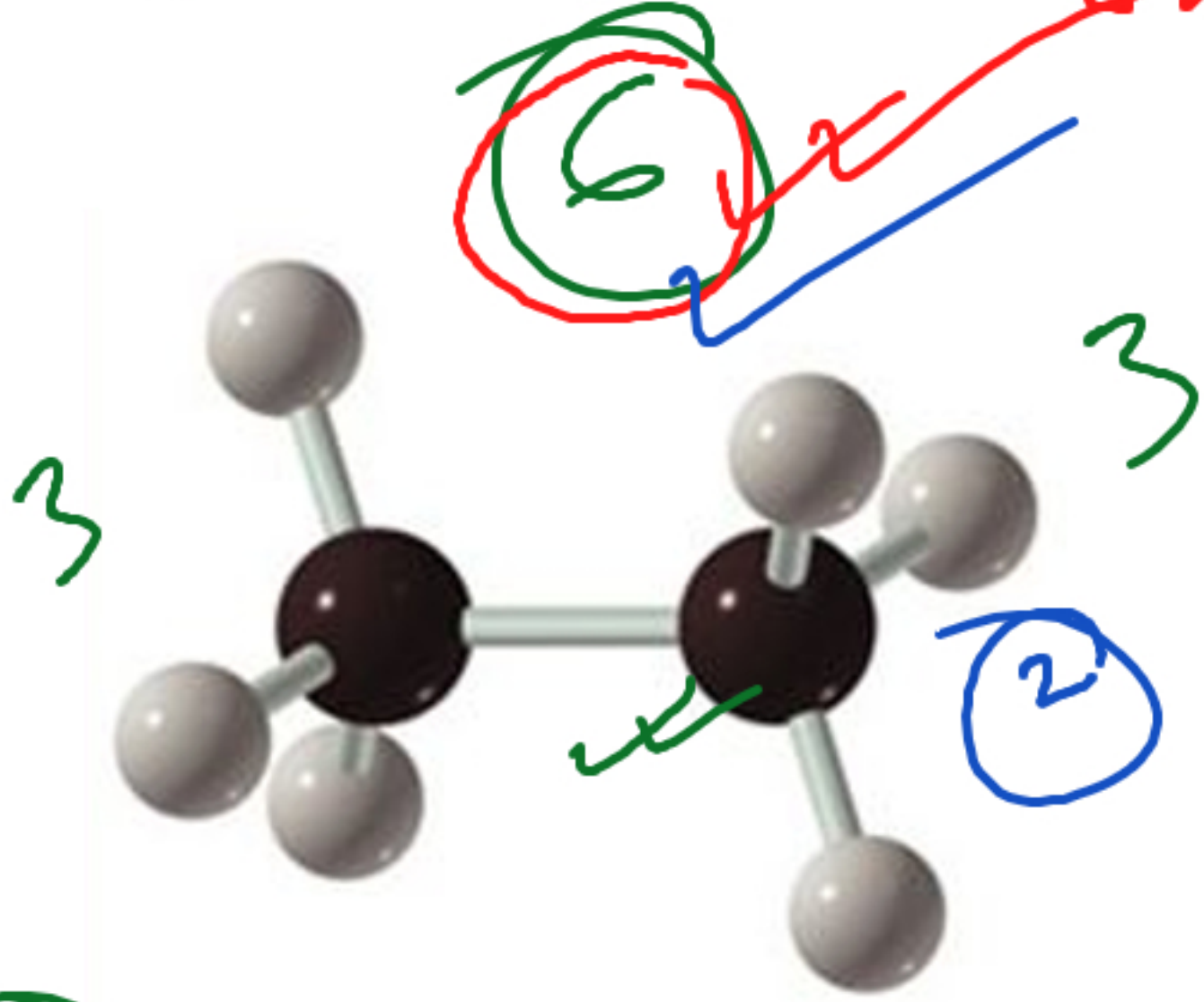




সম্পৃক্ত ও অসম্পৃক্ত হাইড্রোকার্বন

অতিপৃক্ত
 (এক)

হাইড্রো
 হাইড্রো + হাইড্রো
 salt + সল্ট



দ্বি
 Alkene

ত্রি
 Alkyne

(এক)

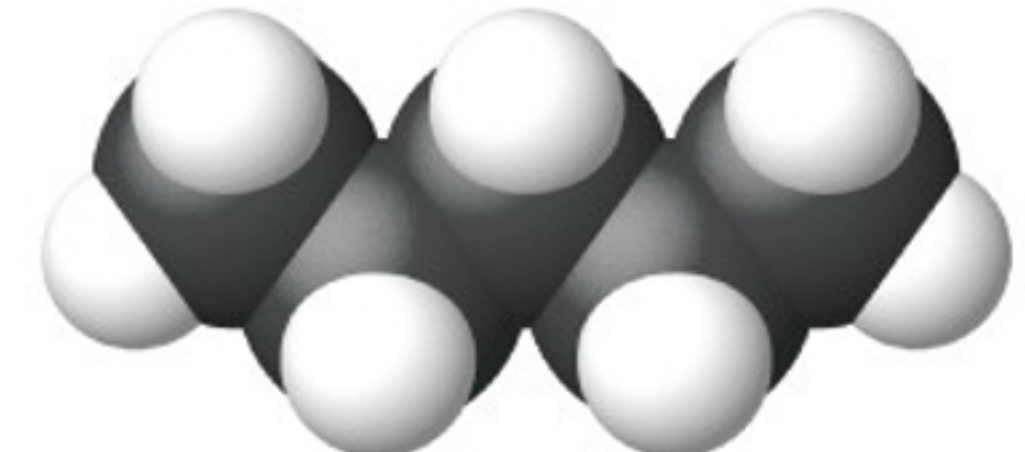
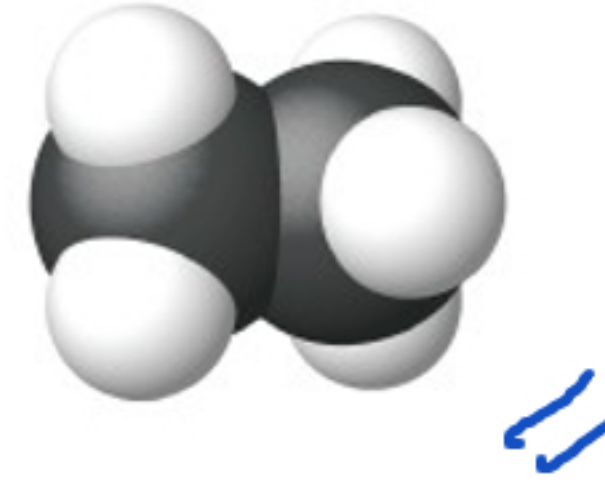
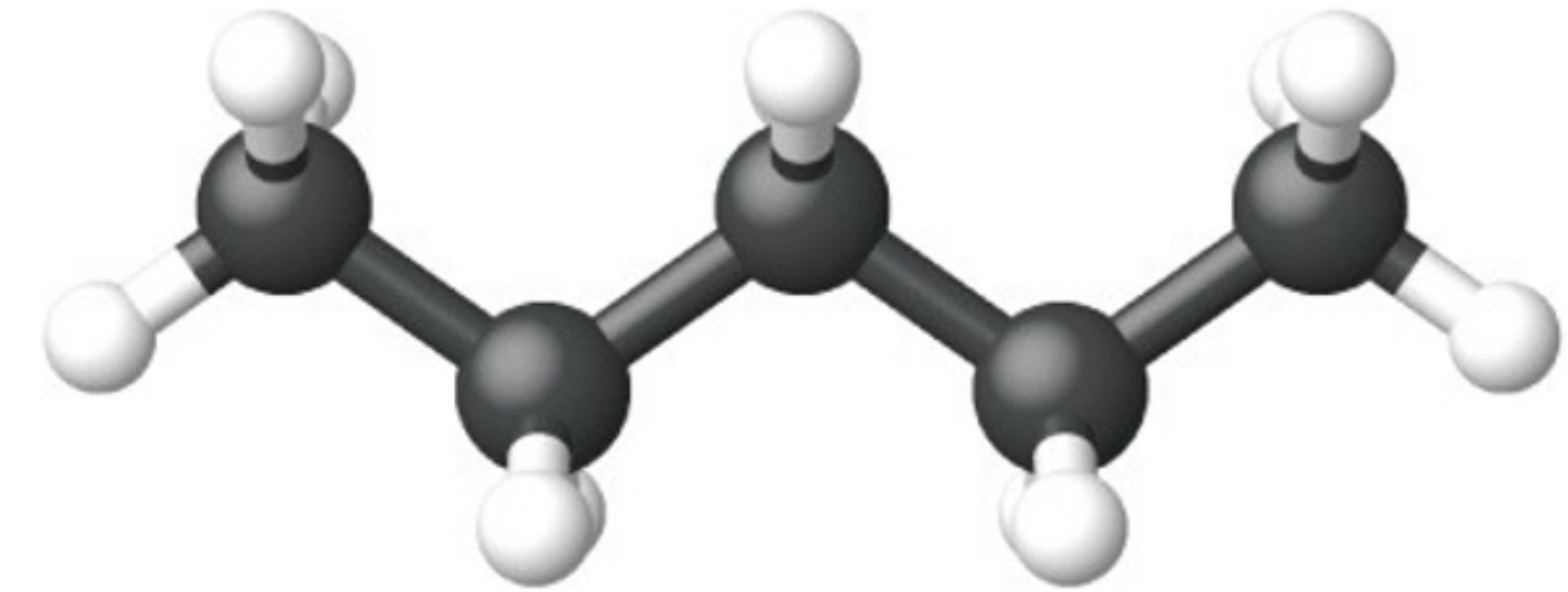
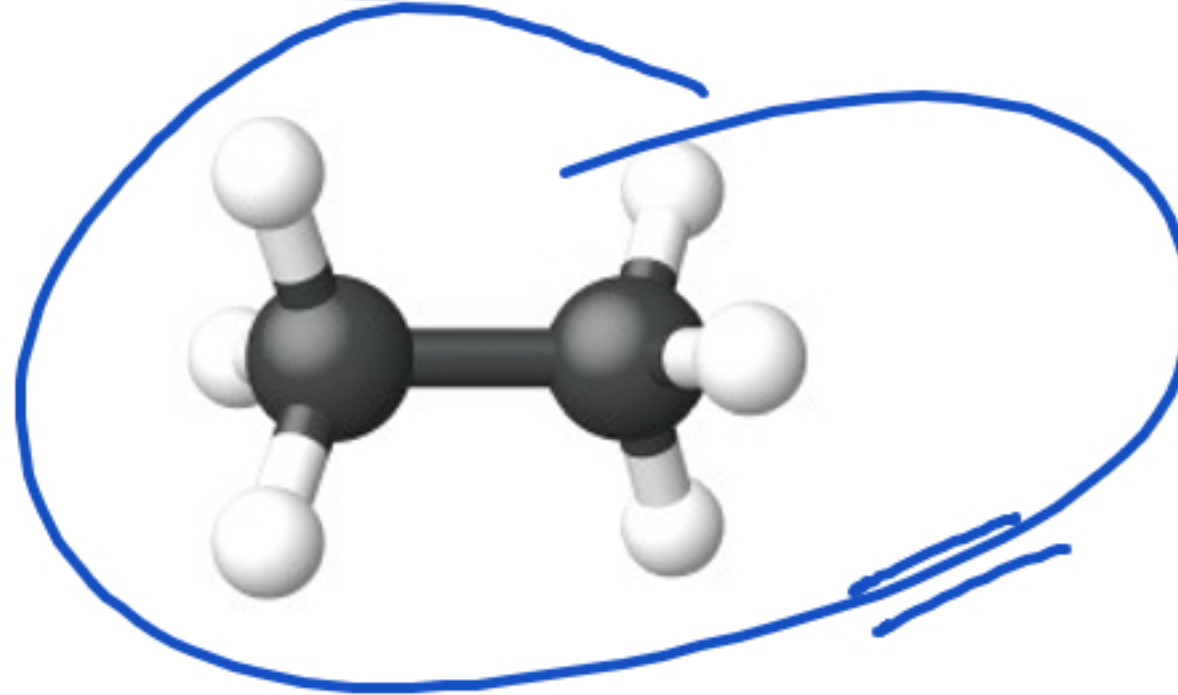
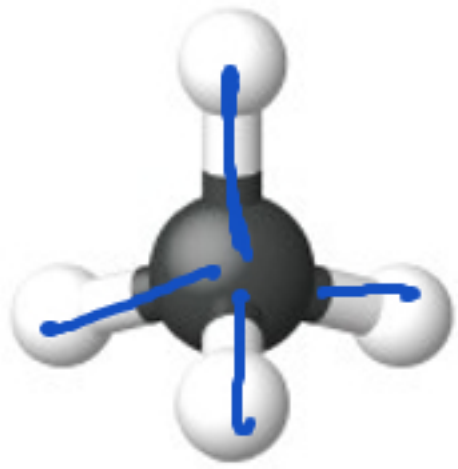
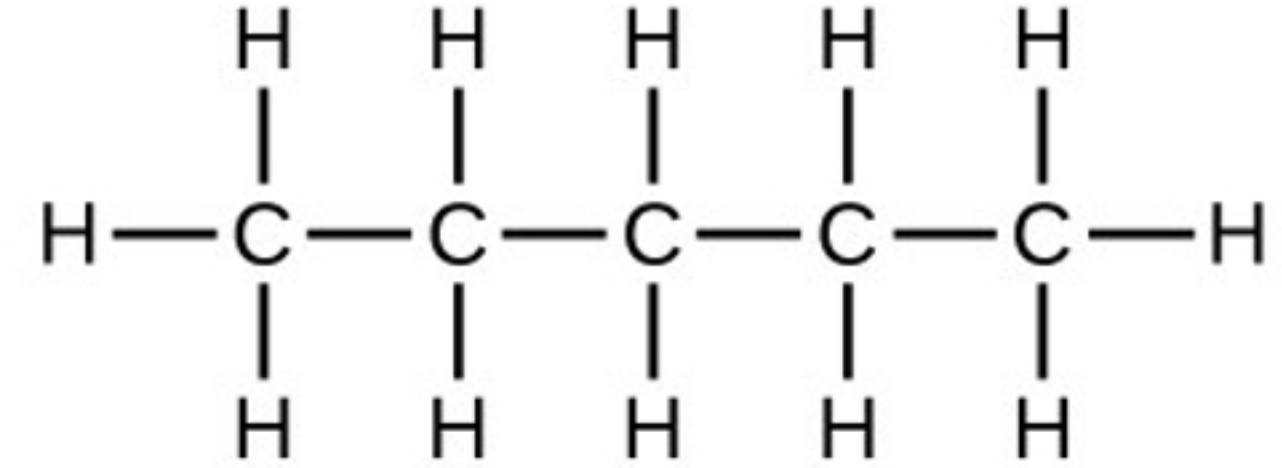
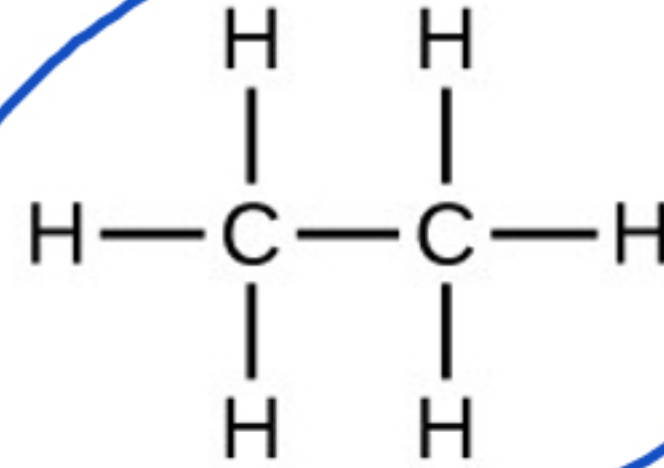
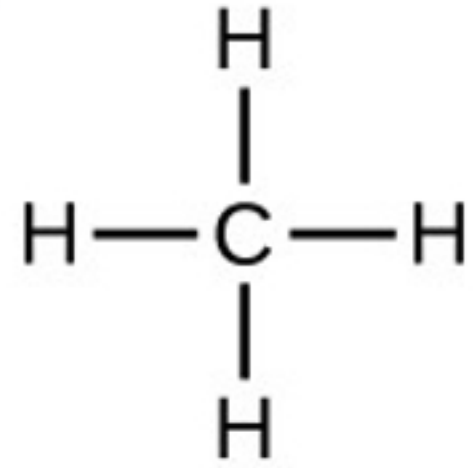
Alkyne



সম্পৃক্ত ও অসম্পৃক্ত হাইড্রোকার্বন

Alkane.

C_2H_6



single

2D

3D

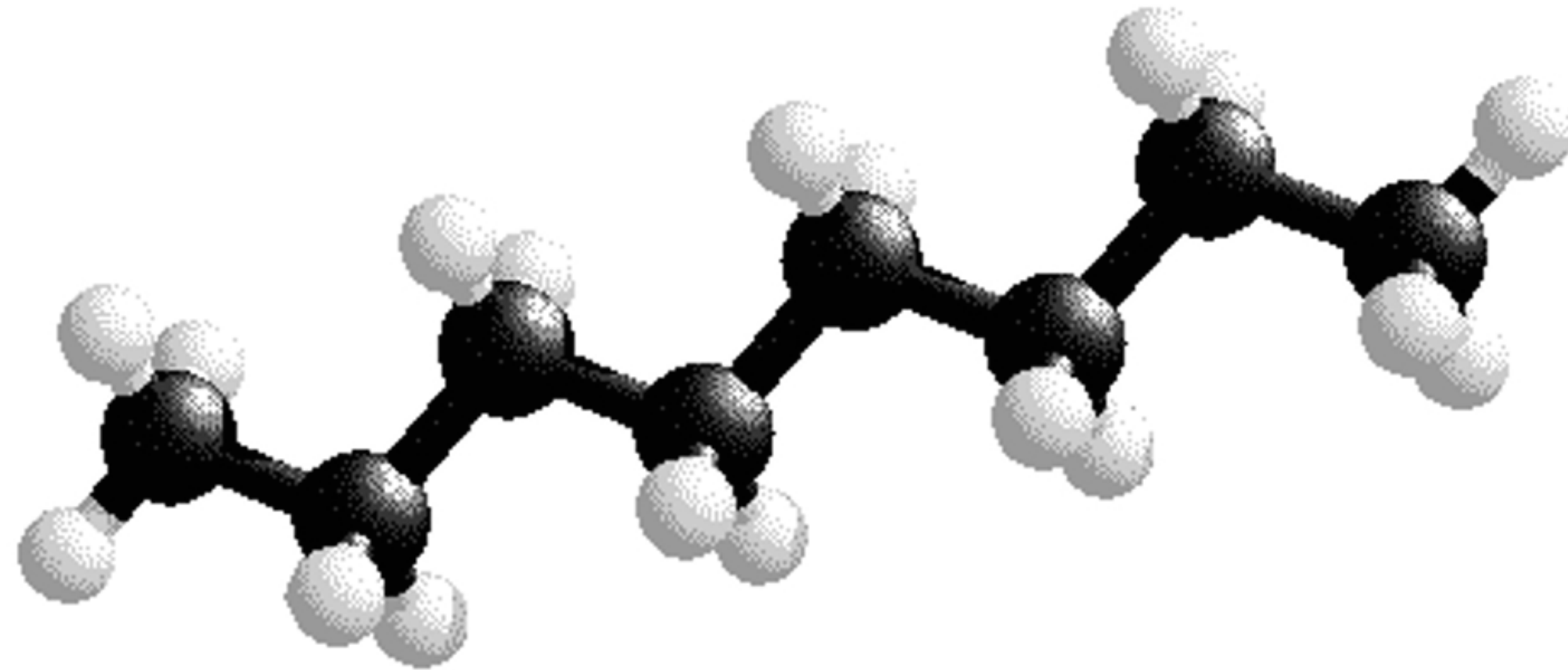
Actual

real

সম্পৃক্ত ও অসম্পৃক্ত হাইড্রোকার্বন



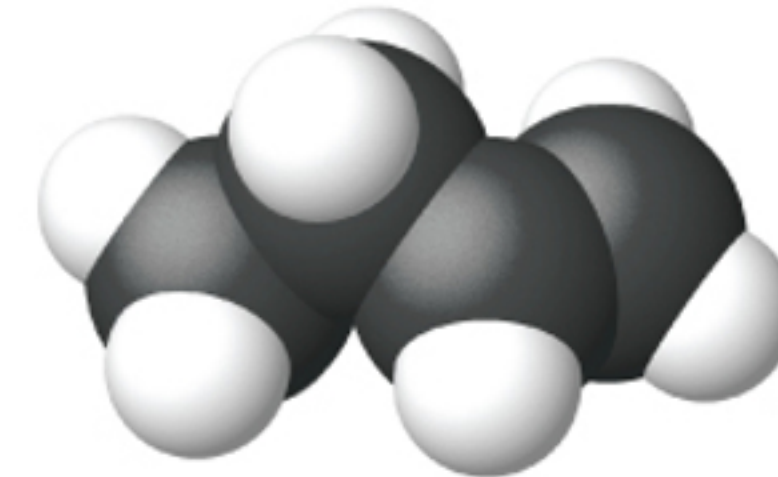
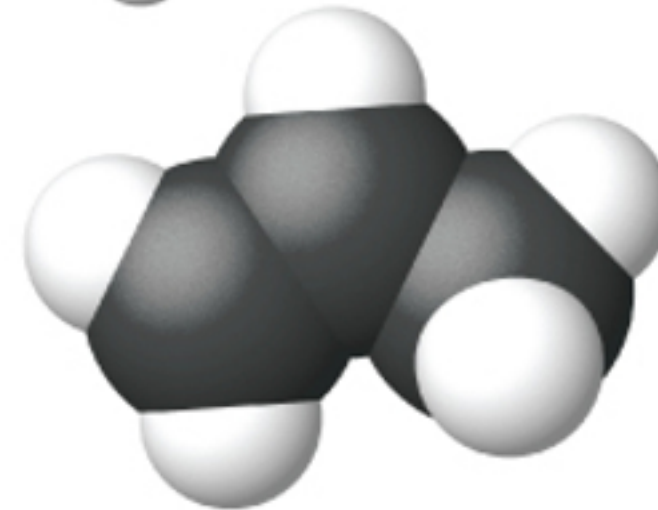
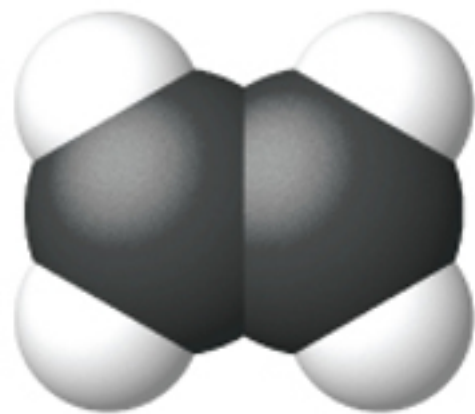
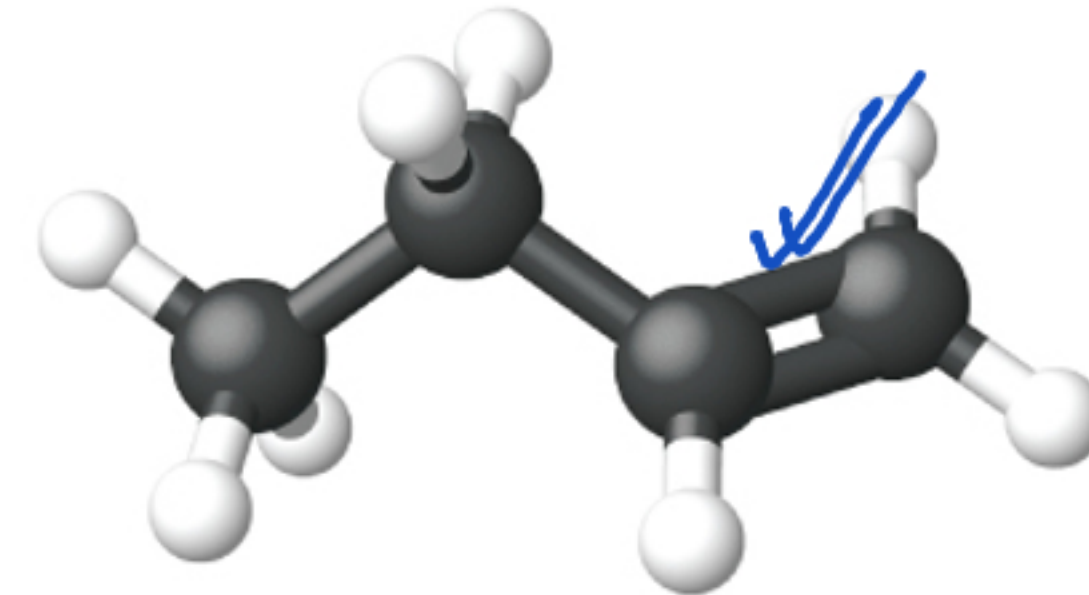
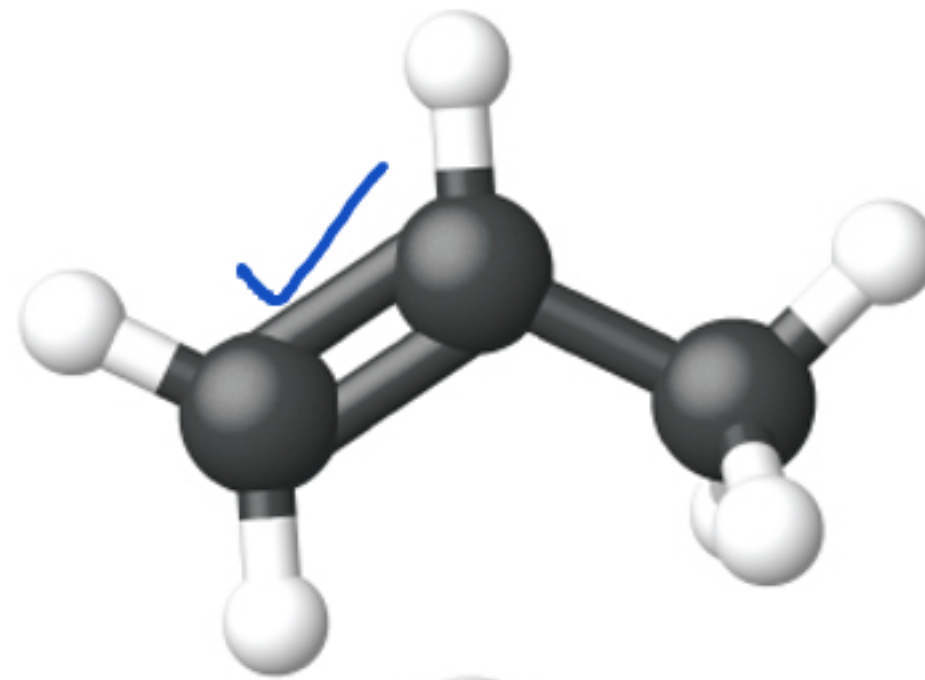
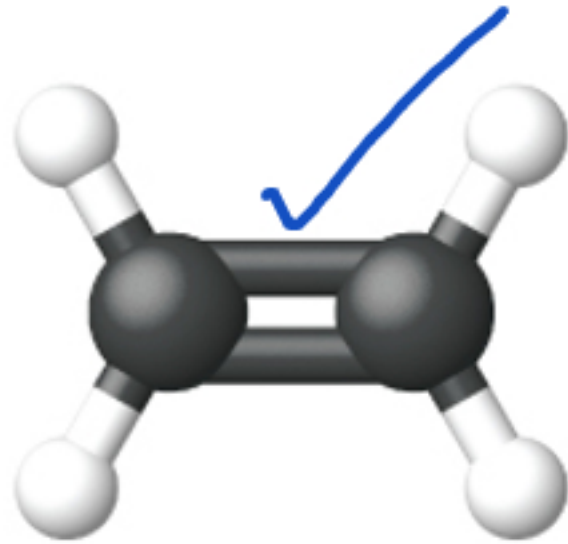
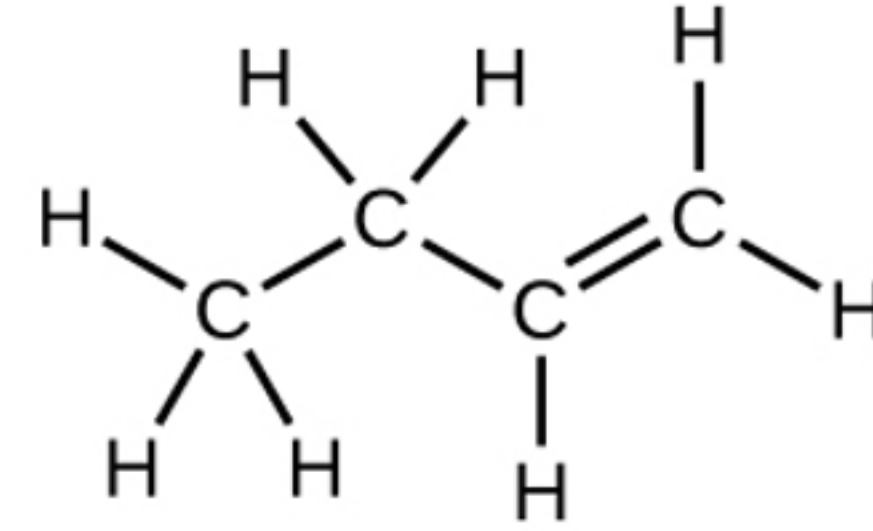
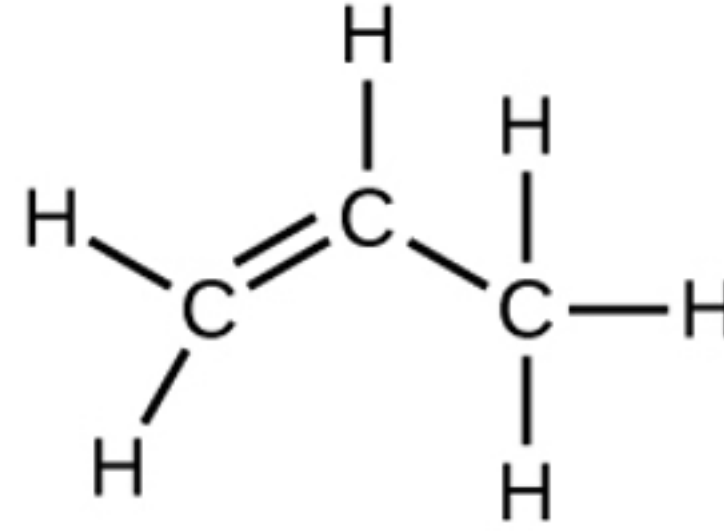
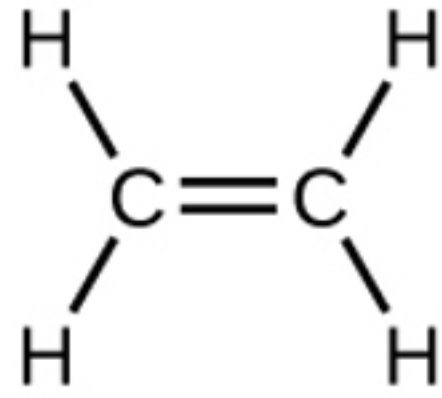
C_8H_{18}





সম্পৃক্ত ও অসম্পৃক্ত হাইড্রোকার্বন

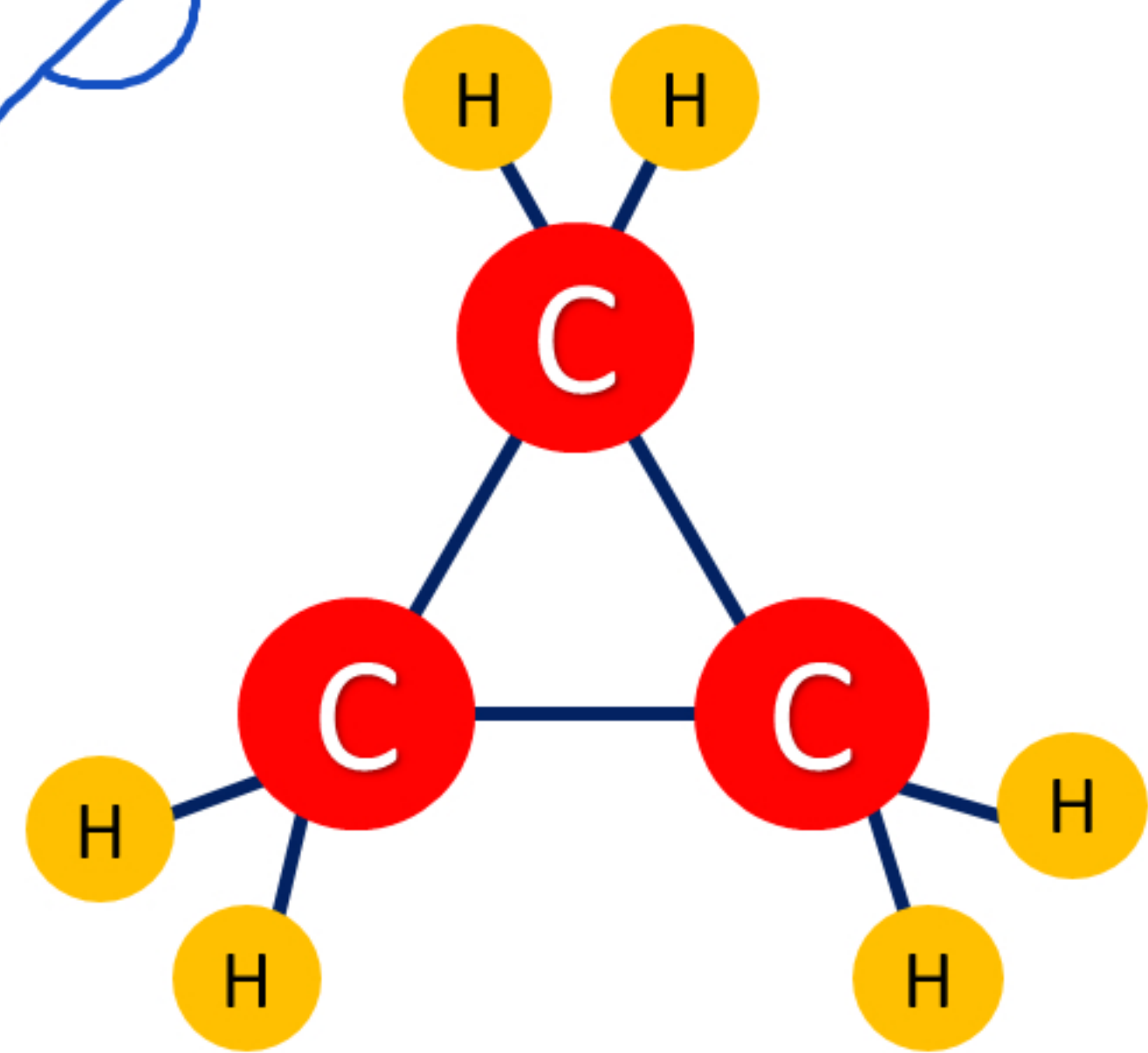
Double
Alkene



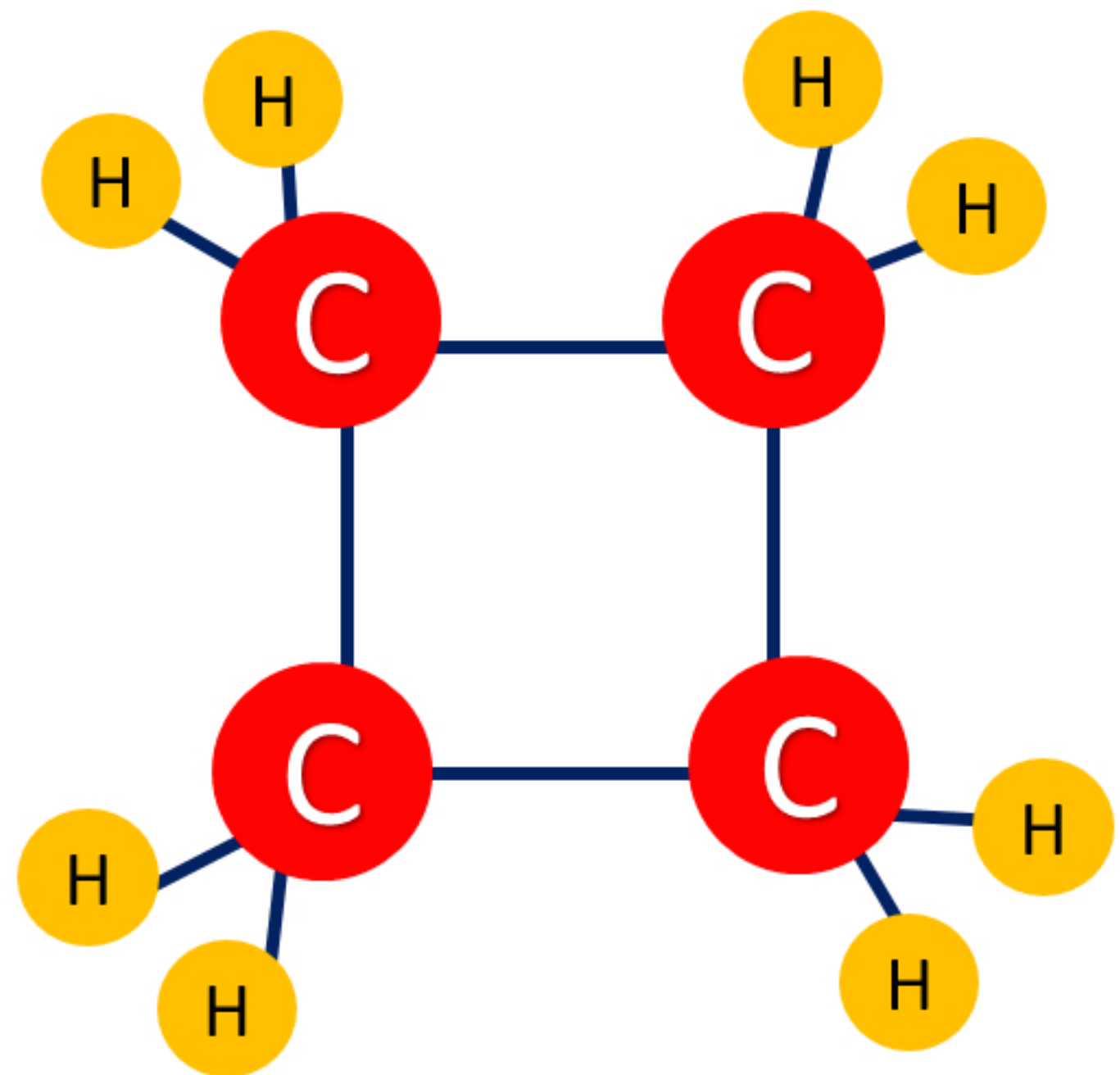


সম্পূর্ণ বন্ধ শিকল হাইড্রোকার্বন

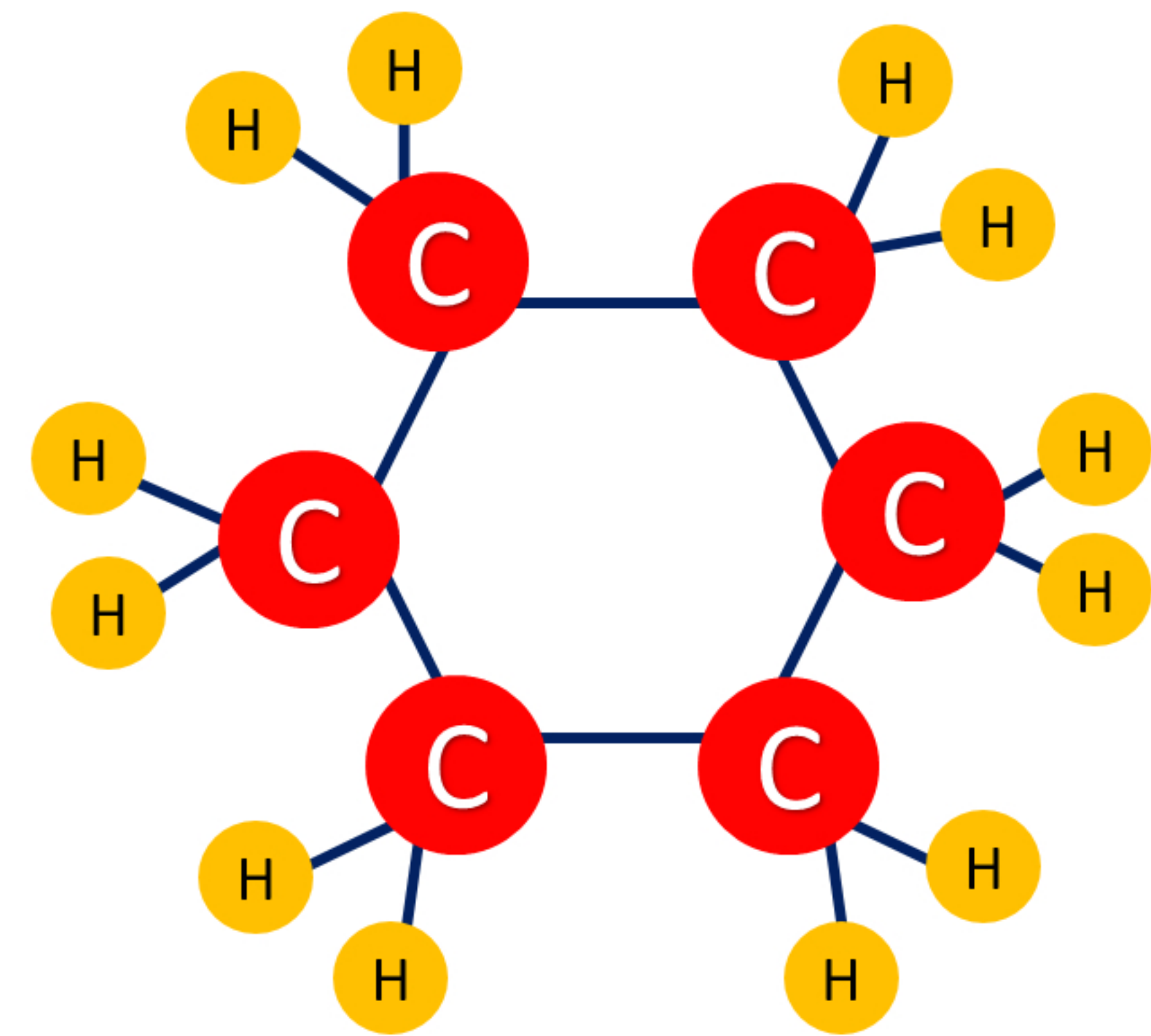
Cyclo Aliphatic



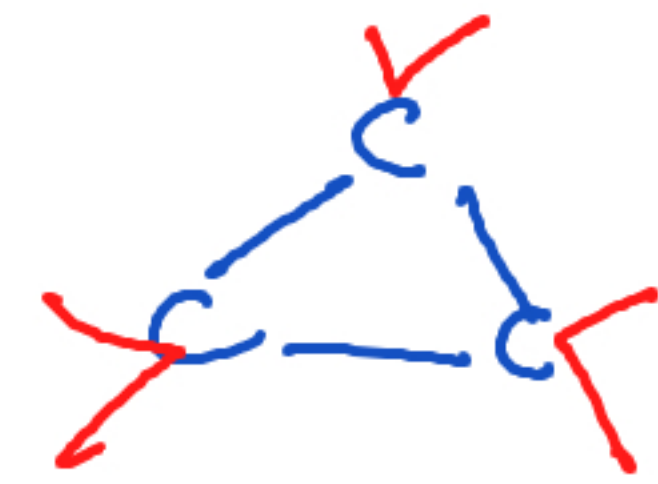
মাইক্রোপ্রোপেন



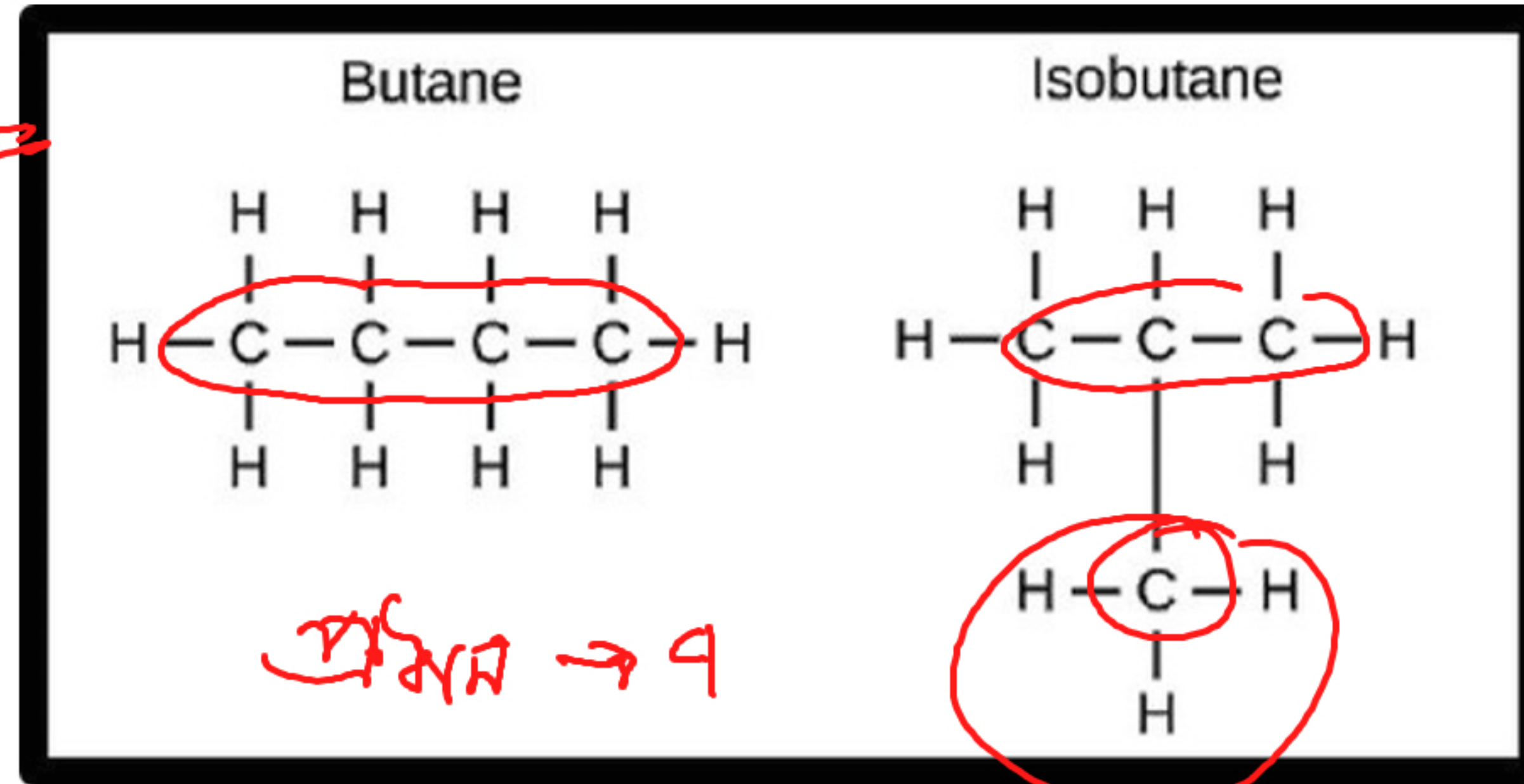
cyclo বিউটেন



cyclo পেন্টেন



C₄H₁₀



isomers → 2

3

even
forward

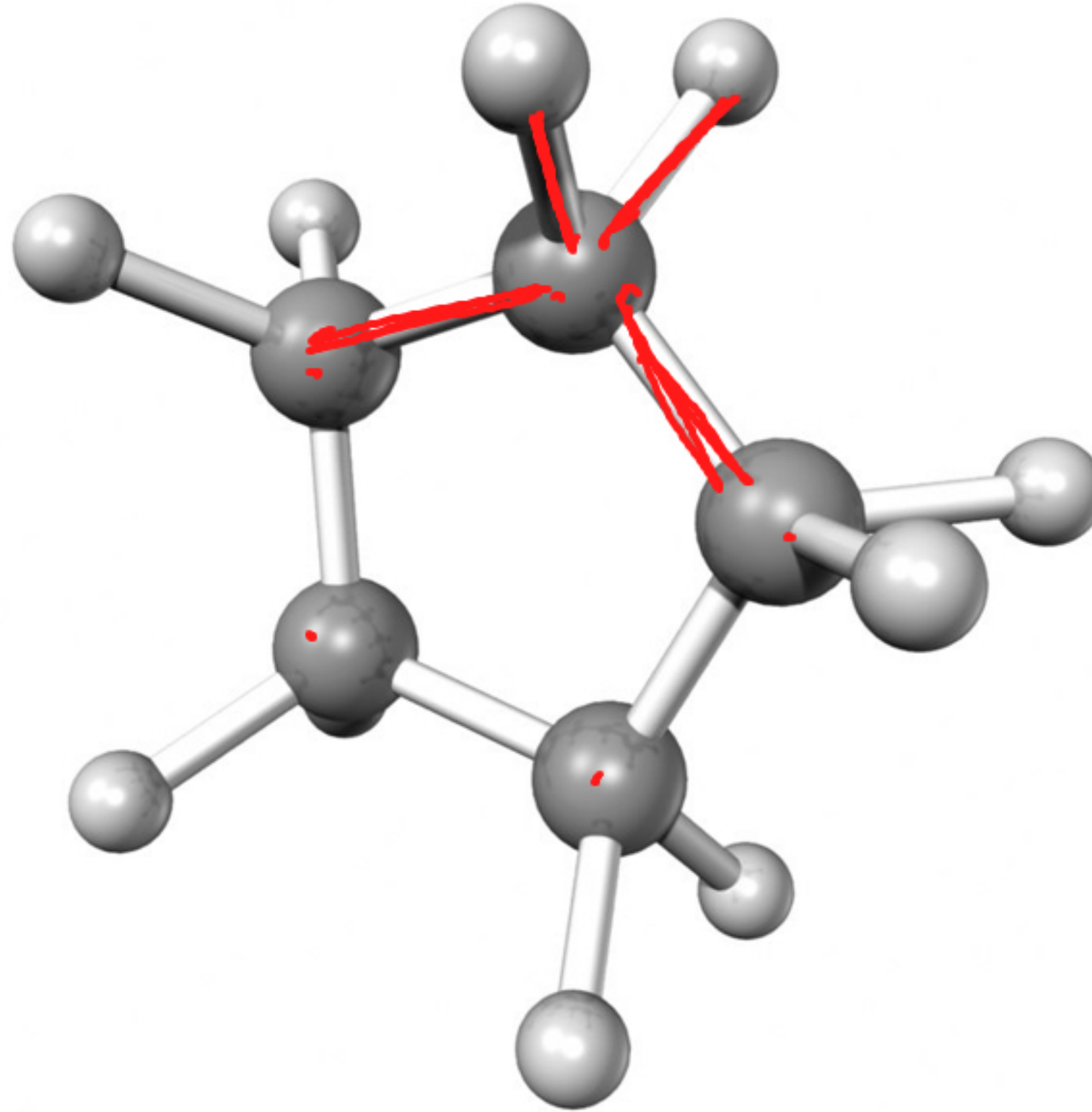


সম্পৃক্ত বদ্ধ শিকল হাইড্রোকার্বন

Cyclo Alkane

C_nH_{2n}

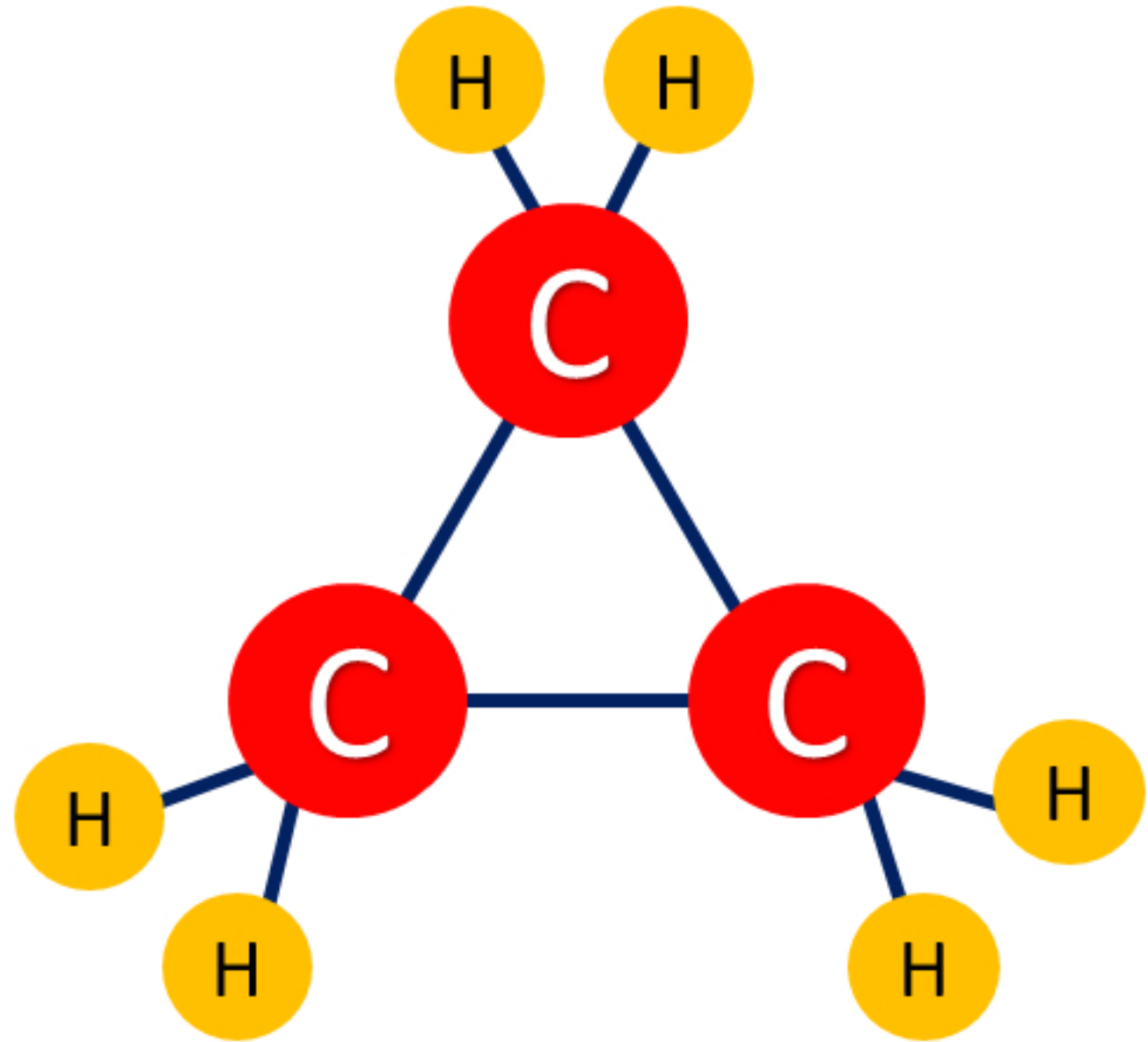
C_4H_8



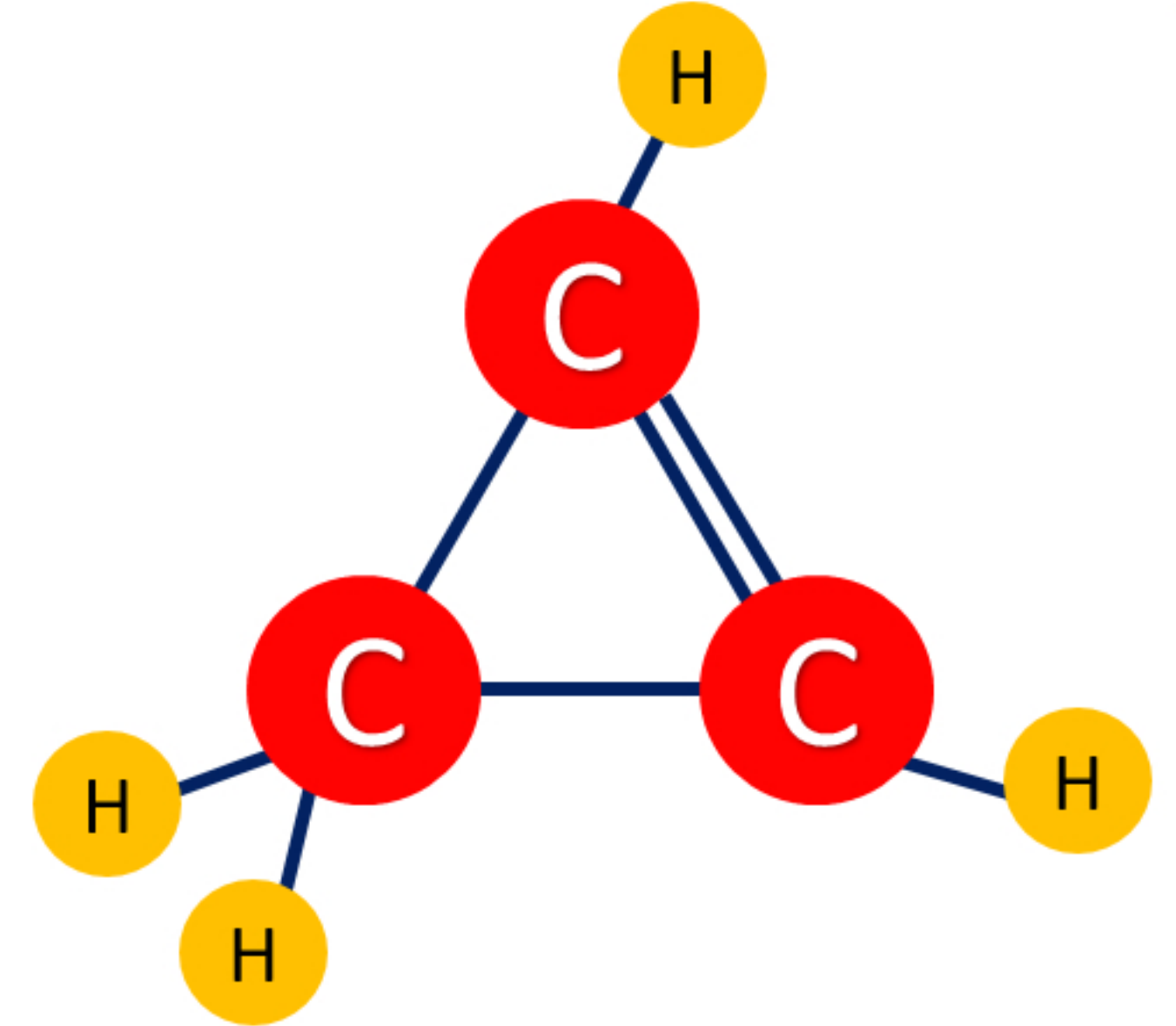
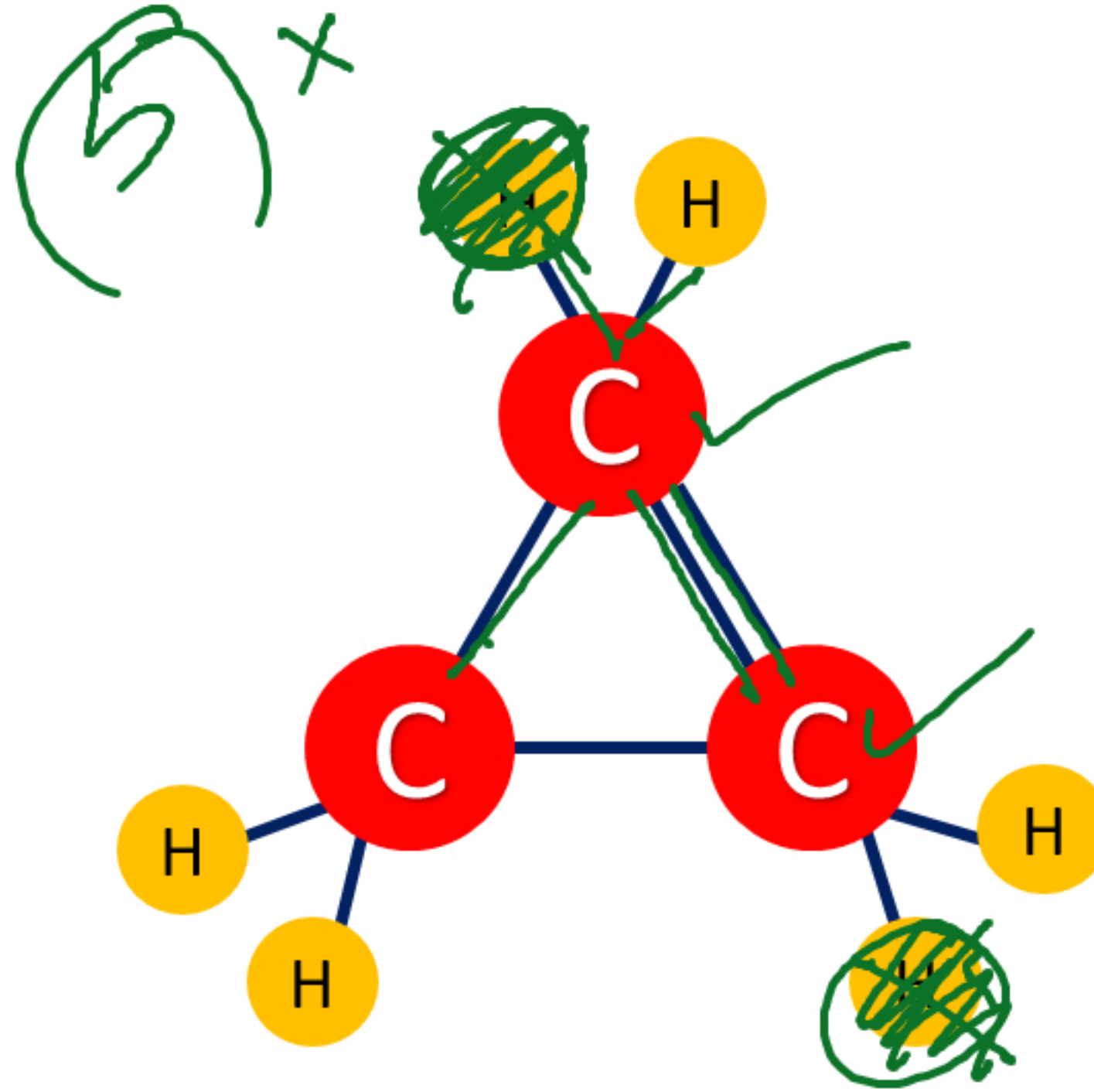
C_5H_{10} ✓

C_5H_{12} ✗

অসম্পৃক্ত বদ্ধ শিকল ইত্যাদি কার্বন



Cyclo Propane



Cyclo propene

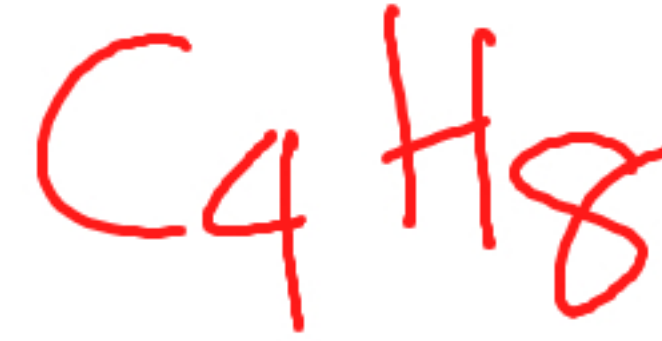


অসম্পৃক্ত বদ্ধ শিকল হাইড্রোকাৰ্বন

□ সাইক্লোবিউটিন

hint no.

①



②

