Deadline for CH320/328 M HW 10: Apr 29 3:00 PM
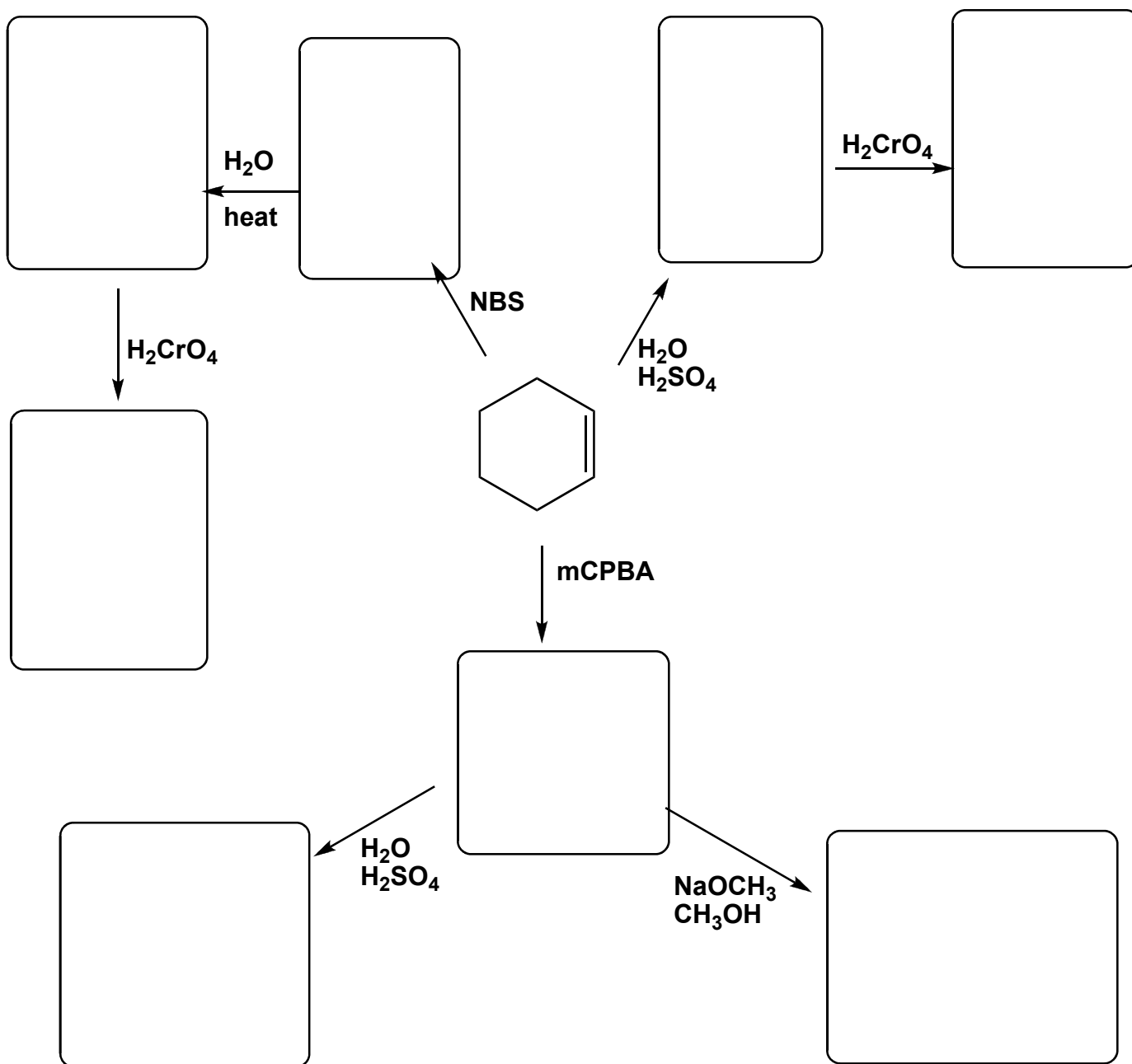
1) Multistep synthesis: Provide the products (structure-n-a-box) for the following pathways.

H_2O

heat

H_2CrO_4

NBS

H_2CrO_4

H_2O
H_2SO_4

mCPBA

H_2O
H_2SO_4

NaOCH$_3$
CH$_3$OH

2) Reactions: Draw the structures for each of the following rections.

Cyclohexanecarbaldehyde $\xrightarrow{H_2CrO_4}$ [empty box]

Cyclohexanol, reagents:
1) H_2SO_4
2) O_3
3) $(CH_3)_2S$ → [empty box]

2-methyl-2-ethyloxirane (epoxide) $\xrightarrow{H_2SO_4}$ [empty box]

Isobutylene (2-methylpropene) $\xrightarrow[CH_2Cl_2]{MCPBA}$ [empty box]