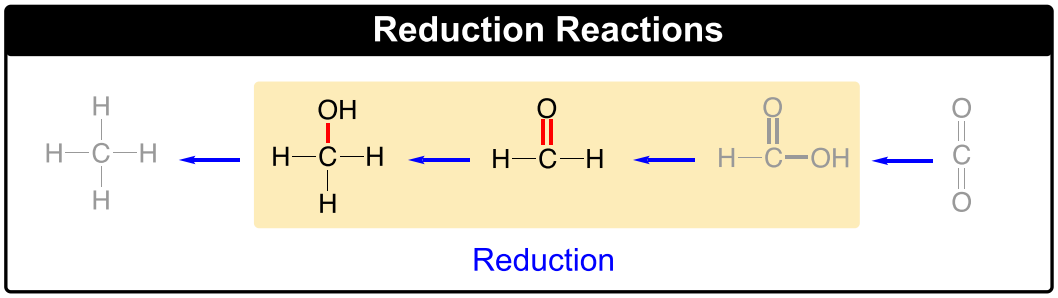
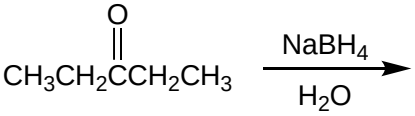
CONCEPT: ALDEHYDE AND KETONE REACTIONS

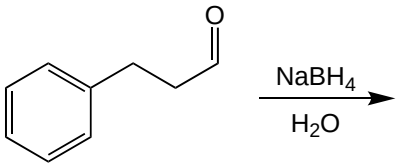
- The reducing agent of _____ dissolved in water reacts with an alcohol.
  - □ **Reducing Agent:** the compound used to _____ aldehydes and ketones.
    - The carbonyl oxygen gains an ____ and the carbonyl carbon gains an ____.



EXAMPLE: Determine the alcohol product formed in the following reaction.

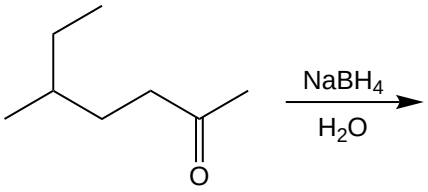


PRACTICE: Determine the alcohol product formed in the following reaction.



CONCEPT: ALDEHYDE AND KETONE REACTIONS

PRACTICE: Name the alcohol product formed from the following reduction reaction.



a) 5-ethyl-2-pentanol b) 3-methyl-6-heptanol c) 5-methyl-2-heptanol d) 3-methyl-5-pentanal

PRACTICE: Which of the following compounds could not be reduced?

a) 2,2-dimethylpentane b) 2-methyl-1-pentanal c) 3-ethyl-2-heptanone d) 4-bromoheptanoic acid