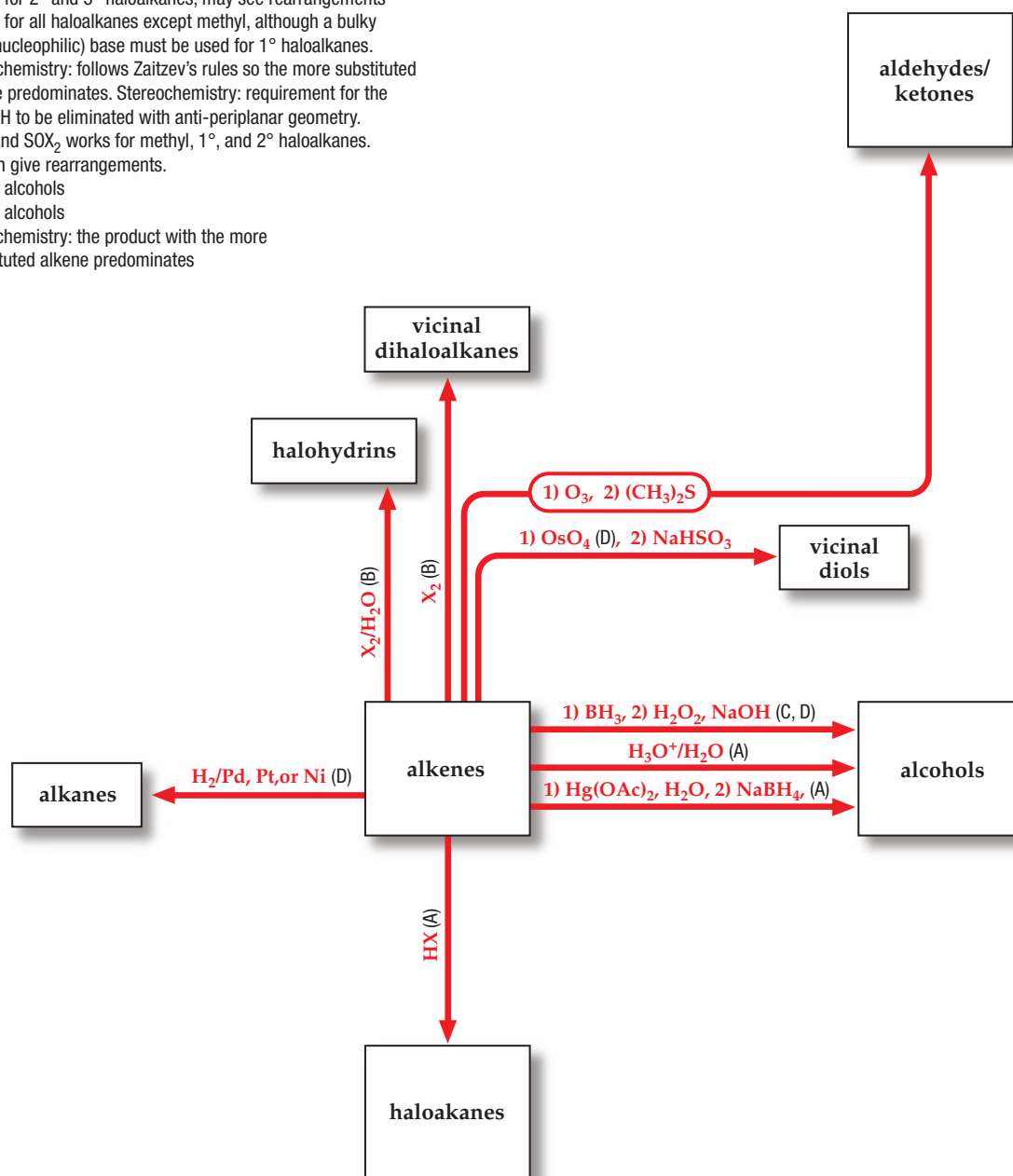


- (A) Regiochemistry: Markovnikov addition to a π bond
- (B) Stereochemistry: anti-addition
- (C) Regiochemistry: non-Markovnikov addition to a π bond
- (D) Stereochemistry: syn-addition
- (E) Works well for methyl and 1° haloalkanes
- (F) Stereochemistry: gives *cis*-alkenes as products
- (G) Stereochemistry: gives *trans*-alkenes as products
- (H) Reactivity of C–H bonds follows 3° > 2° > 1°
- (I) Works for methyl, 1°, and 2° haloalkanes
- (J) Works for 2° and 3° haloalkanes, may see rearrangements
- (K) Works for all haloalkanes except methyl, although a bulky (non-nucleophilic) base must be used for 1° haloalkanes. Regiochemistry: follows Zaitsev's rules so the more substituted alkene predominates. Stereochemistry: requirement for the X and H to be eliminated with anti-periplanar geometry.
- (L) PBr₃ and SOX₂ works for methyl, 1°, and 2° haloalkanes. HX can give rearrangements.
- (M) For 1° alcohols
- (N) For 2° alcohols
- (O) Regiochemistry: the product with the more substituted alkene predominates

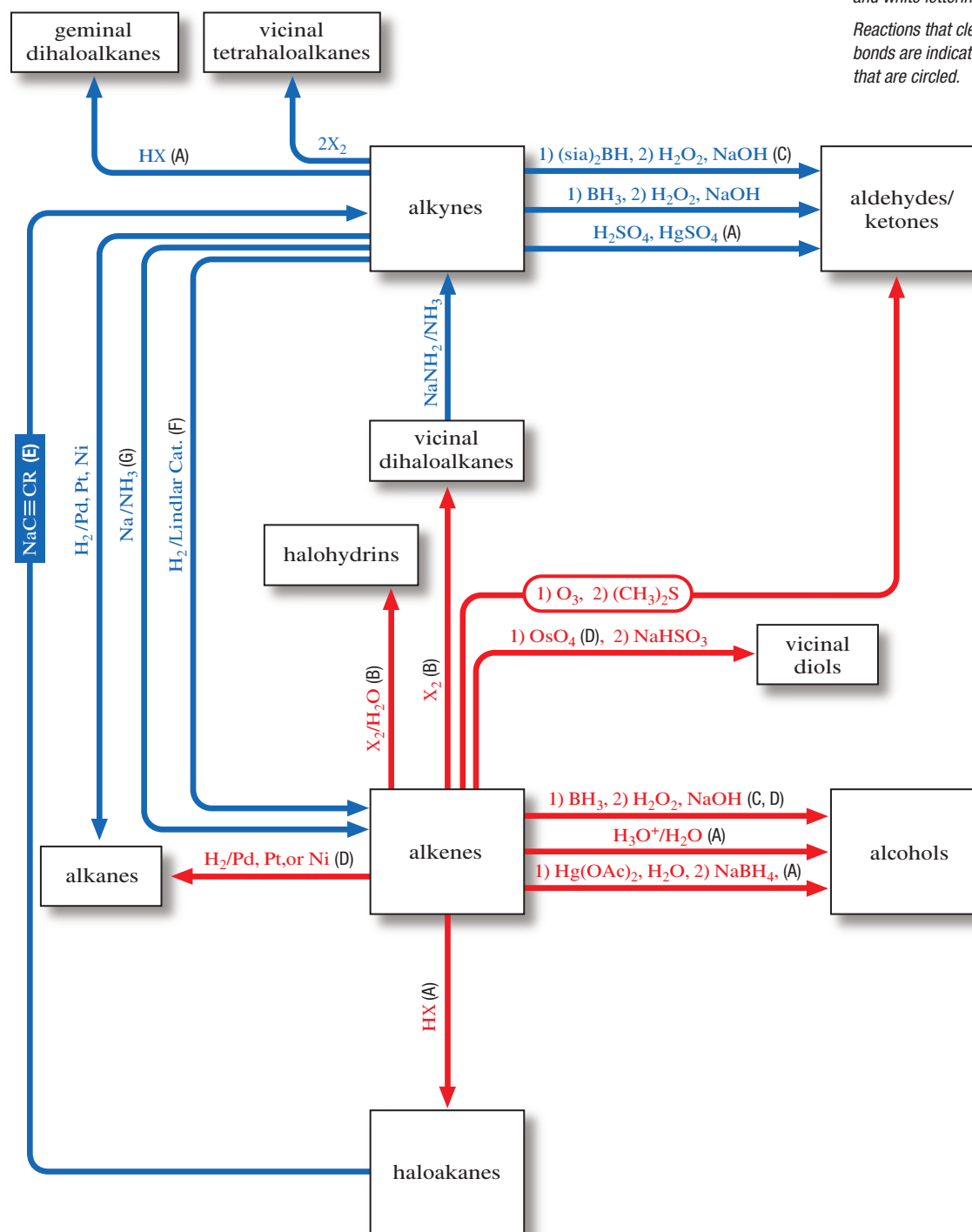
Reactions that cleave carbon-carbon bonds are indicated by reagents that are circled.



Key:
→ Chapter 6
→ Chapter 7

Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.

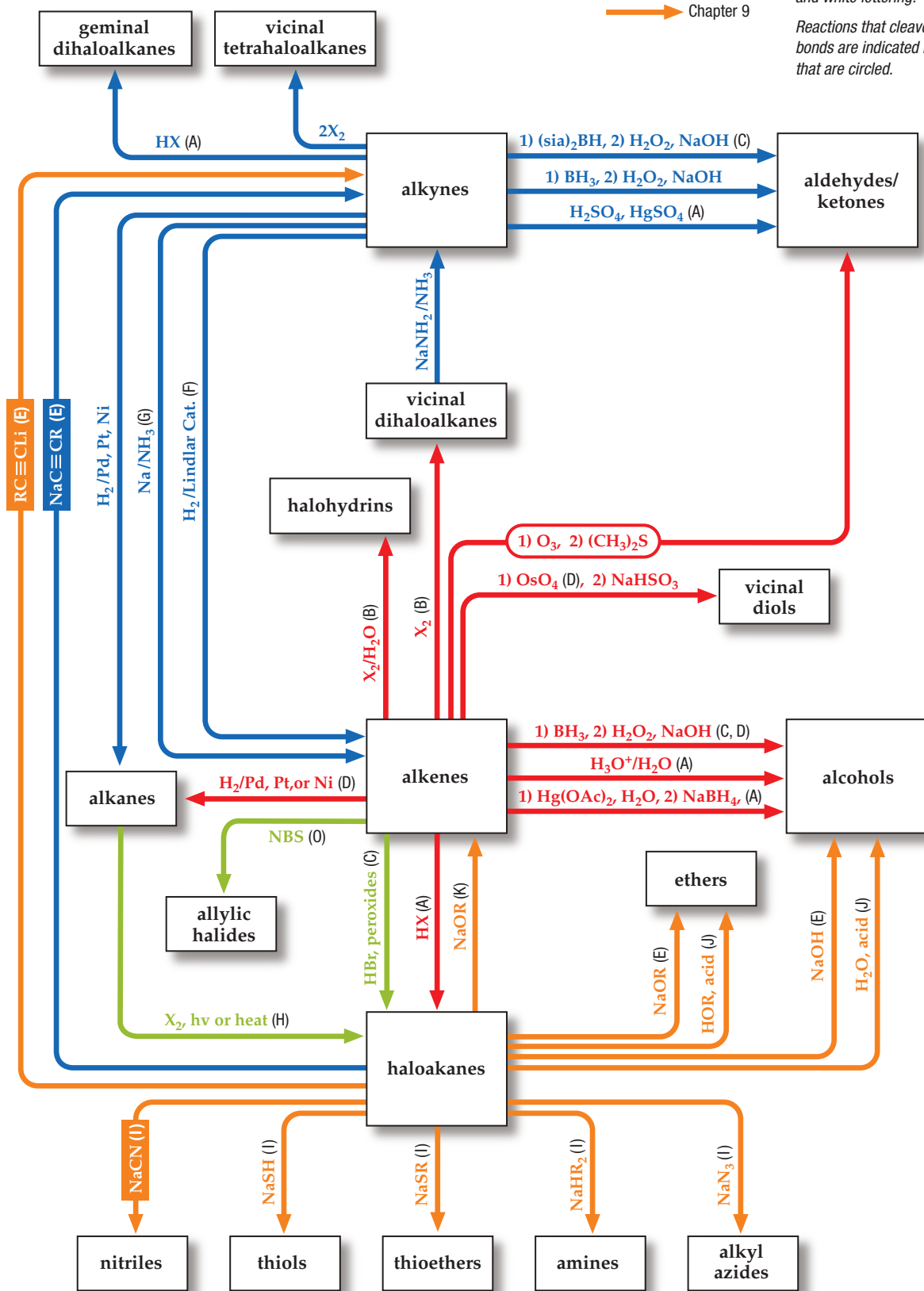
Reactions that cleave carbon-carbon bonds are indicated by reagents that are circled.



- Key:
- Chapter 6
 - Chapter 7
 - Chapter 8
 - Chapter 9

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Reactions that cleave carbon-carbon bonds are indicated by reagents that are circled.

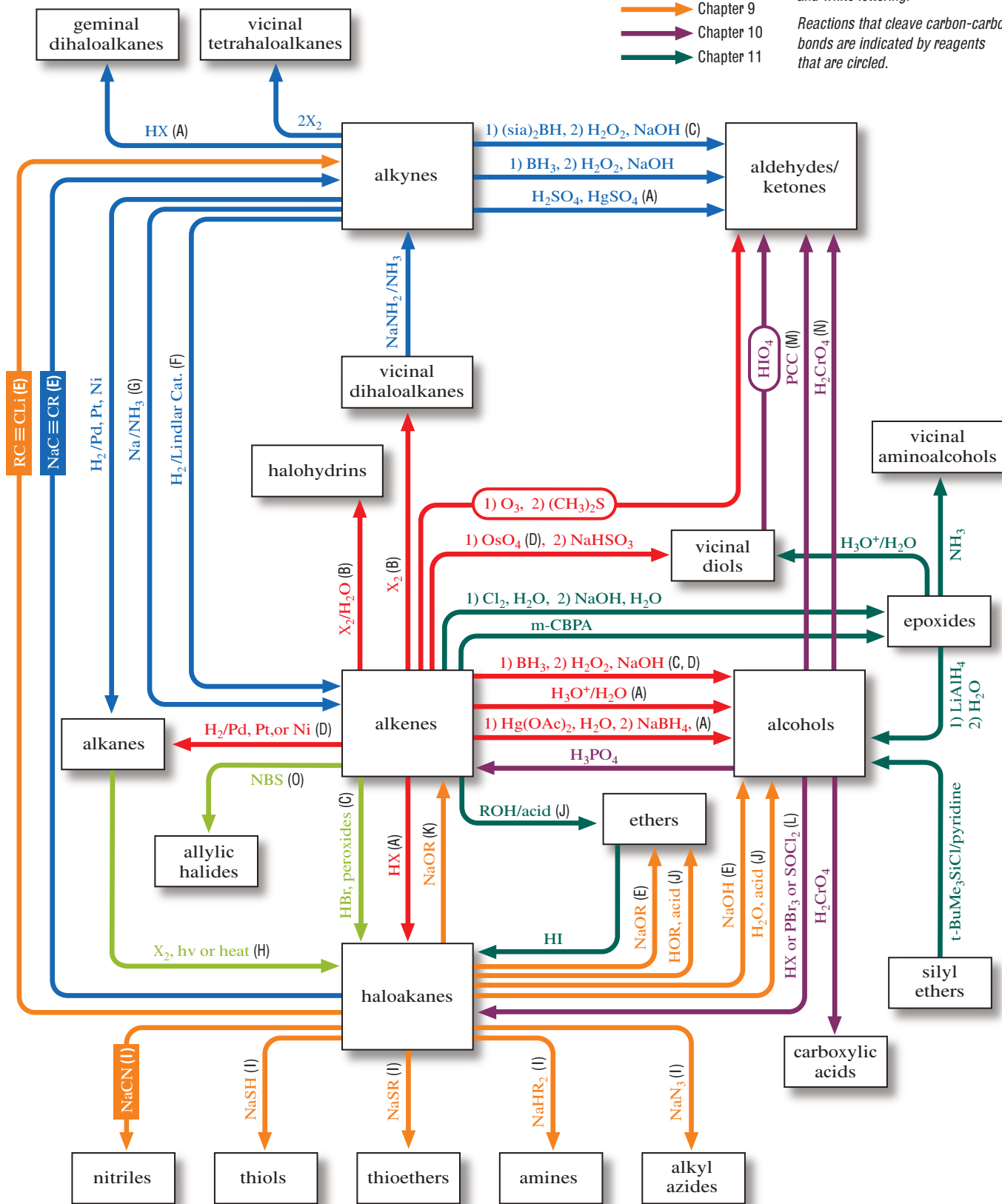


ROADMAP FOR REACTIONS Chapters 6 7 8 9 10 11

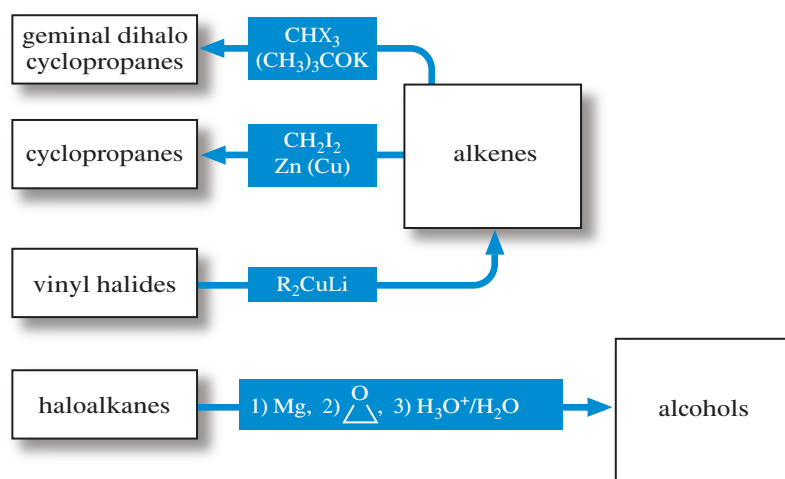
- Key:
- Chapter 6
 - Chapter 7
 - Chapter 8
 - Chapter 9
 - Chapter 10
 - Chapter 11

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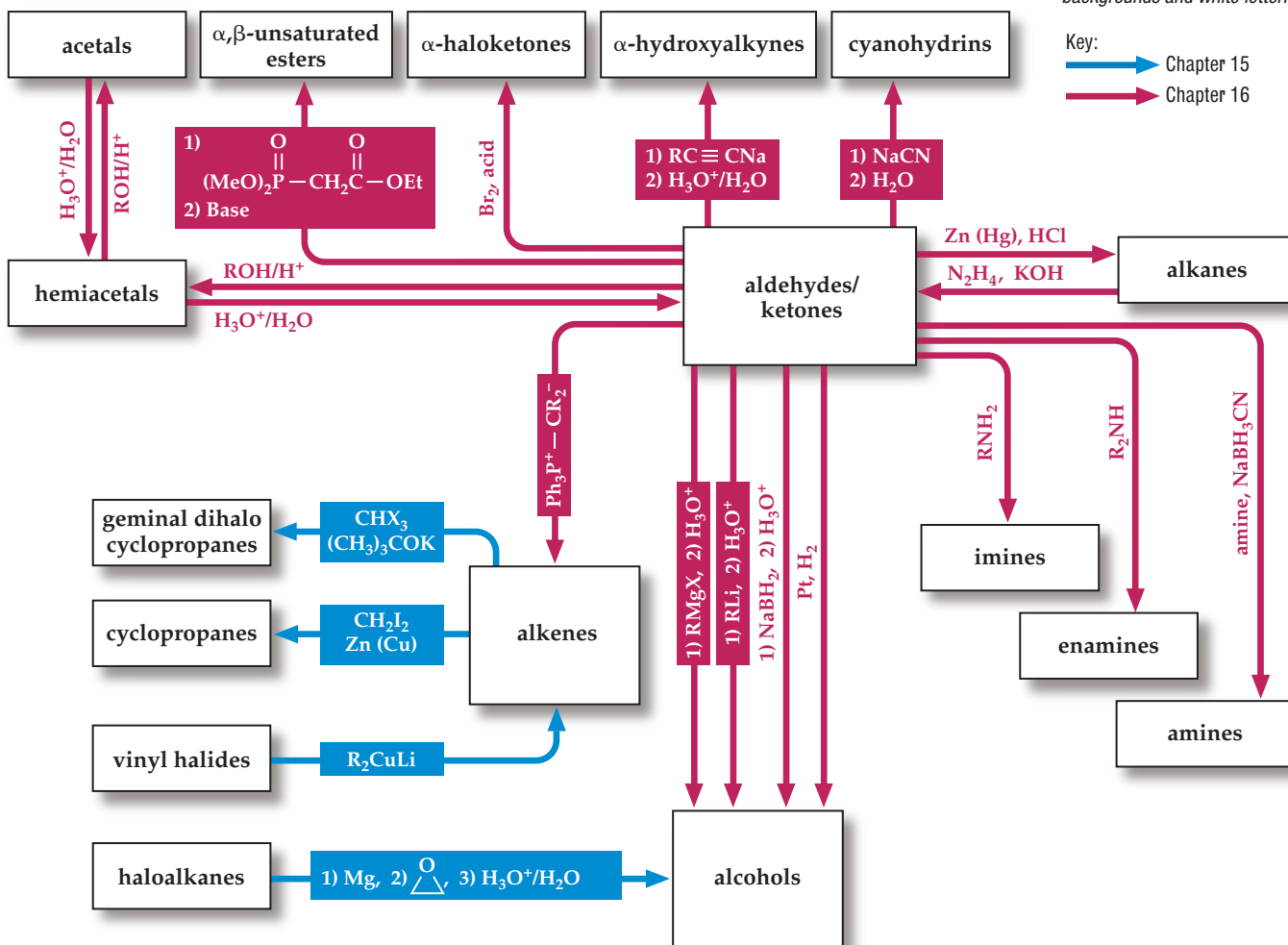


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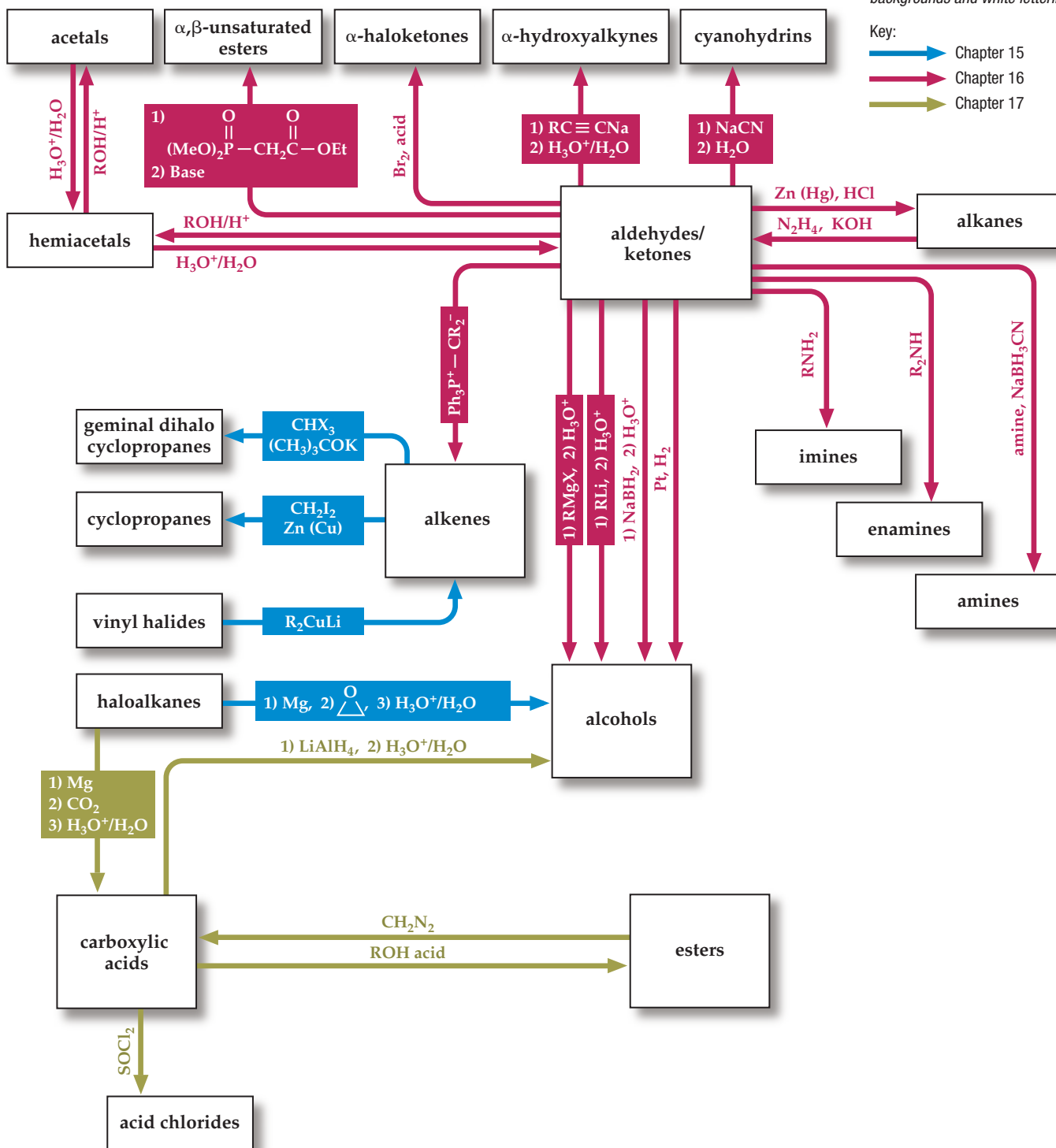


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 (L) PBr_3 and SOX_2 works for methyl, 1° , and 2° haloalkanes.
 HX can give rearrangements.
 (M) For 1° alcohols
 (N) For 2° alcohols
 (O) Regiochemistry: the product with the more substituted alkene predominates

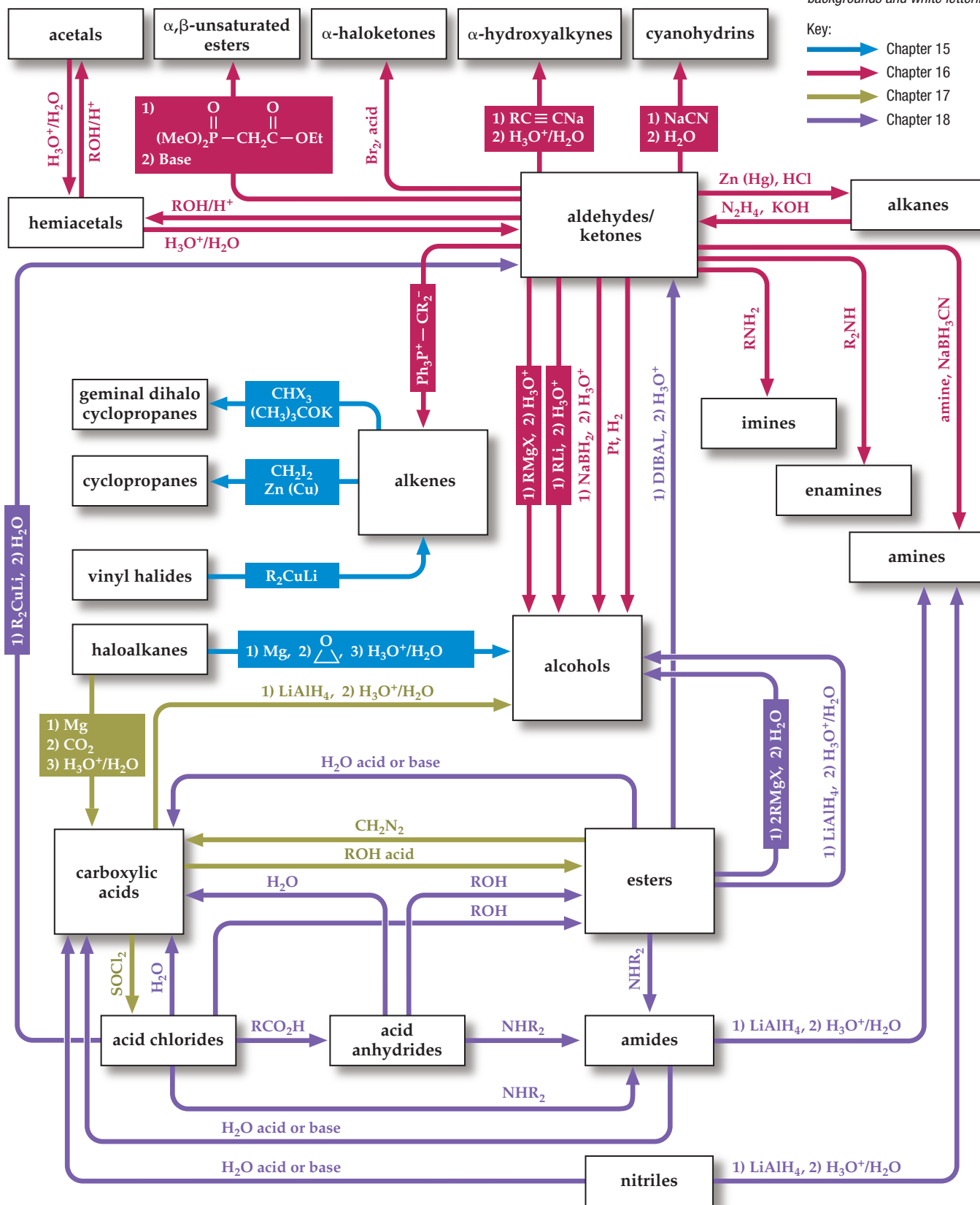
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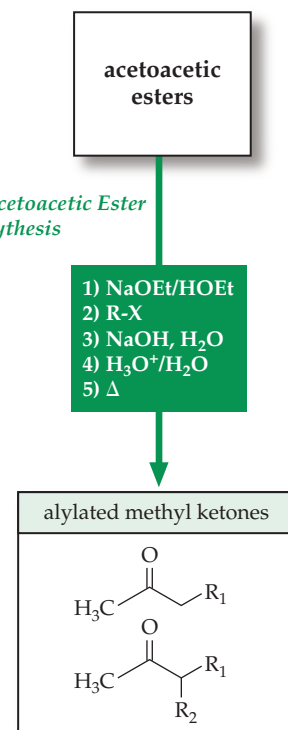
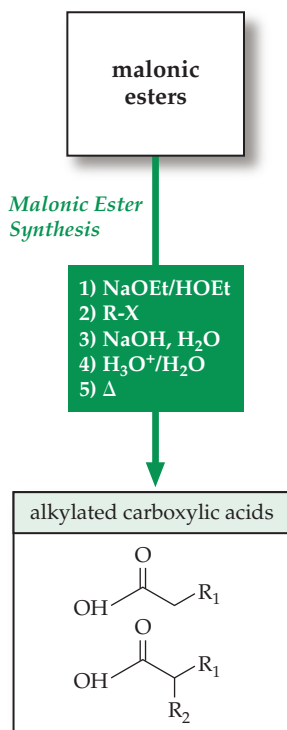
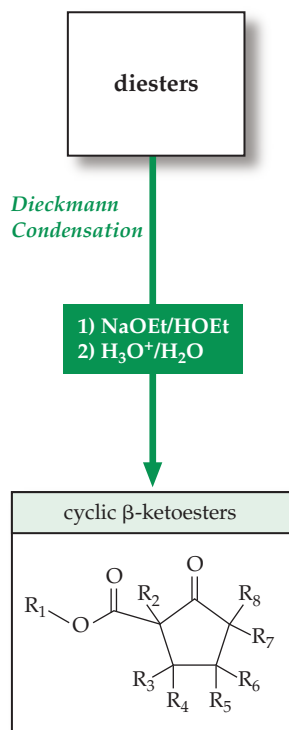
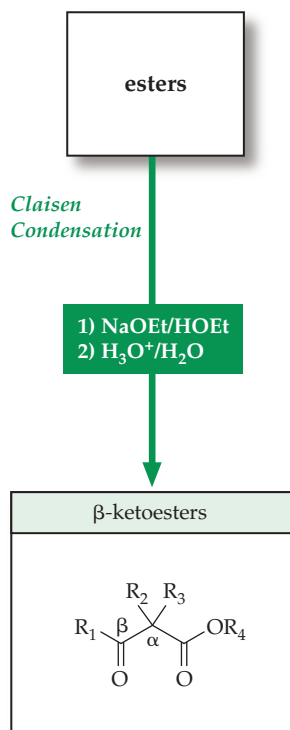
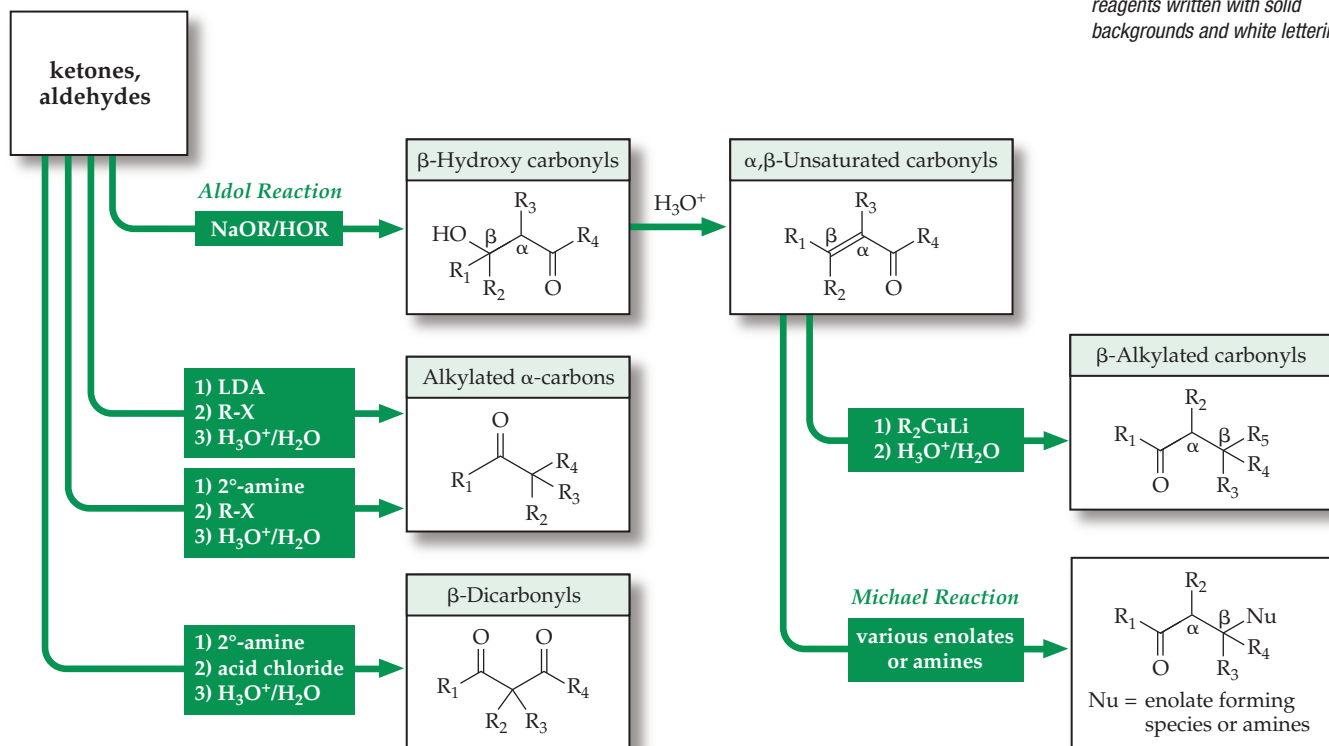
Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.



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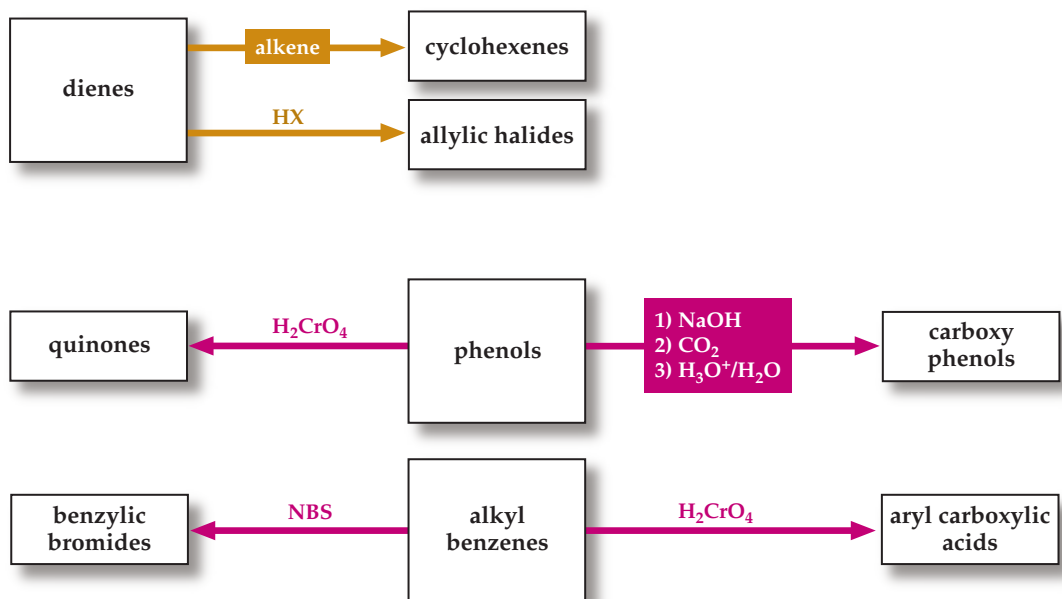
Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.



Key:

→ Chapter 20
→ Chapter 21

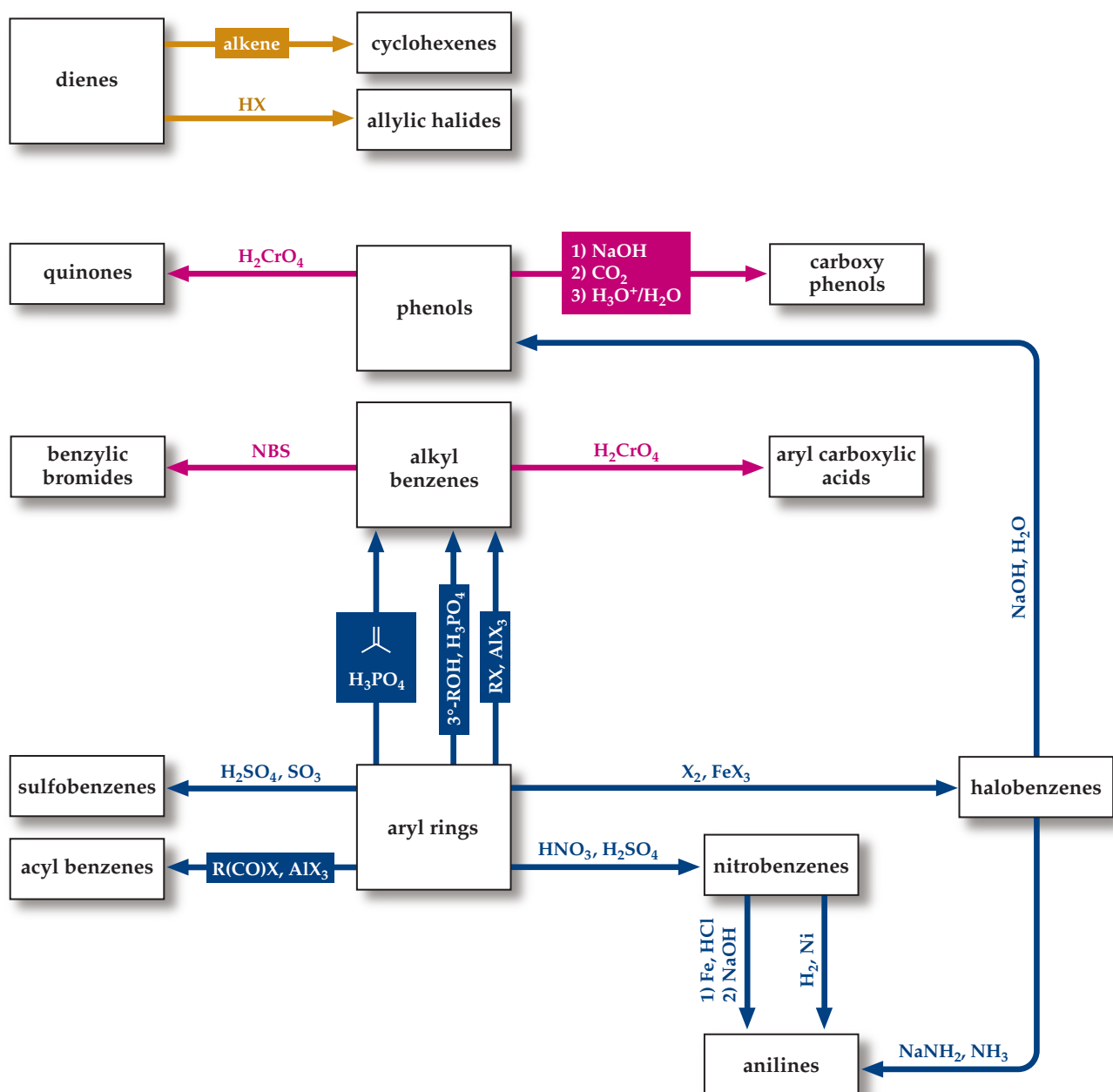
Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.



Key:

- Chapter 20
- Chapter 21
- Chapter 22

Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.



Key:

- Chapter 20
- Chapter 21
- Chapter 22
- Chapter 23

Carbon-carbon bond forming reactions are indicated by reagents written with solid backgrounds and white lettering.

