Melting

Best - Chapter 9, pp. 299-215

Magma Generation

• Partial melting
  – Upper mantle
  – Deep crust
• Magma density
• Less than surroundings

Ab-An System

• Melts are enriched in Na & Si
• Residual is enriched in Ca & Al

Di-An System

• Initial melts have eutectic composition
• Residual enriched in end-member composition
Fo-Q System

- Initial melts have eutectic or peritectic composition
- Residual rock is enriched in Fo or Q, depending on the starting composition