

Anorthite - Diopside System

- Simple binary system with a **simple eutectic** and **no solid solution**
- System is pertinent to gabbroic rocks:
 - crystallizes pyroxene (diopside) and plagioclase (anorthite)

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Anorthite - Diopside System

- This system contains two congruently melting compounds **anorthite** and **diopside**
- **Congruently Melting Compound**
 - A compound which when heated melts directly to a liquid of its own composition
 - eg. Solid anorthite has a composition of $\text{CaAl}_2\text{Si}_2\text{O}_8$ which when heated melts to a liquid with the same composition $\text{CaAl}_2\text{Si}_2\text{O}_8$

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