DNA and RNA Base Pairing Rules

DNA to DNA

- **Possible Bases**: Adenine, Thymine, Cytosine, Guanine
- G ↔ C, A ↔ T
- A and G are purines (double-ring), C and T are pyrimidines (single-ring)

DNA to mRNA

- **Possible Bases**: Adenine, Thymine, Cytosine, Guanine, Uracil (RNA only)
- G ↔ C, A → U, T → A
- A and G are purines (double-ring), C, T, and U are pyrimidines (single-ring)

mRNA to tRNA

- **Possible Bases**: Adenine, Cytosine, Guanine, Uracil
- G ↔ C, A ↔ U
- A and G are purines (double-ring), C, T, and U are pyrimidines (single-ring)