

⚡ Meiosis – 30-Second Instant Cram Sheet

🧬 Purpose:

- Make **haploid** gametes + generate **genetic variation**.
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🔧 Key Events:

- **Prophase I**: Synapsis + Crossing Over.
 - **Metaphase I**: Independent Assortment (bivalents).
 - **Anaphase I**: Homologous chromosomes separate.
 - **Meiosis II**: Like mitosis → chromatids separate.
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🎯 Creates Variation:

- **Crossing Over** (swap all bits)
 - **Independent Assortment** (random distribution).
 - **Random Fertilisation** (later event).
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🔥 Super-Charged Key Words:

- Synapsis | Chiasmata | Bivalent | Recombinant | Reduction Division
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✅ Final Result:

4 genetically unique haploid gametes.

💬 Instant A Flex*:

"Meiosis halves the chromosome number and introduces genetic diversity via crossing over and independent assortment."