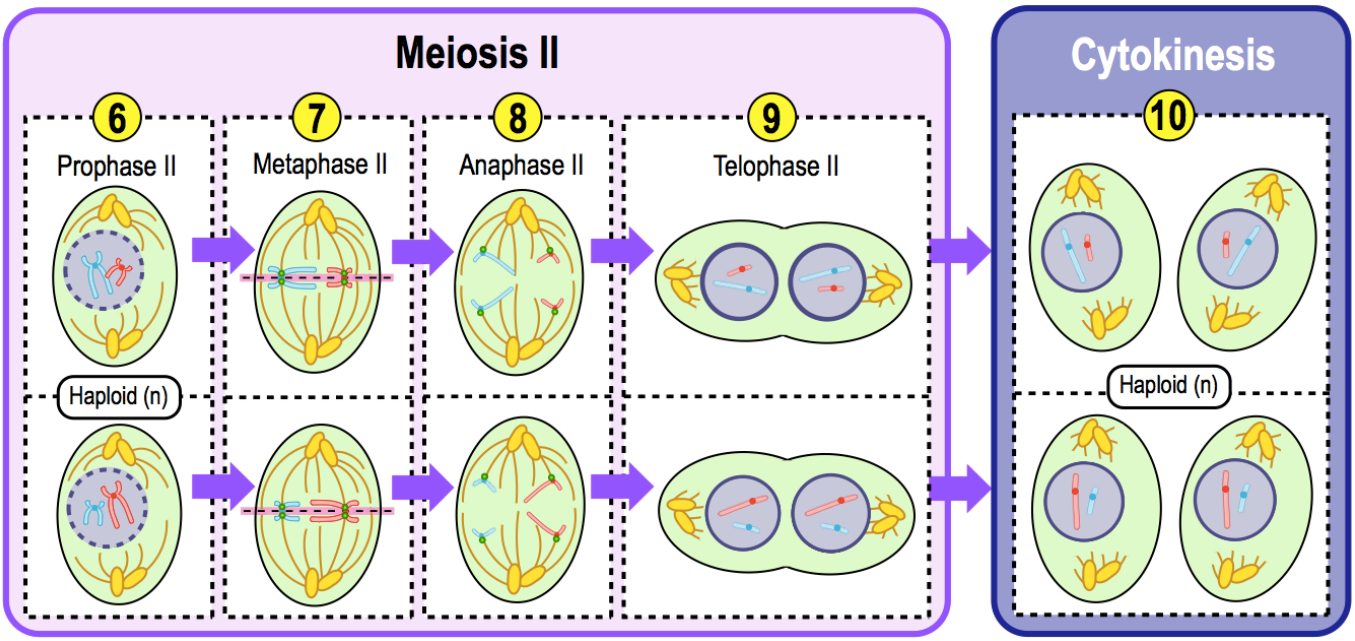
CONCEPT: MEIOSIS II

- In **Meiosis II**, each *haploid* cell produced in Meiosis I divides, forming _____ genetically *diverse,* haploid gametes.
- In terms of the events that occur in each phase, **Meiosis II** is *almost* exactly the same as mitosis.
  - □ Similar to Mitosis, chromosomes align in _____ row in Metaphase II
  - □ Also, similar to Mitosis, *sister* _____ are divided in Anaphase II.

EXAMPLE: Meiosis II.



PRACTICE: Which statement describes a major difference between meiosis II and mitosis in a diploid animal?

a) Homologous chromosomes align on the metaphase plate in meiosis II.
b) Sister chromatids separate in mitosis, and homologous chromosomes separate in meiosis II.
c) Meiosis II occurs in a haploid cell, while mitosis occurs in diploid cells.
d) Meiosis II is known as “reductional division” while mitosis is known as “equatorial division”.

PRACTICE: During which of the following stages of meiosis do homologous chromosomes pair up and align along the metaphase plate of the cell?

a) Metaphase I of meiosis.
b) Telophase I of meiosis.
c) Anaphase I of mitosis.
d) Metaphase II of meiosis.

PRACTICE: What separates during Anaphase II?

a) The cytoplasm. b) Sister Chromatids. c) Homologous chromosomes. d) Daughter nuclei.