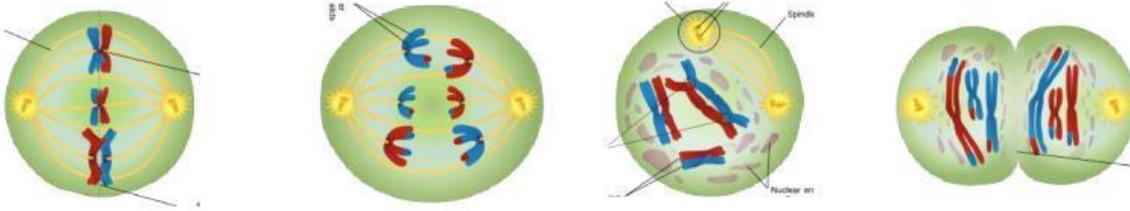


# Meiosis – Meiosis I - Crossing over

**Success Criteria:** Being able to describe and outline the process of crossing over

**TASK 1** – Crossing over occurs at which phase. Tick the correct phase below



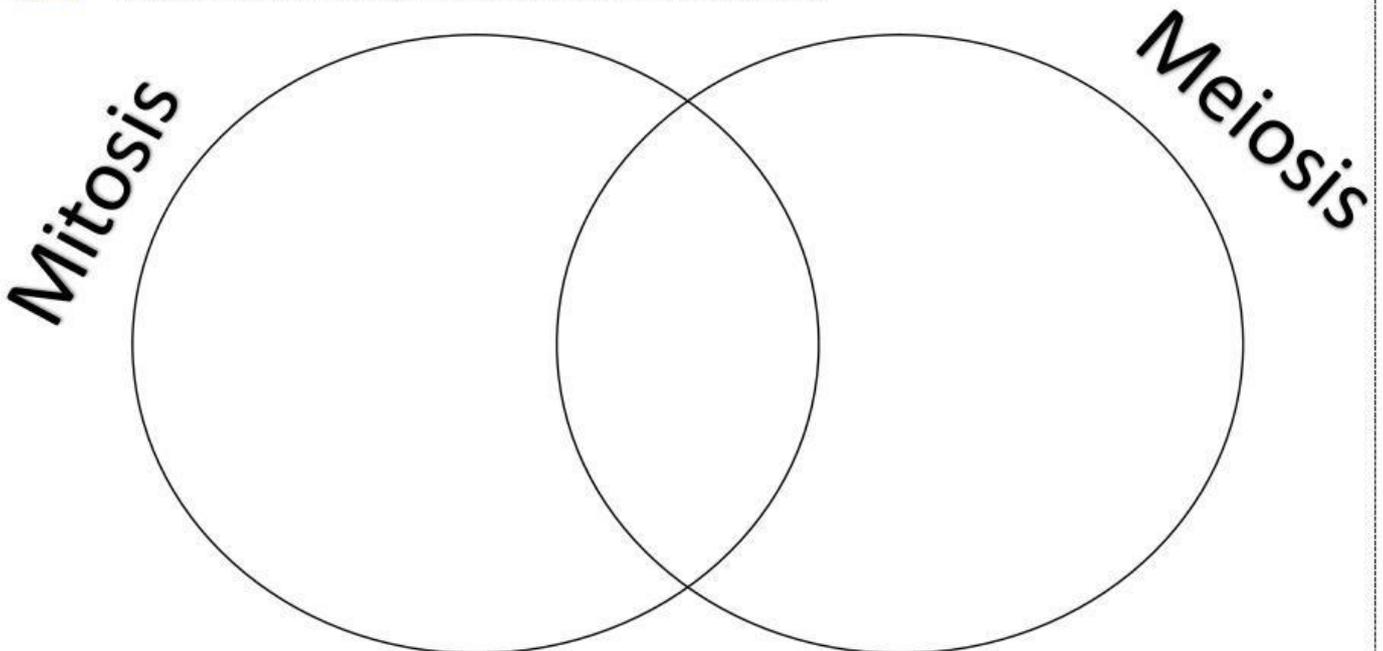
Also, write the name of the phase here \_\_\_\_\_

**TASK 2** – Fill in the corrects works for the passage below. Word bank below

Crossing over is when genetic information is swapped between \_\_\_\_\_. This occurs during \_\_\_\_\_ where the chromatids overlap with one another. The purpose of crossing over is to increase genetic \_\_\_\_\_ by creating new \_\_\_\_\_ of genetic code. Increase genetic diversity is essential to the \_\_\_\_\_ of a population as it increases chances of survival in an ever-changing environment.

|           |             |              |          |            |
|-----------|-------------|--------------|----------|------------|
| Diversity | Chromosomes | Combinations | Survival | Prophase I |
|-----------|-------------|--------------|----------|------------|

**TASK 3** – Complete the venn diagram that compares Mitosis and Meiosis



|  |                                      |
|--|--------------------------------------|
| Crossing over occurs                             | Forms haploid cells                  |
| Genetic information division separated in phases | Produces genetically identical cells |
| Type of cell replication                         | Start with a diploid cell            |
| Produces "2n" cells                              | For growth and repair                |
| Produces multiple daughter cells                 | Forms gametes                        |