Name: Date: Block:

**Memorize this comparison chart as you will have a quiz over it first thing next class!**

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| --- | --- | --- |
| **Category** | **Mitosis** | **Meiosis** |
| **What is it for?** | Growth and Repair | Production of gametes |
| **Where does it happen?** | Everywhere! Almost all cell division is Mitosis | Only Sex Cells! |
| **Starts with?** | One diploid cell (2N) | One diploid cell (2N) |
| **Ends with?** | Two diploid cells (2N) | Four haploid cells (N) |
| **Genes?** | Genetically identical clones! | Genetically distinct-produces our genetic variation |
| **How many divisions or cycles?** | One | Two |
| **What happens in Anaphase?** | Sister chromatids separate | Anaphase 1-homologous chromosomes separateAnaphase II- Sister chromatids separate |