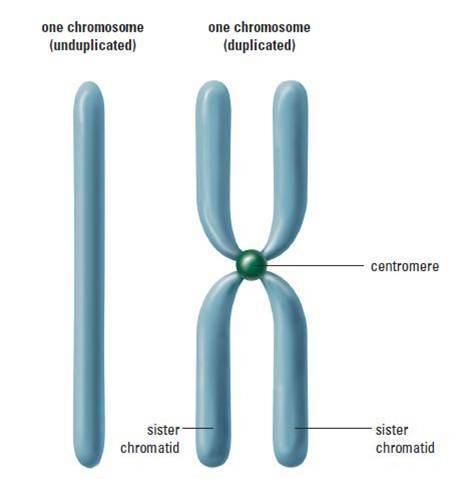
Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_

**Unit 1 LT 2: Cell Cycle & Regulation Notes**

**BACKGROUND VOCABULARY**

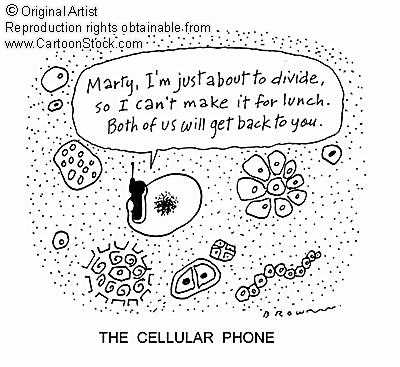
**Chromosomes**

**[](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwi2vpHX8bLOAhVB5CYKHaxUCFgQjRwIBw&url=https://www.tes.com/lessons/sIWJmjprvRjEoQ/cell-cycle-m-phase&psig=AFQjCNFtO66kBZ78UTWkrPG1SVnXEKcrOg&ust=1470782381821056)**

**Chromatids**

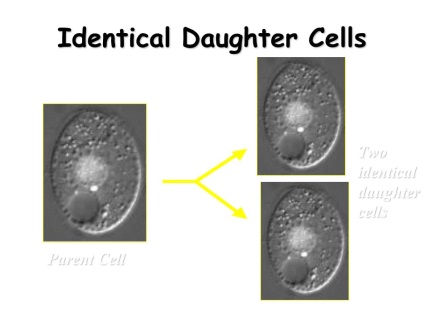
**Centromere**

**Why Do Cells Divide? (3 reasons)**



**The Cell Cycle: What is it?**

**What Happens during the Cell Cycle?**

**What is the goal/purpose of the Cell Cycle?** [](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwiU7bDw9rLOAhXGOSYKHS5rAt8QjRwIBw&url=http://slideplayer.com/slide/2575915/&bvm=bv.129389765,d.eWE&psig=AFQjCNGzIqb4gebbPwqYqmlfKEsUfIBcqg&ust=1470783819154701)

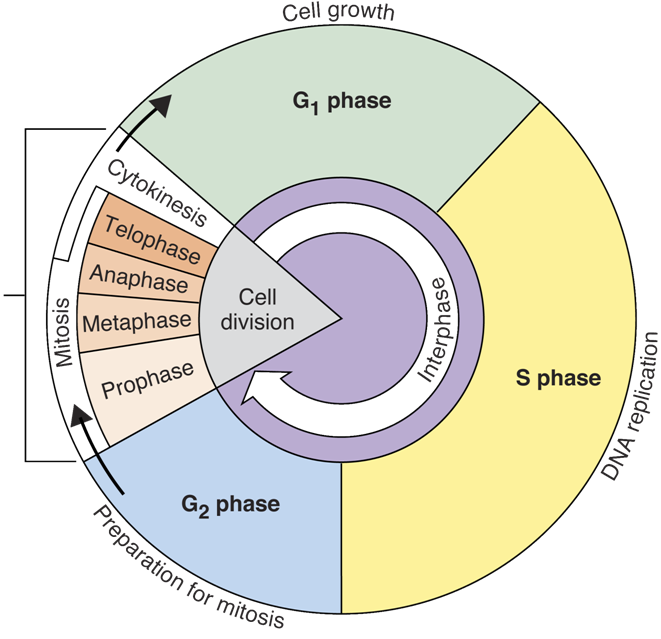
**Two**

**Identical**

**Daughter cells**

**Parent Cell**

**4 Phases of the Cell Cycle**

 **1.**

**2.**

**3.**

**4.**

**What happens during each of the 4 steps of the Cell Cycle?**

|  |  |
| --- | --- |
| 1. **G -1 (Gap Phase 1)** | 1. **S - Synthesis** |
| 1. **G-2 (Gap Phase 2)** | **4. M- phase** |

**CELL CYCLE SUMMARY**

**Together, the G1, S, and G2 phases make up INTERPHASE.**

**What is interphase?**

**Cell Division**

* **Mitosis --**
* **Cytokinesis --**

**G0**

**Mitosis: ( I ) – P – M – A—T**

|  |  |
| --- | --- |
|  | **p246d** |
|  | **p246e** |
|  | **p246c** |
|  | **p246a** |

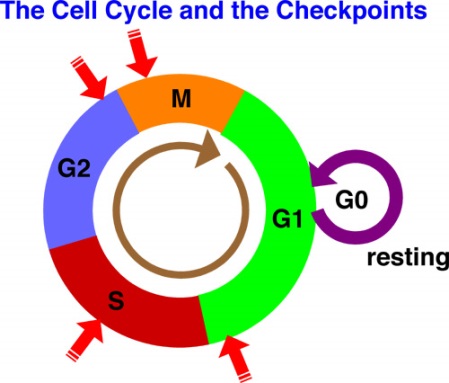
|  |  |
| --- | --- |
| **Cytokinesis in Animal Cells** | **Cytokinesis in Plant Cells** |
| **p246a** | **sb4505f1 [Converted]** |

**Cell Cycle Regulation**

**What does research say?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| petri1 |  | **petri3** |  | **petri5** |
|  | petri2 |  | **petri4** |  |

**What are cyclins?**

**Internal Regulators External Regulators**

**CANCER**

[](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwiP0oz-ibPOAhVERyYKHV16ABgQjRwIBw&url=http://www.123rf.com/photo_7649909_african-american-traffic-police-officer.html&bvm=bv.129389765,d.eWE&psig=AFQjCNFt9mY1AFwZOkkp2_-J7H_V8cTqDQ&ust=1470788901674438)

**Problem Solving Activity**