UNIT	4 - N	<b>Iend</b>	lellian	Ge	netics
"MEIO	SIS	GUII	DED I	COV	ΓES"

Name\_\_\_\_\_ Hr\_\_\_

#### 1. Do you remember Mitosis?

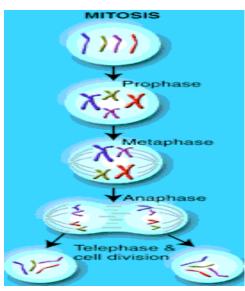
Mitosis –

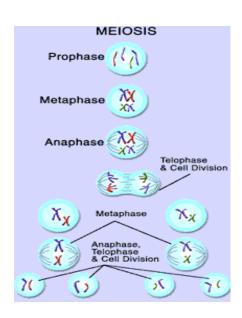
Results in \_\_\_\_\_\_ of the \_\_\_\_\_

## 2. Why do cells Divide?

\_\_\_\_\_

### 3. Compare Mitosis and Meiosis:





#### 4. Why MEIOSIS?

1(2n) organisms must produce(n)	) cells before they can
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2. \_\_\_\_\_\_ guarantees a "\_\_\_\_\_" of genes.

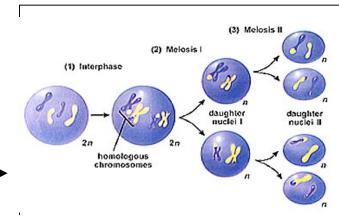
3. This mixing of \_\_\_\_\_\_ helps that species have

enough \_\_\_\_\_\_ to survive changing

4. \_\_\_\_\_\_ is the

process of "\_\_\_\_\_\_"

those genes



# SIMPLE DIAGRAM OF MEIOSIS →

## **STEPS OF MEIOSIS**

STEP 1. The number of	must be	to form
· 1 (	_ chrom.)> 4	( chrom.)
STEP 2. Meiosis I: DNA	to form	
• chrom> total ch	rom> Cell	> diploid cells
STEP 3. Metaphase I: "		by switching
• Source of	· , which is ho	ow organisms evolve
STEP 4		
Instead	t, the entire chromosome	e moves apart.
STEP 5. Telophase I: Results in	two cells, each with	chromosomes.
Meiosis II begins AFTER Telopha	se I (the last step in Mei	osis I)
STEP 6: Meiosis II: the same pro		nout
It's called		
• 2 diploid cells ( chromos	omes)> Cell Division	
STEP 7. Results in		
in		aalla
These cells are also called _	or	сенѕ.

