Chapter 11-4, Part II, Meiosis and Genetics Sexual Cell Reproduction Page 275-278

Objectives: Students will

- A) Compare haploid and diploid chromosome numbers
- B) Summarize why half of an individual's genetic information comes from each parent
- C) Summarize the steps of meiosis and identify its products
- D) Explain how genetic variation occurs from meiosis

A)	Compare	haploid	and dip	oloid c	hromosome	numbers
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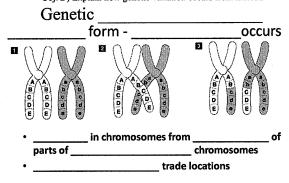
	develo	pment
0	egg or spe set of chromosome ()
(FA)	Undergoes divisions	_ with cell
\(\frac{1}{2}\)	• Develops into a sperm (,)
Why do cells divide by Meiosis?	e • To reduce chromos sex cells to	ome number in numbers
	Chromosome genetic	
() V ()	or or	=

Obj. C) Summarize the steps of meiosis and identify its products

Meiosis I

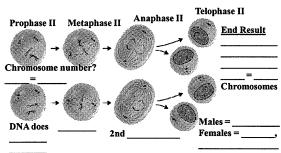
Interphase I	Prophase I	Metaphase	I Anaphase I	Telophase I
	- 	Chromatids Occurs	Chromatids	CellsChromosome number?
Chro	mosome nu =	mber?		

Obj. D) Explain how genetic variation occurs from meiosis



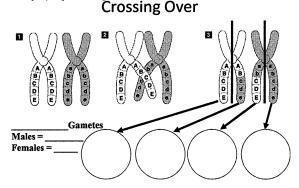
Obj. C) Summarize the steps of meiosis and identify its products

Meiosis II



Obj. C) Summarize the steps of meiosis and identify its products

Obj. D) Explain how genetic variation occurs from meiosis



Obj. B) Summarize why half of an individual's genetic information comes from each parent

Melotic C	ens	
• Divide	_to	Immature Egg or
Chromosome number		sperm
• or eggs		
FERTILIZATION? MALE FEMALE BABY + = =		

Obj. B) Summarize why half of an individual's genetic information comes from each parent

Meiotic Cells......

How does a female child result from fertilization?

 DAD MOM FEMALE CHILD

 SPERM EGG ZYGOTE

 How does a male child result from fertilization?

 DAD MOM MALE CHILD

 THE CHILD

EGG

SPERM

ZYGOTE

Obj. B) Summarize why half of an individual's genetic information comes from each parent $\,$

	= chromosomes
to "	:
•zygote with _	
of one type	Eggs forming
•	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$
zygote with _ one type	
	+ =

Answer the following to receive your Standards Based Worksheet: Exit Ticket

- 1. What is used to represent haploid and how many chromosomes is this in humans?
- 2. What is produced from meiosis?
- 3. What causes genetic variation and occurs during meiosis?
- 4. Write the mathematical formula for fertilization.