LEGO MITOSIS/MEIOSIS SECTION

DIFFERENCES BETWEEN MITOSIS and MEIOSIS		
Difference by category	**Mitosis**	**Meiosis**
1. This process can occur in what kind of cells?	All cells	Reproductive or Germ Cells
2. How many cells does this process produce at the end?	2	4
3. How do the chromosomes line up at the middle of the cell before the first division?	Not in any order	Each chromosome finds its matching chromosome.
4. Are the new cells **identical** to the original or are they **genetically different**?	Identical	Genetically different
5. Compare the total amount of DNA in each new cell with the amount of DNA in the original cell.	Same Amount (Diploid)	Half the amount (Haploid)
6. How many times does the sequence of cell division occur in this process?	Once	Twice

TRUE OR FALSE?		
	MITOSIS	**MEIOSIS**
7. DNA duplication happens prior to this cell process.	T	T
8. Microtubules move the chromosomes.	T	T
9. Chromatids are joined together at the centromere.	T	T
10. Recombination occurs on every chromosome during this process.	F	T

Adapted from LEGO Life Science 2004