Name _____ Class/Period _____ Date _____

Contrasting Mitosis and Meiosis

Directions: Compare and contrast mitosis and meiosis by answering the questions below.

Questions	Mitosis	Meiosis
Number of cells at beginning of division?		
Is parent cell haploid or diploid?		
Number of cells at end of division?		
Are daughter cells haploid or diploid?		
Are daughter cells identical to parent cell?		
Are daughter cells identical to each other?		
In humans, # of chromosomes at beginning of division?		
In humans, # of chromosomes at end of division?		
How many divisions occur?		
In what type of cells does the division occur?		
What is the purpose of this type of division?		

ANSWER KEY

Contrasting Mitosis and Meiosis

Directions: Compare and contrast mitosis and meiosis by answering the questions below.

Questions	Mitosis	Meiosis
Number of cells at beginning of division?	1	1
Is parent cell haploid or diploid?	diploid	diploid
Number of cells at end of division?	2	4
Are daughter cells haploid or diploid?	diploid	haploid
Are daughter cells identical to parent cell?	yes	no
Are daughter cells identical to each other?	yes	no
In humans, # of chromosomes at beginning of division?	46	46
In humans, # of chromosomes at end of division?	46	23
How many divisions occur?	1	2
In what type of cells does the division occur?	body cells (somatic cells)	sex/reproductive cells (gametes)
What is the purpose of this type of division?	to produce identical cells; to increase the number of cells; to replace cells	to produce gametes for sexual reproduction