

Name: _____ Period: _____ Date: _____

How Cells Divide: Meiosis

Worksheet to accompany PBS Nova Animation
<http://www.pbs.org/wgbh/nova/baby/divide.html>

Step 1 – Before We Split

- How many chromosomes are in the human genome?
- How many chromosomes are in a sperm or egg cell?
- For each of the following diagrams, draw the chromosomes of the mother in one color and the chromosomes of the father in a different color.

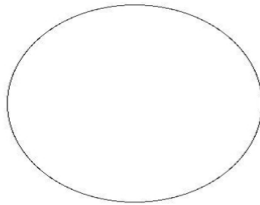
Key:

Chromosomes from father = []

Chromosomes from mother = []

Draw the cell as it appears during this stage. Label the following parts:

- Nuclear envelope
- Nucleolus
- Chromatin
- Centrioles



Step 2 – Interphase I

- What replicates during this time?

Draw the cell as it appears during this stage. Label the following parts:

- Nuclear envelope

h (E)

B	BB	Bb
b	Bb	bb

25% BB, 50% Bb, 25% bb
 75% brown, 25% blue

4.

	W	W
W	WW	WW
w	Ww	Ww

0% short whiskers

5.

	r	r
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Cow A x bull		r
	h	r
h	hh (D)	

Cow B x bull		r
	H	r
h		r

Cow C x bull		r
	h	r
H	Hh (F)	