

Name: Peter Martin

CHROMO---What?
What's in a Name?

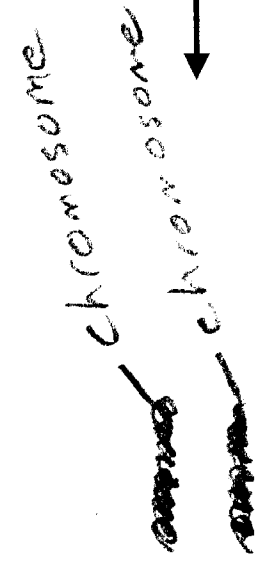


chromatin

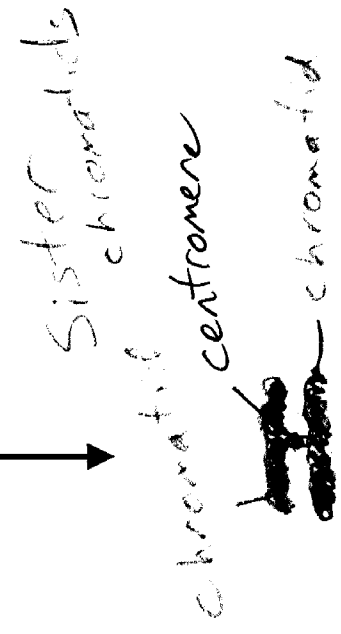
Interphase

Chromatin

Interphase



daughter chromosomes
Anaphase, Telophase



chromosome
Prophase, Metaphase

Mitosis Lyrics:

From:

<http://www.youtube.com/watch?v=JHRBJgq50dk>

Those cells they're everywhere.
Cells are things plants and animals share.
But if you want to know something hip,
Just check out how cells split....

(They split by....) **MITOSIS, MITOSIS**
What every cell knows is
When it comes time to divide,
Mitosis will be working inside.

You see a cell's life is all worked out.
There is no room for doubt.
The cycle keeps on turning
And the cells they keep on yearning..

For ... **MITOSIS, MITOSIS**
What every cell knows is
When it comes time to divide,
Mitosis will be working inside.

At first a cell must grow
And what soon begins to show
Is that Interphase isn't much
trouble.
It's just that everything inside must double.

All the DNA replicates
And a very big change that makes.
The reason things look different is
The chromosomes got chromatids.

(It's for) **MITOSIS, MITOSIS**
What every cell knows is
When it comes time to divide,
Mitosis will be working inside.

Mitosis has four distinct phases
And those chromosomes all have places
When they have to move
To do the cell division groove.

(Oh yeah!) when it comes time to divide,
Those chromosomes will be moving inside.

At Prophase they make the
nucleus fizzle.

During Metaphase they move to
the middle.

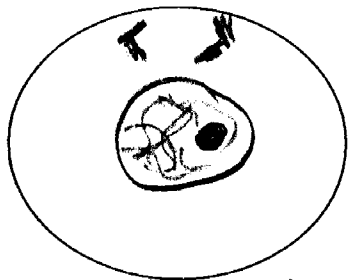
In Anaphase their
centromeres split.

And in Telophase on the poles they
sit.

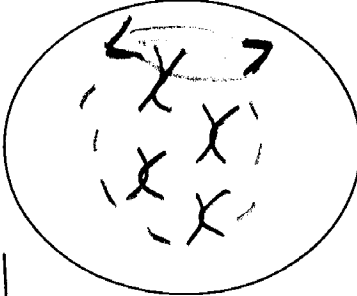
And when all the four phases are through,
The one cell will become two.
'Cause the cytoplasm splits apart
And then new cells move back to the start.

MITOSIS!

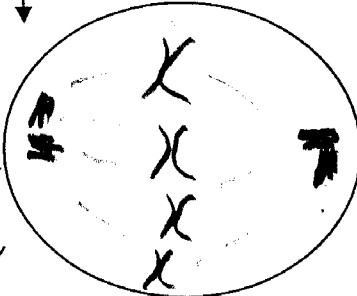
MITOSIS



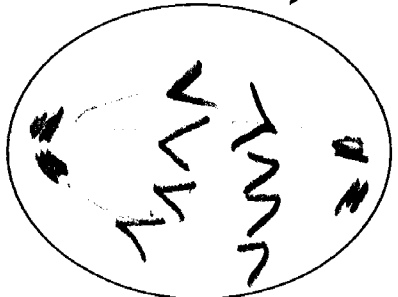
- I. Interphase
- DNA replicates
 - longest period
 - centrioles divide



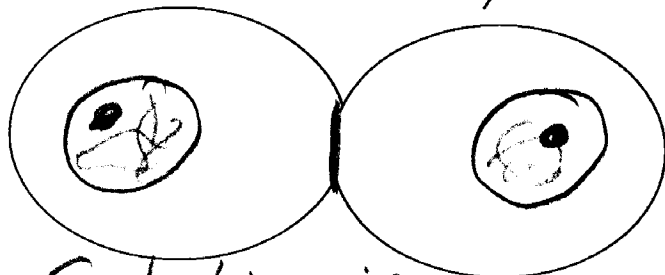
- II. Mitosis
- A. Prophase
- nuclear membrane breaks down
 - chromatin condenses ^{down}
 - nucleolus fades
 - spindle fibers attach to centromeres



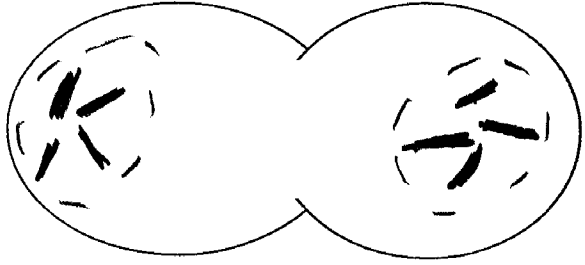
- B. Metaphase
- chromosomes line up along equator



- C. Anaphase
- chromatids (1/2's) separate
 - spindle fibers shorten



- III. Cytokinesis
- Animal: cell pinches in two
 - Plant: builds wall between new cells



- D. Telophase
- nuclear membrane reassembles
 - spindle fibers disappear