March 14, 2012

1) DNA Replication /Fingerprinting
2) DNA Assignment

Warm - Up

The information contained in the DNA would fill a _____volume encyclopedia, if it could be written down.

Sep 22-3:16 PM

Part D

1) - All Living things made of cells.
- Cells are the smallest unit of life.
- All cells come from pre existing cells.

2) a. Asexual - reproduces by itself
-> Daughter cells are identical

Sexual -> Requires fertilization
-> Zygote, cell that is different.

b. Frag. -> piece of organism falls off, forms new organism.

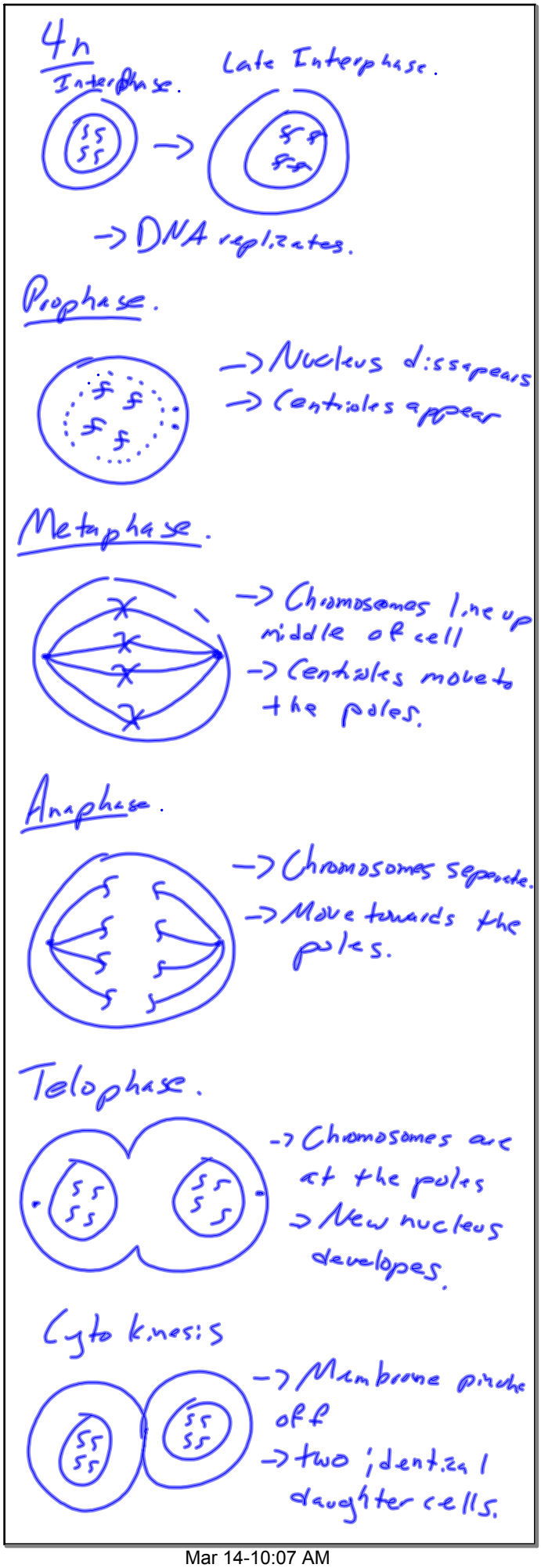
Budding -> Parent organism grows a new pore, it falls and forms new organism.

3. Cilia -> tiny hair like structures, that move the cell.

Flagellum -> a tail structure that propels the cell.

4. a Budding.
b Fragmentation
c Binary Fission
d Vegatative Reproduction
e Spore formation

Mar 14-9:47 AM



Mar 14-10:07 AM

It would fill a 1000 volume encyclopedia, if written down.

Oct 7-10:41 AM

Pg. 178.

1) DNA -> Deoxyribonucleic acid.

2). A, T, C, G.

Because genetic codes are made up of thousands of different combonations of these 4 letters.

3. Each strand of DNA acts as a template for a new compliment strand of DNA. It is important because the genetic material in every cell must duplicated before cells divide.

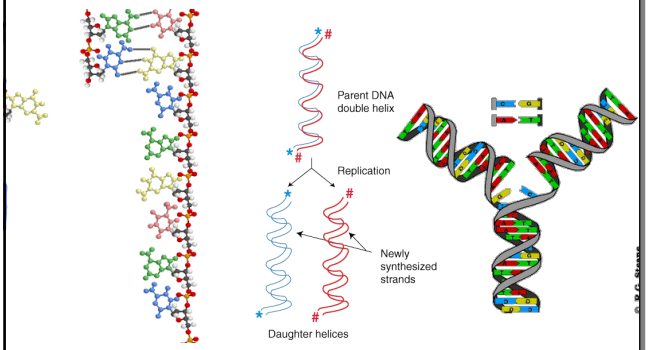
4. Because we each have unique combonations of genetic codes, made up of DNA

DNA Replication

The process in which DNA is able to make copies/duplicate itself.

During Cell division the duplicates separate so that eat cell has a complete se genetic information.

The DNA unzips and each side makes a new copy to match.



Primary Strand — Compliment Strand

A – T
C – G
C – G
T – A
C – G
A – T

1

– T – A
– A – T
C – G
G – C
T – A
A – T

2

T – A
A – T
C – G
G – C
T – A
A – T

T A G C G T T A A C A T G A G T
A T C G C A A T T G T A C T C A

Sep 28-7:48 PM

A

T

C

G

A - T

C - G

With our nitrogen bases "A"s are only going to pair with "T", and "C" are only going to pair with "G"

Oct 15-10:12 AM

C G

A T

A-T A-T

C-G C-G

T-A T-A

G-C G-C

A-T A-T

A T

C G

T A

G C

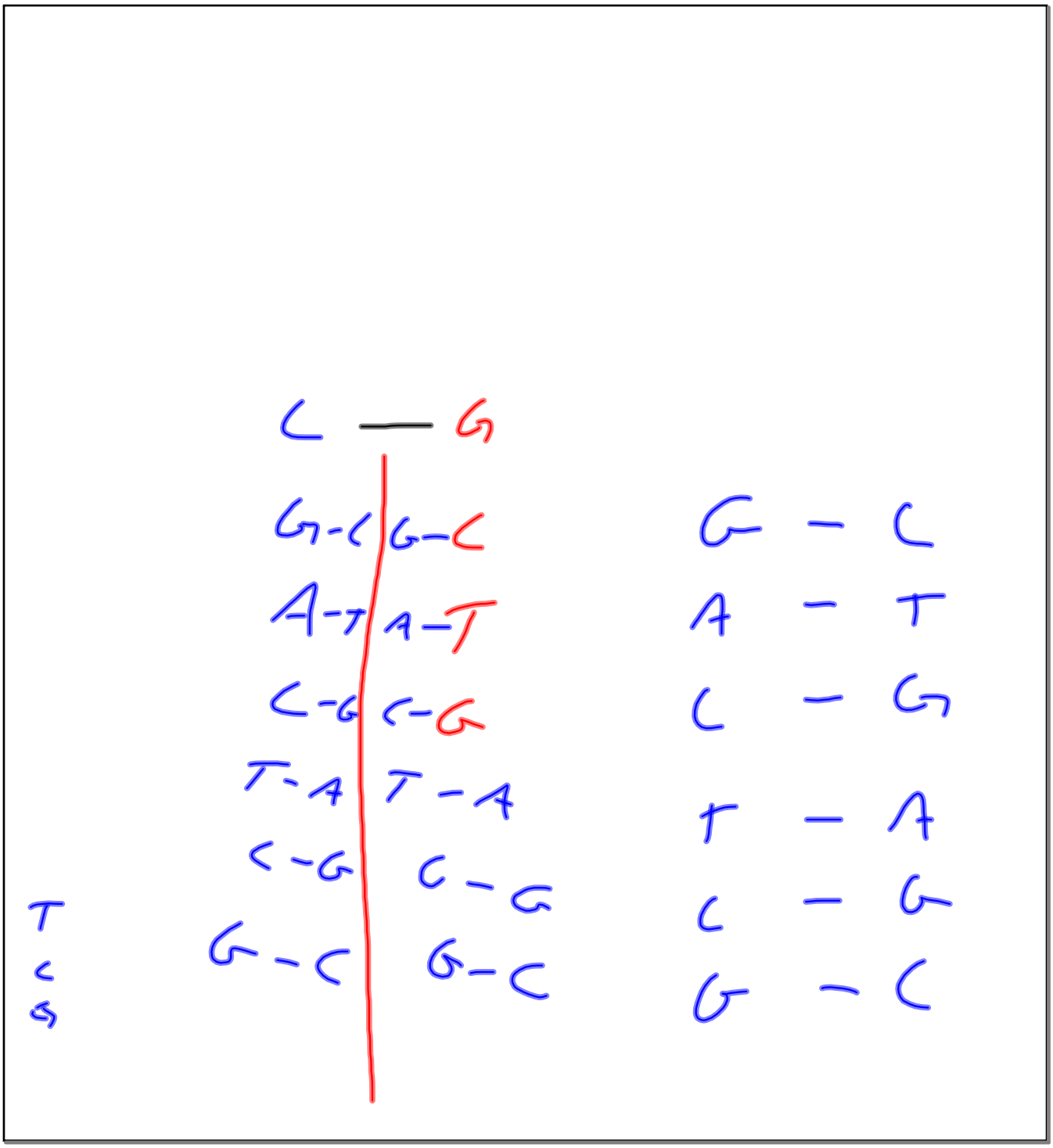
A T

T A G A G G C C A T G

| | | | | | | | | | |

A T C T C C G G T A C

Mar 14-10:21 AM



Mar 13-12:49 PM

Part D

1)- All Living things made up of cells
- Cells are the smallest functional unit of life.
- All cells come from pre-existing cells.

2) a) Asexual → Reproduces alone
→ Daughter cell are identical
Sexual → Require fertilization (2 Parents)
→ Offspring will not be identical

b) Fragmentation → piece of an organism falls off, creates new organism

Budding → Parent organism grows a new piece, it falls off and creates a new organism

3. Cilia → Hair like structures
Flagellum → Tail structure that propels the cell

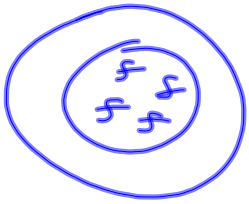
4. @ Budding.
(b) Fragmentation.
(c) Binary Fission
(d) Vegetative Reproduction.
(e) Spore Formation

Mar 14-12:54 PM

Long Answer

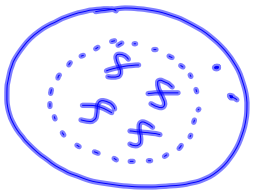
Interphase

Late Interphase



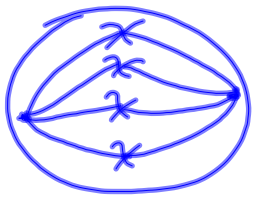
- DNA Replicates.

Prophase



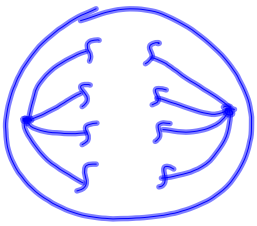
-> Nucleas dissapears
-> Centrioles appear

Metaphase.



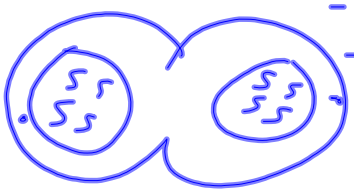
-> Chromosomes Line up.
-> Centriole go to the Poles.

Anaphase



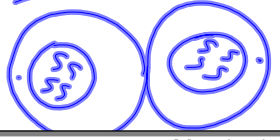
-> Chromosomes sepa
-> Move towards the poles.

Telophase



- New nucleus form
-> Chromosomes a
at the poles

Cyto kinesis



-> Two identica cells.
-> Mem

Mar 14-1:14 PM

A – T – Base Pair

C – G

A - T

G - C

C - G

A - T

T - A

A – T

G – C

C – G

A – T

T – A

A	T
G	C
C	G
A	T
T	A

Helicase → Is an enzyme that breaks bonds that are connecting base pairs in a strand of DNA

Mar 15-9:36 AM

DNA FINGERPRINTING

As you know, DNA contained in your chromosomes is unique to you. DNA fingerprinting allows us to identify a person by his or her DNA found in skin, hair follicles, semen, saliva and blood. That is the reason why DNA has found its way into the courtroom. Crime scene investigators and police can look for samples of DNA left by someone and match it to a suspect.

Aside from the courtroom, can you think of another way this technology can be used now or in the future?

174-178

Question 1-5

Sep 27-4:27 PM

DNA: The genetic Material Assignment

Oct 4-2:03 PM

ATGCATAGCTCCA
TACGTATCGAGGT

A-T

C-G

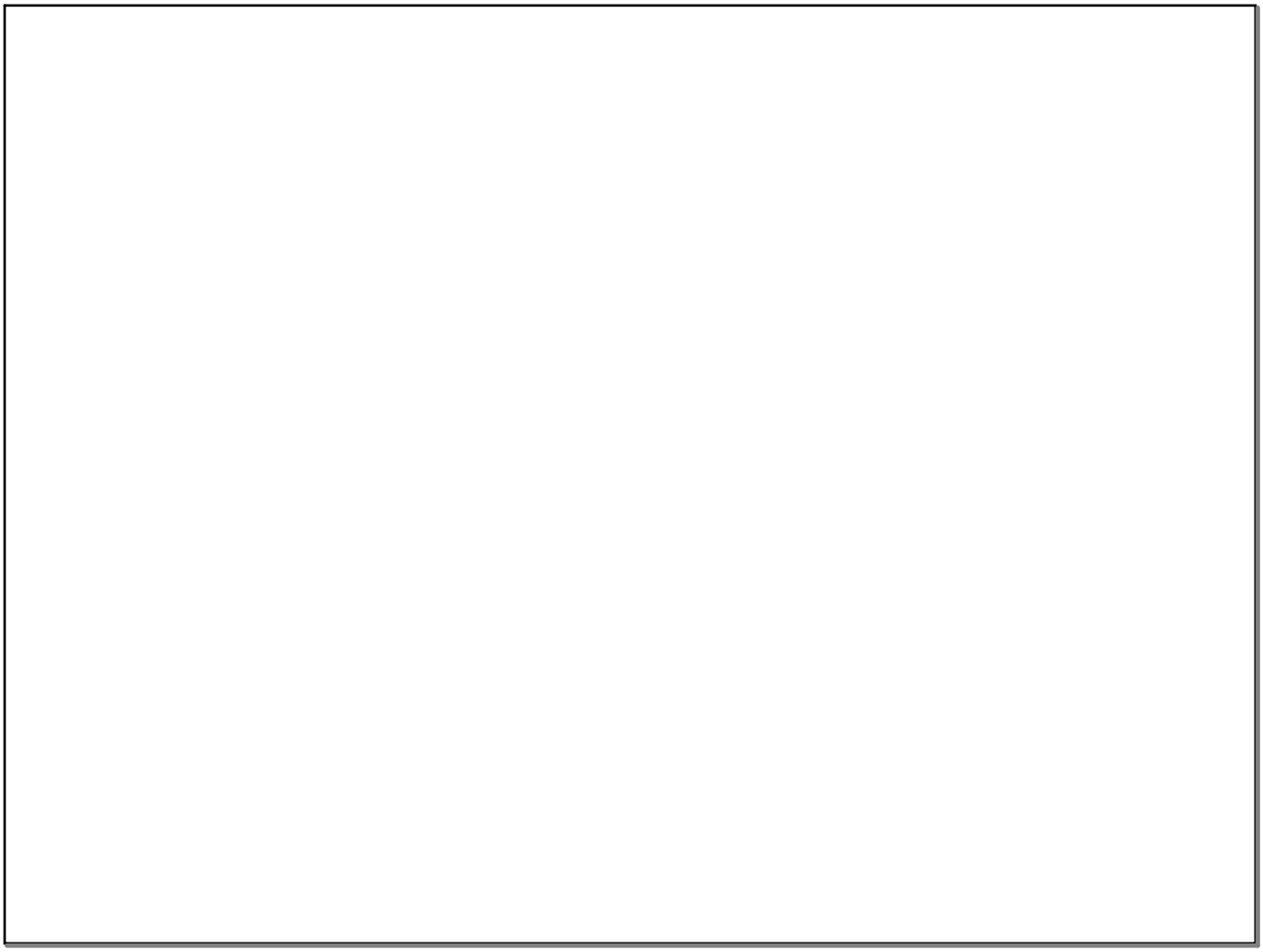
A-T
T-A
C-G
G-C
C-G

A-T
T-A
C-G
G-C
C-G

A-T
T-A
C-G
G-C
C-G

Helicase -> an enzyme used to break bonds between base pairs. Seperating base pairs for replication

Mar 15-10:06 AM



Mar 12-5:06 PM