Lesson 1: Monday, March 23, 2020. Biology MHS

AIM: What is the structure of DNA, and how does this allow for DNA replication? Why is DNA replication necessary?

Practice questions on google form.
https://forms.gle/t1XKZyfwZTyr1c6Q7

Helpful Video: https://www.youtube.com/watch?v=lSvF5-rBRGQ – *Fuse School*
- This video covers details that you do not need to know, but it provides a decent visual of DNA strands separating for replication, and complementary base-pairs.

Practice Questions:

1. In which organelle is DNA stored?

2. How many strands does DNA have?

3. What holds the 2 strands of DNA together?

4. Identify the rules of base-pairing.

5. Why is DNA replication important?

6. Using the rules of base-pairing, complete the commentary strand to the template strand shown below.

DNA template strand: G A A T G C C A T T G C

Complementary DNA strand: _____

7. A molecule of DNA is made from 22% cytosine (C). What % of the molecule is made from Adenine (A)?
   1) 22% 2) 44% 3) 56% 4) 28%

8. A scientist analyzed a segment of DNA from a human chromosome and found that the percentage of thymine molecular bases (T) was 35%. Which row in the chart below contains the correct percentages of the other molecular bases in the DNA segment?

Row	Guanine (G)	Cytosine (C)	Adenine (A)
(1)	15%	25%	25%
(2)	25%	25%	15%
(3)	15%	15%	35%
(4)	35%	15%	15%