

Name: _____ EID: _____

Topic: DNA for Information Storage (Week 11)

Pre-discussion questions. Answer briefly. Use only the space provided.

- 1) How many nucleotides long is the longest single-stranded DNA molecule used by Church to store information in DNA?
- 2) Portions of this sequence are used for three different functions. Name these functions and draw a figure showing how they might be located relative to one another on a DNA strand.
- 3) How much greater is the information density of DNA in a test tube compared to a standard hard disk or flash drive? (Hint: Look in the supplemental materials for precise numbers.)
- 4) What is a major disadvantage of using DNA to encode information relative to normal digital media?
- 5) Do you think any library or archive in the world will start using DNA for information storage within the next 20 years?