

Name _____

Period _____

Ms. Foglia

Date _____

OSWALD AVERY & THE SEARCH FOR THE TRANSFORMING FACTOR

Oswald Avery studied the *Streptococcus* bacteria that is the cause of pneumonia, a common and, at the time, often fatal disease.

1. When Avery began to work with *Streptococcus*, was he primarily interested in discovering basic principles of genetics, or in finding practical disease treatments?

2. Was this research dangerous? What safety precautions were taken? Were they adequate (by modern standards)?

3. In the 1940's, why did biochemists think that DNA was a simple molecule, not capable of holding information?

4. How did Avery, MacLeod, and McCarty show that the substance causing the transformation of *Streptococcus* was DNA and not protein or polysaccharide?

5. Avery worked on *Streptococcus* for over 30 years. His discovery about the biochemical nature of “the transforming principle” was not generally accepted for nearly a decade after it was published. What does this suggest about his personality and attitude toward science? What does it suggest about the acceptance of creative new ideas in science?
