

Date: _____

Name: _____

Molecular biology

Review the central dogma by watching the following YouTube videos:

<https://youtu.be/-K8Y0ATkkAI>

<https://youtu.be/6YqPLgNjR4Q>

Based on the videos and/or your own investigations (using wikipedia, google, etc.) answer the following questions. After completing this worksheet, proceed to Part I of "Resistance is Futile... or is it?" and answer the questions.

Questions

1. What are cellular membranes composed of? What is their function?
2. What are the main differences between procaryotes and eucaryotes?
3. Briefly explain what a gene is.
4. Explain the concept of "gene expression" using a diagram and a brief explanation
5. Briefly explain the structure and composition of the DNA molecule. What are the complimentary bases?
6. Why is the genetic code considered to be redundant?
7. What is the advantage of a redundant code?