Viruses and Reverse Transcription

Virus: A small genetic entities (DNA or RNA) that are **obligate pathogens**. They are not cells, and contain no ribosomes.

 Obligate pathogen: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reverse Transcription: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Viral Life Cycles

 Lytic:

 Lysogenic:

Lytic Virus Example: Influenza

 What nucleic acid? \_\_\_\_\_\_\_\_\_\_\_

 What are H and N? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 How big? \_\_\_\_\_\_\_\_\_\_\_

 Transmission method: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 6 Steps to Lytic Infection Cycle

1.

2.

 3.

 4.

 5.

 6.

Lysogenic Virus (aka Retrovirus) Example: HIV

 HIV is Small: \_\_\_ genes, \_\_\_\_\_ proteins

 Geographic distribution: global, concentrated in \_\_\_\_\_\_\_\_\_\_\_\_

 High-Risk behaviors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Ethnic Imbalance: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Nucleic acid: \_\_\_\_\_\_\_

 Retrovirus: a type of virus that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Consequence of Retroviral Action: 1. Difficult to cure 2. Long onset time.

Steps in Lysogenic Infection Cycle

 1.

 2.

 3.

 4.

 5.

 6.

 7.