Replication of HIV

3) Viral DNA enters the nucleus and is incorporated into host chromosomes. It is transcribed into mRNA and more viral RNA, which move to the cytoplasm.

4) Viral proteins are synthesized, using mRNA.

2) Viral reverse transcriptase produces DNA, using viral RNA as template.

6) Viruses bud from the plasma membrane.

1) Virus attaches to receptor on host's plasma membrane. Its core disintegrates, and viral RNA enters the cytoplasm.

Virus- Characterized by a lack of independent metabolism and by the ability to replicate only within a living host cell; consist of nucleic acid (Nucleoid) DNA or RNA (but not both) and a protein shell.

1. Fusion inhibitors- prevents the virus from entering the T-cell

2. Reverse Transcriptase inhibitors- binds to HIV reverse transcriptase. Blocks RNA from becoming DNA

3. Protease inhibitors- prevents maturation of the virus. Blocks protease activity within the HIV virus