

Virology – Biology W3310/W4310 Spring 2016
Prof V. Racaniello
Study questions for Lecture 5 – Attachment and entry

1. Why must viruses attach to receptors to enter cells? Do cell receptors exist solely for virus entry?
2. Describe how icosahedral and enveloped virions attach to cell receptors.
3. Why are two receptors sometimes required for entry into a cell?
4. What are the different ways that nucleic acids exit a naked icosahedral capsid? An enveloped virus particle?
5. Why must fusion of viral and cellular membranes be regulated? Name three ways by which it is regulated.
6. How does the viral or subviral particle move within the cell? Does diffusion play a role?
7. Are viral nucleic acids always released from the capsid/nucleocapsid during entry? If not, provide an example.
8. Most DNA viral genomes must enter the nucleus. How is this movement accomplished? Do any RNA virus genomes enter the nucleus? If so, how do they cross?