

**Virology – Biology 3310/4310 Spring 2017**  
**Prof. V. Racaniello**  
**Study questions for lecture 2 - The infectious cycle**

1. What is a susceptible cell? A resistant cell? A permissive cell? Which describes the only cell that can take up a virus particle and replicate it?
2. What is cytopathic effect? Name two examples.
3. How does a plaque assay work? How many viruses are needed to form a plaque?
4. Are all virus particles infectious? What is the term used by virologists to measure this?
5. What are the individual phases of the one step growth cycle, and what occurs during each?
6. What is MOI?
7. At an MOI of 1, a significant number of cells will get no virions and a similar number will get one virion. Some (a smaller number) will get 2, 3, or more. How do you know?

Fill out the table below.

**Proportion (probability) of cells infected with:**

MOI	0 pfu	1 pfu	More than 2 pfu
0.01			
0.1			
1			
10			

8. In addition to the plaque assay, what other methods are used to measure virus particles?