1. What, in your own words, is community immunity?

*Answers should reflect this basic concept:*

*When a critical percentage of a population is immune to a particular transmissible disease (in this case, through vaccination), the disease can no longer circulate in the community.*

2. Explain how the class data from Master 2.8: Community Immunity Data Sheet relate to the concept of community immunity. Compare what happened in each round, noting the relationship between the percentage of the population vaccinated and the total number infected. Use actual numbers from the simulation in your description.

*Answers will vary depending on how the simulation progressed in your classroom. Students should note that as the number of vaccinated people increases, the total number infected decreases.*

*When community immunity is achieved, the chances that an unvaccinated person gets a disease are greatly diminished. There are vastly fewer people from whom an unvaccinated person can contract a virus. Although an unvaccinated person’s chances of contracting a disease are greatly diminished, the risk is not entirely eliminated. If an unvaccinated child happens to come in contact with a virus, he or she is vulnerable to the disease. This means that parents who opt out of vaccinating their children reduce overall community immunity and may place their own children at risk of contracting an illness.*

3. Is it fair for someone to benefit from the protective effect of community immunity if he or she has chosen not to assume any risks of vaccination? Why or why not?

*Some susceptible people were protected in Round 2 by high levels of vaccination in the community even though they took no risks of vaccination themselves, which can be considered unfair.*