



# Immunity, Antibiotics and Painkillers

## Exam Style Questions Answers

1. a) Suggest two reasons why parents may not want their children immunized.

(2 marks)

- Fearful of the side effects (bad reactions).
- Vaccines do not always work.

b) Define the term herd immunity.

(1 mark)

Herd immunity involves a high percentage of a population being immune to a disease (due to vaccinations). The disease cannot be passed on because it cannot find a new host, and consequently dies.

2. Describe how bacteria can become resistant to antibiotics.

(3 marks)

- The bacteria can mutate.
- A population of bacteria will contain some bacteria susceptible to antibiotics and some that are resistant.
- When Antibiotics are prescribed, the susceptible bacteria are slowly killed, nothing happens to the resistant bacteria.
- The course of bacteria has been taken, and yet harmful bacteria remain.
- The remaining bacteria can start to multiply.
- If the antibiotic is prescribed again, it will have no effect because all the bacteria are resistant.

