

Name:

Class:



Look at the diagrams. They show how light is focused in people with different eye defects.

i. Name the eye defect in each person.

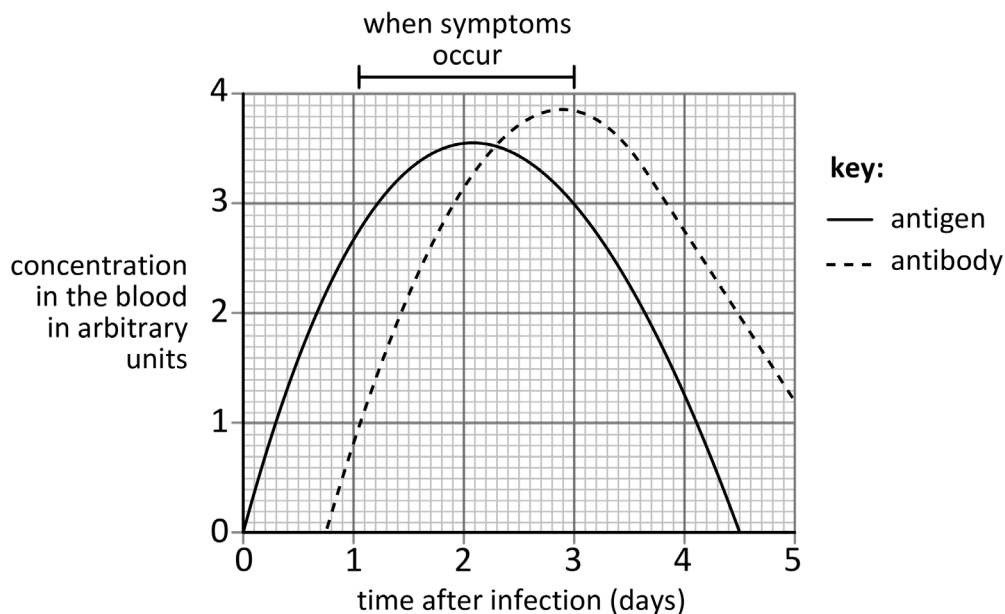
Person X: **is short-sighted.**

Person Y: **is long-sighted.**

ii. Identify the type of corrective lens needed by person X and Y and explain how the lenses work.

- **Idea that concave lenses diverge light rays / person X needs a lens to diverge light rays (before they enter the eye).**
- **Idea that convex lenses converge light rays / person Y needs a lens to converge light rays (before they enter the eye).**

The graph shows data collected from a person infected with a microorganism.



i. Why does the concentration of antigen increase during the first two days after infection?

Microorganisms/bacteria/pathogens are reproducing/dividing/multiplying.

Accept idea that there is not yet enough antibody to fight the infection.

ii. Use the graph to help you answer the following question.

For how many days does the infection last?

4.5 days

iii. Describe what is meant by an antigen and an antibody.

An antigen is a protein on the surface of a pathogen.

An antibody is a protein that binds to an antigen.