

## 7.012 IMMUNOLOGY 2

C.

Match the following statements with the appropriate cell type(s).

Choose from:

- All body cells
- B cells
- Helper T cells
- Neurons
- Macrophages
- Killer (cytotoxic) T cells

- 1) destroy infected body cells
- 2) specifically bind soluble antigen
- 3) present peptides on class II MHC
- 4) present peptides on class I MHC
- 5) stimulate B cells
- 6) undergo somatic recombination

D.

The varicella zoster virus (VZV) is the infectious agent that results in chickenpox, a common childhood illness that causes itchy red spots on the skin. Contracting VZV as a child is relatively benign, but can present serious health issues when contracted as an adult.

i) How does a VZV infected cell signal the immune system? How are the infected cells specifically eliminated from the body.

ii) Over the course of a lifetime, the average person is exposed to VZV many times, yet usually only displays symptoms once. What is the immune system mechanism that results in lifetime resistance?

As of September 1999 any child entering kindergarten must have had chickenpox or received a new vaccine against VZV.

iii) Present an argument in support of this vaccination campaign.

iv) Present an argument opposed to this vaccination campaign.

