

Optical Networks

Go to:

<http://web.science.mq.edu.au/groups/cudos/education/Simulator.swf>

Open the photonics dictionary, read through the definitions

1. What is photonics?
2. What is a photon?
3. What is an optical network?
4. Read the section "How do I encode text for transmission?" and describe how a message is converted into a form that can be sent through optic fibres.

Now go to build a photonics network and do challenges 1-4

5. In challenge 3 what would happen if you didn't use the buffer?
6. Why do you use an amplifier?
7. Do challenges 5-7
8. When you have challenge 7 correct, draw a copy of your solution.
9. What situations can you think of that use optical fibres to send information?

When you have answered all the questions try to complete some of the harder challenges

10. When would you use a collision detector?
11. What does a switch do?

