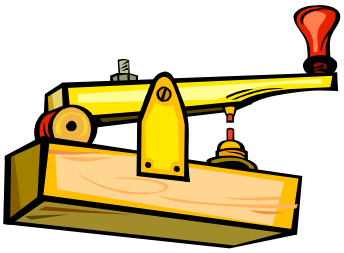
Summary of *Module 6* Activities

Laser Light: An Activity: 30 minutes
Students will learn about two of the most important properties of laser light by pretending to be different types of light. Students will simulate the difference between monochromatic light and polychromatic light. They will also simulate the difference between coherent and incoherent light.

Old Time Communication: 1 hour
In the early days of electronic communication, wires and radio waves could not carry voice signals. Samuel Morse developed what came to be known as Morse code. Students will learn about Morse code and how use it to send messages.



Communicating on a Beam of Light: A Demonstration: 30 minutes
Lasers can be used to carry information just like radio waves. In this demonstration, students will see how an inexpensive diode laser can carry their voice or music and be received by a solar cell.

Laser Communication Challenge: 1-2 hours
Students will design their own laser communication system. They will look for reflective surfaces and obstacles to pass through. Their goal is to create a laser communication system that works over a large distance with a variety of reflections and obstacles in its path.

Fiber Optics: A Demonstration: 30 minutes
Students will observe the phenomena of total internal reflection and how it relates to fiber optic cables. Students will see how fiber optic cables can guide light around corners and obstacles.