

## LU01 Introduction – Nature and Properties of Light

Photonics is the study of photons. Photons are everywhere! Visible light we see reflecting off of objects is photons. Photons are quanta or packets of energy, light energy, that when generated travel out in straight lines until manipulated by natural or man-made optics. Light is used in medicine to cure us, military to detect enemies and protect us, commercial arena to sell our products, and entertainment to wow us. To begin a successful career in the optical and laser area technicians must have a good foundation which includes a solid understanding of the nature and properties of light.

During this unit you will be introduced to light sources and characteristics of light that make lasers so unique. Also you'll discover what happens to light as it passes by or through other materials like our atmosphere or glass. It is always a good idea to read ahead in your book and take notes to help you in discussions and on assignments, quizzes, and exams.

As you are reading, investigate the applets noted in your text when you come across them. The applets again are noted in the margin with an "A" and numbers. Go to the applets web page and select the appropriate applet.