

Client Cards – Three examples of engineering design tasks using UV light detecting beads

**Client Card #1**

Nina Newton is the director of the Childtime Day Care Center and she is concerned about children getting too much Sun exposure during play time. She would like a device that can monitor the amount of Sun the children are getting. The cost must be affordable and the sensor must be age appropriate and safe for her children, who are four years of age and younger.



**Client Card #2**

Charlie Cook is the owner and chief landscaper for Cook’s Greenhouse. Mr. Cook is interested in a device that can monitor Sun exposure to his plants. Some of his plants need indirect light and other plans require lots of direct light. This device must be low-cost, water proof, and be able to remain in soil for long periods of time.

**Client Card #3**

Kavita Landers is the chief lifeguard at Columbia Water Park. She would like to know which sunscreen to buy and how often she needs to reapply it. She needs a device that can monitor whether or not her sunscreen is still effective. The device must be comfortable, easy to put on and take off, and be able to withstand extended Sun exposure and be waterproof.



