Name_____ Date _____

Polarization Quiz Tower: I II III IV

Determine the polarization of the light coming out of each of the ports. Put the answer number in the answer column and explain the basis for your answer under Rationale. If your answer is 2, linearly polarized, state the angle of the transmission axis from the vertical using the coordinate system shown below: 0°, 90°, +45° or –45°. Partial credit will be given for identifying circularly polarized light, but with the wrong handedness. (The filters are not ideal, so the linear or circular states are not perfect. By linear we mean "nearly linear," by circular we mean "nearly circular." **Look straight through the ports–normal to the surface**.)

Port	Rationale	Answer
A		
B		
C		
D		

Choose answers from the following list:

1. Unpolarized light
2. Linearly polarized light
   (state angle θ: 0°, 90°, +45° or –45°)
3. Right circularly polarized light
4. Left circularly polarized light
5. Elliptically polarized light
6. Mixture of linearly polarized and unpolarized light
7. Mixture of circularly polarized and unpolarized light