

pg 402 #20-28

- 20) When Red-shifted \rightarrow moving away from observer by doppler effect waves spread out making freq. lower
When Blue-shifted \rightarrow moving toward observer waves pushed together so freq. higher
- 21) Red, Green, and Blue must combine to make White light
- 22) a) yellow
b) yellow
c) black
- 23) Secondary colors are combinations of primary colors
They are mixtures of two primary colors
- 24) Red is a primary pigment - It cannot be produced by mixing other colors
- 25) Look at light reflecting off a window to see if it cuts out the reflection and you just see through
- 26) Since reflection comes off horizontal you should orient the polarizing axis vertical to cut out the reflection
- 27) yes, if speed changes but frequency does not, then wavelength must change $c = \lambda f$
- 28) They see that the light coming from these galaxies is red-shifted so they are both moving away from us. Tells us that the universe is expanding.