

1-9. Refer to the preceding graph in arriving at your answers.

1. Which of the colors absorbed by chlorophyll is seen least? **blue**
2. What is its approximate wavelength? **about 460 nm**
3. What percent of light energy absorbed does this peak represent? **85%**
4. How much of this color is being reflected? **15% (100-85)**
5. What percent of light energy absorbed by chlorophyll does the orange spectrum peak represent?
about 12%

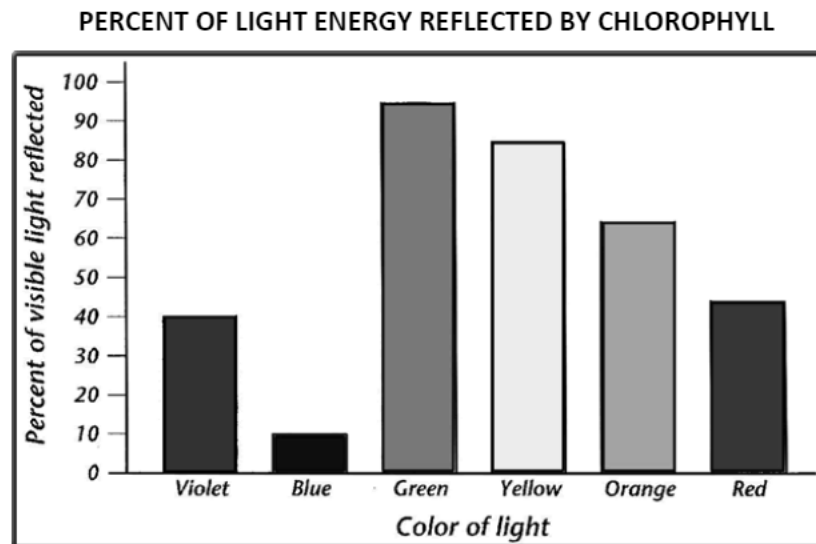
6. Why would you say there are no peaks in the range between 500 nm and 600 nm?
most of the light with those wavelengths is reflected

7. Are you able to see the light in the green-yellow part of the spectrum? **Yes**

Explain why. **most of the light is not absorbed, therefore it is reflected**

8. Arrange the colors in the absorption spectrum of chlorophyll in order of their visibility. Put the most visible color first. **green, yellow, orange, red, violet, blue**

9.-12. Below is a bar graph of the percentage of light energy reflected by chlorophyll. It was derived from the chlorophyll absorption spectrum. Refer to the graph in answering the questions.



9. Which color in this spectrum is most visible? **green**
10. What is the approximate percentage of light energy reflected for this color? **about 90%**
11. What percent of light absorbed does this represent? **about 10 %**
12. If everything above 50% of light energy reflected is visible to the human eye, is red light part of the mixture of colors seen in light reflected by chlorophyll? **no**