NAME _____ DATE _____ CLASS _____

CHAPTER 9: COLOR

REVIEW

1. Fig. 9–1 shows a beam of white light refracted by a prism. Use this diagram to complete the sentences below.

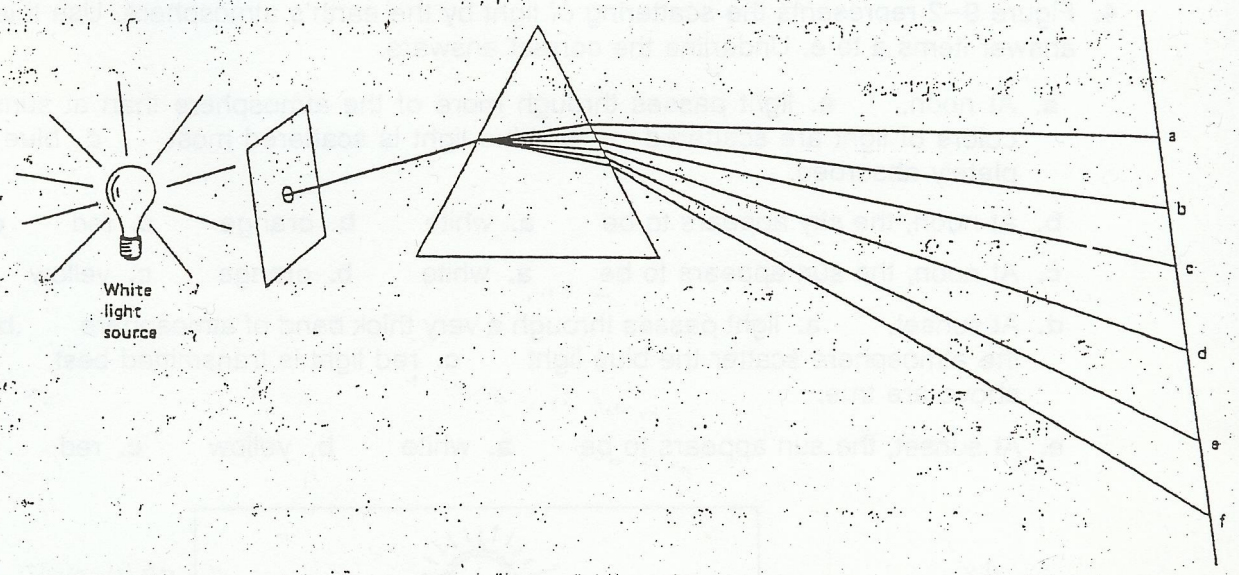

Fig. 9–1

   a. Each of the letters a through f represents a _____ of visible light.

   b. The glass prism bends a light ray by an amount that depends on the _____ of the light ray.

   c. The color of light ray a, which is bent the least, is _____.

   d. The color of light ray f, which is bent the most, is _____.

   e. All the bands of color are called the _____ of light.

2. Fill in the blanks with the correct words and answer the following questions.

   a. White light shines on a yellow notebook. The notebook appears _____. What colors are absorbed? _____

   b. Yellow light shines on a white notebook. The notebook appears _____. What color is reflected? _____

   c. Blue light shines on a yellow shirt. The shirt appears _____. What color is absorbed? _____

   d. Blue light shines on a blue-green blouse. The blouse appears _____.

   e. Green light shines on an orange. The orange appears _____.

3. Complete the following sentences by unscrambling the letters.

   a. The light that a laser emits is described as being THENCORE _____.

   b. This means the light has a single QUERFYNEC _____.

   c. Red, green, and blue are the MIRRAPY _____ colors of light.

   d. Any two MOMTACRELPENY _____ colors combine to produce white light.

4. Figure 9–2 represents the scattering of light by the earth's atmosphere. Use this diagram to answer items a to e. Underline the correct answers.

   a. At noon, **a.** light passes through more of the atmosphere than at sunset **b.** all colors of light are scattered **c.** blue light is scattered most **d.** blue light is completely absorbed.

   b. At noon, the sky appears to be **a.** white **b.** orange **c.** red **d.** blue.

   c. At noon, the sun appears to be **a.** white **b.** orange **c.** yellow **d.** red.

   d. At sunset, **a.** light passes through a very thick band of atmosphere **b.** particles in the atmosphere scatter the blue light **c.** red light is transmitted best **d.** all of the above are true.

   e. At sunset, the sun appears to be **a.** white **b.** yellow **c.** red **d.** green.

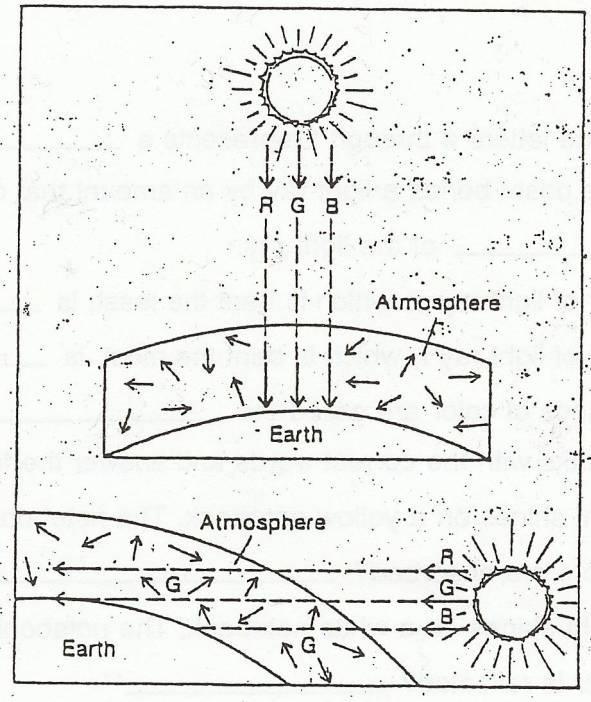

Fig. 9–2