The Lens Lamar/THS
Photography

Use Chapter 3 in Upton and Upton to answer the following questions.

1. What is the basic job of a lens? (5)

2. What is the camera obscura? (5)

3. Complete: Most lenses are convex lenses which bend light rays so they converge at a single point, called the _____ _____. This point falls on a surface called the _____ _____. This plane and our film plane are the same. (4)

4. The physical characteristic of light which convex lenses operate by is that light rays can be _____. (2)

5. What is focal length? (5)

6. What two things does focal length control? (4)

7. Magnification increases as we (increase/decrease) focal length. (2)

8. If we go from a 25mm to a 50mm lens what will that do to the size of our subject? (Specific answer) (2)

9. What is the normal angle of view of a 50mm lens? (2)

A 300mm lens? (2)

A 28mm lens? (2)

10. What is a normal focal length lens for a 35mm camera? (2)

For a 120mm camera? (2)

For a 4x5 camera? (2)

11. What are three advantages of a normal lens? (6)

12. What are three advantages of a long lens? (6)

13. Does a long lens have more or less depth-of-field? (2)

14. What are three disadvantages of a long lens? (6)

15. What is the recommended shutter speed for hand-holding a 105mm lens on a 35mm camera according to the book? (2)

16. What is the difference between a long lens and a telephoto lens?(4)

17. What are two main characteristics of a wide-angle lens? (4)

18. What is a fisheye lens? (2)

19. What is a zoom lens? (2)

20. What kind of lens would we need to use if we were photographing something extremely close? (3)

21. What is depth-of-field? (5)

22. What is the normal ratio for depth-of-field in front of your subject versus behind your subject? (4)

23. What are two ways you can increase depth-of-field? (4)

24. What is perspective? (5)

25. What controls perspective? (4)