ACTIVITY ANSWER KEY

Chapter 6, Section 3

Check your answers from the Answer Key.
Correct all errors, then complete your next goal.



Lesson 11: *Energy*

Bending Light

1. (a) True
2. Concave
3. infinity
4. (b) focal point
5. (b) False
6. Refraction
7. diamonds
8. (a) a vacuum
9. index of refraction
10. (c) a vacuum
11. (b) False
12. (c) direction
13. (b) False
14. speed
15. (a) lengthened
16. (a) True
17. sky
18. (a) True
19. refracts
20. *"The faults of others are like the lights of an oncoming automobile—they only seem more glaring than our own."*



Lesson 12: *Inventions & Discoveries*

Cameras and Eyeglasses

1. (a) convex
2. (a) converge
3. (a) True
4. (a) increased
5. (d) less
6. cornea
7. (b) lens
8. (b) changing shape
9. pupil
10. iris
11. farsighted
12. retina
13. (d) converge
14. convex
15. nearsighted
16. front
17. (c) diverges
18. (d) lens
19. (b) wearing bifocals
20. *"We live in a wonderful world that is full of beauty, charm and adventure. There is no end to the adventure that we can have if only we seek them with our eyes open."*



Lesson 13: *Inventions & Discoveries*

Single Lens Microscopes

1. (c) 10x
2. the ratio of the size of the image to the size of the object, $m = Si/So$
3. m = Si/So = (50 cm) / (5 cm) = 10x
4. (a) comfortable viewing distance
5. (c) 2.5x
6. increases
7. (c) microscope
8. (b) janitor for the city hall
9. (b) False

10. (a) Dutch
11. (a) True
12. Microorganisms
13. (b) False
14. (b) False
15. objective
16. Magnification
17. *m = Di/Do*
18. Di/Do = 36 in / 3 in = 12x
19. (a) True
20. *"Great discoveries are made when we search out and study the secret(s) of nature by experiments."*



Lesson 14: ***Inventions & Discoveries***
Microscopes and Telescopes

1. *m= Di/Do*
2. eye lens
3. magnification
4. (a) True
5. 2,000x
6. Electron microscopes
7. 100,000
8. telescope
9. (b) False
10. moon
11. *mt = Fo/Fe*
12. Resolution
13. quality
14. (b) increases
15. indistinct
16. empty
17. resolution
18. (b) 80x
19. (d) 300x
20. *"It is best to view the faults of others with the naked eye while using a microscope to examine our own."*



Lesson 15: ***Scientific Laws***
Rainbows

1. (a) True
2. (b) toward
3. (b) diamond
4. speed
5. (d) dispersion
6. (a) red
7. (b) False
8. (c) violet
9. (b) diamond
10. (c) dispersion and total internal reflection
11. (b) False
12. fiber optics
13. (b) False
14. mirror
15. (b) False
16. convex
17. dispersion
18. Crown glass
19. (b) False
20. *"It is never too late to give up our prejudices."*

Ask for your QUIZ over Section 3.
Reminder: Students who score 85% or higher on the three section quizzes may be exempt from the chapter test!