6.2 Directed Reading: HOW DNA WORKS

 1. about 2 m

 2. A

 3. C

 4. gene

 5. 46

 6. 2

 7. DNA

 8. bases

 9. amino acids

 10. protein

 11. gene

 12. Answers may vary. Sample answer: Proteins determine how tall you are, what colors you see, and whether your hair is curly or straight.

 13. ribonucleic acid

 14. DNA

 15. ribosome

 16. messenger RNA

 17. transfer RNA

 18. 2

 19. 4

 20. 3

 21. 5

 22. 1

 23. mutations

 24. B

 25. A

 26. C

 27. mutagens

 28. Answers may vary. Sample answers: high-energy radiation from Xrays, ultraviolet radiation from sunlight, asbestos, chemicals in cigarette smoke

 29. A

 30. D

 31. Answers may vary. Sample answers: curing diseases, creating new drugs, new foods, or new fabrics

 32. fingerprinting

 33. DNA

 34. clone