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