Partner Read 4.1

Page 110: Explain why you think Mendel is often called the “father of genetics”. What is the difference between heredity and genetics?

Page 111 Mendel’s experiment and figure 1: how did Mendel control the fertilization of the pea plants?

Page 111 Crossing Pea Plants: Why did Mendel start his experiment with purebred plants? What type of traits was he crossing?

Page 112 The F1 offspring and F2 offspring: what does the F1 offspring describe? What does the F2 offspring describe?

Page 112 experiments with other traits: what did Mendel discover occurred in all F1 generations and all F2 generations when he started with purebreds in the parental generation?

Page 113 figure 3: is yellow seed color controlled by a dominant allele or a recessive allele?

Page 113 Dominant and Recessive Alleles: what were some of Mendel’s conclusions?

Page 113 Genes and Alleles: what are the organism’s traits controlled by? Where do the alleles come from? Why does one trait show up, while another doesn’t?

Page 114 Alleles in Mendel’s Crosses: The F1 plants are hybrids? Describe why

Page 114 Symbols for alleles: what symbols are used to represent dominant and recessive alleles? What does a big letter and little letter represent? Two big letters? Two little letters?

Page 115 Describe the significance of Mendel’s contributions

Section Assessment page 115. Write in complete sentences.