



Kentucky Core Content for Science

Assessment Correlations

LIFE SCIENCE STANDARDS	STUDENT EDITION PAGES
THE CELL	
3.1.1: Cells have particular structures that underlie their function. Every cell is surrounded by a membrane that separates it from the outside world. Inside the cell is a concentrated mixture of thousands of different molecules that form a variety of specialized structures. These structures carry out specific cell functions.	7, 177, 180-193, 197, 202-206, 209-215, 227-230, 251-254, 502-503, 523, 567, 626, 629, 640, 936-937
3.1.2: Most cell functions involve chemical reactions. Food molecules taken into cells react to provide the chemical constituents needed to synthesize other molecules. Both breakdown and synthesis are made possible by a large set of protein catalysts, called enzymes. The breakdown of some of the food molecules enables the cell to store energy in specific chemicals that are used to carry out the many functions of the cell.	151, 162-163, 165-167, 188, 191, 228-243, 254, 287, 948, 951, 955, 1004
3.1.3: Cells store and use information to guide their functions. The genetic information stored in DNA directs the synthesis of the thousands of proteins that each cell requires.	167, 186-187, 208, 217, 252, 287, 294-301, 311, 370-371
3.1.4: Cell functions are regulated. Regulation occurs both through changes in the activity of the functions performed by proteins and through selective expression of individual genes. This regulation allows cells to respond to their internal and external environments and to control and coordinate cell growth and division.	181-182, 184, 201, 217, 640, 642-643, 649, 916, 926, 943, 960-965, 969, 1045, 1051, 1083
3.1.5: Plant cells contain chloroplasts, the site of photosynthesis. Plants and many microorganisms (e.g., <i>Euglena</i>) use solar energy to combine molecules of carbon dioxide and water into complex, energy-rich organic compounds and release oxygen to the environment. This process of photosynthesis provides a vital link between the Sun and energy needs of living systems.	32, 48-49, 57, 69, 137, 190, 231-236, 243, 247, 252, 254, 502, 526, 569, 576-577, 625-626, 630-631, 649, 684
3.1.6: In the development of multicellular organisms, cells multiply and differentiate to form many specialized cells, tissues, and organs. This differentiation is regulated through the expression of different genes.	32, 216, 625-631, 633-640, 649, 693, 695-699, 714-715, 718-719, 923-924, 932, 935-937, 943, 1007-1008, 1040-1041, 1064-1066, 1069-1070, 1080
THE BEHAVIOR OF ORGANISMS	
3.2.1: Multicellular animals have nervous systems that generate behavior. Nerve cells communicate with each other by secreting specific molecules. Specialized cells in sense organs detect light, sound, and specific chemicals enabling animals to monitor what is going on in the world around them.	721, 727, 744, 749, 764-765, 777, 789, 807, 845, 890-891, 974-976, 980-981, 983-987, 999, 1084
3.2.2: Behavioral responses to internal changes and external stimuli can be innate or learned. Responses to external stimuli can result from interactions with the organism's own species and/or other species, as well as environmental changes.	9, 728, 854, 867, 871, 888-903, 907
3.2.3: The broad patterns of behavior exhibited by organisms have changed over time through natural selection to ensure reproductive success. Organisms often live in unpredictable environments, so their behavioral responses must be flexible enough to deal with uncertainty and change. Behaviors often have an adaptive logic.	843, 890-895, 898-899, 907



Kentucky Core Content for Science

Assessment Correlations

LIFE SCIENCE STANDARDS	STUDENT EDITION PAGES
THE MOLECULAR BASIS OF HEREDITY	
3.3.1: In all organisms and viruses, the instructions for specifying the characteristics are carried in nucleic acids. The chemical and structural properties of nucleic acids determine how the genetic information that underlies heredity is both encoded in genes and replicated.	167, 287-293, 311, 370, 490, 566, 1072-1073
3.3.2: Multicellular organisms, including humans, form from cells that contain two copies of each chromosome. This explains many features of heredity. Transmission of genetic information through sexual reproduction to offspring occurs when male and female gametes that contain only one representative from each chromosome pair unite.	213-216, 262, 269-277, 283, 369
3.3.3: Changes in DNA (mutations) occur spontaneously at low rates. Some of these changes make no difference to the organism, whereas others can change cells and organisms. Only mutations in germ cells have the potential to create the variation that changes an organism's future offspring.	302-306, 311, 413-414
BIOLOGICAL CHANGE	
3.4.1: Species change over time. Biological change over time is the consequence of the interactions of (1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, and (4) natural selection. The consequences of change over time provide a scientific explanation for the fossil record of ancient life forms and for the striking molecular similarities observed among the diverse species of living organisms.	9-10, 303, 376, 378-380, 384-387, 391-393, 397, 401-411, 413-421, 425, 431-435, 438-445, 449, 466-469, 477, 480-485, 576, 584, 593, 602-604, 606, 608, 621, 705, 725, 808-811, 824, 826, 831-833, 841, 858, 890, 892, 978-979
3.4.2: The great diversity of organisms is the result of more than 3.5 billion years of biological change over time that has filled every available niche with life forms. The millions of different species of plants, animals, and microorganisms that live on Earth today are related by descent from common ancestors.	377, 384, 391, 401-421, 425, 431-435, 438, 449, 466-469, 470-477, 480-485, 500, 559, 576, 705, 718, 725, 824, 826, 831-833, 841, 858, 881, 978-979
3.4.3: Biological classifications are based on how organisms are related. Organisms are classified into a hierarchy of groups and subgroups based on similarities that reflect their relationships. Species is the most fundamental unit of classification. Different species are classified by the comparison and analysis of their internal and external structures and the similarity of their chemical processes.	454-455, 457-473, 477, 484-485, 504, 551, 566, 568-569, 794, 872, 885
THE INTERDEPENDENCE OF ORGANISMS	
3.5.1: Atoms (e.g., carbon, nitrogen) and molecules (e.g., water) cycle among the living and nonliving components of the biosphere.	50, 55-59, 63, 137, 146, 161
3.5.2: Energy flows through ecosystems in one direction from photosynthetic organisms to herbivores to carnivores and decomposers.	48-55, 137-138
3.5.3: Organisms both cooperate and compete in ecosystems. Often changes in one component of an ecosystem will have effects on the entire system that are difficult to predict. The interrelationships and interdependencies of these organisms may generate ecosystems that are stable for hundreds or thousands of years.	40, 42, 50, 117, 124, 136-141



Kentucky Core Content for Science

Assessment Correlations

LIFE SCIENCE STANDARDS	STUDENT EDITION PAGES
3.5.4: Living organisms have the capacity to produce populations of infinite size. However, behaviors, environments, and resources influence the size of populations. Models (e.g., mathematical, physical, conceptual) can be used to make predictions about changes in the size or rate of growth of a population.	42, 68, 76, 94, 97-103, 108-109, 111, 118, 139
3.5.5: Human beings live within the world's ecosystems. Human activities can deliberately or inadvertently alter the dynamics in ecosystems. These activities can threaten current and future global stability and, if not addressed, ecosystems can be irreversibly affected.	62, 87, 122, 530, 708
MATTER, ENERGY, AND ORGANIZATION IN LIVING SYSTEMS	
3.6.1: Living systems require a continuous input of energy to maintain their chemical and physical organization since the universal tendency is toward more disorganized states. The energy for life primarily derives from the Sun. Plants capture energy by absorbing light and using it to form strong (covalent) chemical bonds between the atoms of carbon-containing molecules. These molecules can be used to assemble larger molecules (e.g., DNA, proteins, sugars, fats). In addition, the energy stored in the bonds between the atoms can be used as sources of energy for life processes.	9, 32, 48, 50, 53-55, 63, 137, 190, 227-240, 243, 246-247, 252, 254, 947, 954-955, 957
3.6.2: The chemical bonds of food molecules contain energy. Energy is released when the bonds of food molecules are broken and new compounds with lower energy bonds are formed. Cells usually store this energy temporarily in the phosphate bonds of ATP. During the process of cellular respiration, some energy is lost as heat.	54, 227-243, 246-247, 254, 937, 947, 957
3.6.3: As matter and energy flow through different organizational levels (e.g., cells, organs, organisms, communities) and between living systems and the physical environment, chemical elements are recombined in different ways. Each recombination results in storage and dissipation of energy into the environment as heat. Matter and energy are conserved in each change.	51, 54-55, 63, 146, 161-167, 170, 181-184, 190, 227-242, 247, 254
SCIENTIFIC INQUIRY STANDARDS	STUDENT EDITION PAGES
SlA: Students will formulate testable hypotheses and demonstrate the logical connections between the scientific concepts guiding a hypothesis and the design of an experiment.	20, 23, 39, 60-61, 93, 135, 168, 182, 249, 280, 328, 336, 508, 512, 538, 560, 606, 618, 683, 719, 754, 763, 766, 780-781, 818, 835, 860, 865, 870, 906, 940, 958, 996, 1025
SlB: Students will use equipment, tools, techniques, technology, and mathematics to improve scientific investigations and communications.	6, 14, 22, 25-27, 31, 39, 52, 56, 60-61, 65, 69-71, 74-75, 87-89, 99, 103, 105-109, 113, 116, 130-131, 135, 155, 158-159, 167-169, 173, 177, 187, 194-195, 209, 215-216, 218, 220-221, 225, 232, 243-245, 249, 260, 268, 280-282, 285, 313, 316, 320, 332, 335, 341, 348, 367, 379, 384, 387, 395, 399, 424, 427, 434, 439, 456, 459, 467, 470, 474-475, 479, 490, 497, 506, 511-513, 522, 527, 532, 538-539, 543, 550, 560-561, 577, 588-591, 595, 606, 618-619, 623, 629, 640-641, 646-647, 651, 659, 677-679, 683, 695, 703, 705-707, 711, 717, 719, 724-725, 732-735, 739, 746-747, 750, 759, 766, 774, 785, 788, 793, 797, 800-801, 805, 820, 826, 830, 834-835, 839, 849, 857, 859, 865, 869, 871, 882-883, 887, 890, 902, 904-905, 926, 933, 939, 945, 953, 957-958, 964, 966-967, 971, 979, 982, 986, 991, 996-997, 1013, 1016, 1025, 1035, 1042, 1053, 1067, 1072, 1074-1075, 1079



Kentucky Core Content for Science

Assessment Correlations

SCIENTIFIC INQUIRY STANDARDS	STUDENT EDITION PAGES
<p>Slc: Students will use evidence, logic, and scientific knowledge to develop and revise scientific explanations and models</p>	<p>18, 27, 39, 56, 59-62, 69-71, 74-75, 79, 89, 93, 99, 103, 113, 116, 119, 124, 126, 141, 149, 155, 158-160, 169-170, 172-173, 179, 182, 184, 186, 193, 195, 199, 210, 219, 221, 225, 228, 230, 232, 234, 241, 245, 248-249, 270, 274, 279, 281, 284-285, 289, 297, 299, 301, 305-309, 313, 316-317, 320, 324, 328, 332-333, 335, 337, 340-341, 351, 355, 358, 361-363, 366-367, 379-380, 384, 387, 392, 394-396, 399, 406, 411, 415, 421-423, 427, 433-434, 443, 445, 451, 457, 473, 490, 494, 506, 508, 511, 513-514, 517, 524, 530, 534, 537, 539, 542-543, 546, 550, 558-559, 561-562, 564-565, 577, 579, 588-589, 595, 598, 600, 604, 607, 609, 617, 623, 630, 644-645, 651, 654, 659, 663, 679-680, 683, 689, 719, 724-725, 727, 730, 733, 735-736, 739, 744, 749, 753, 756, 759, 766, 775, 782, 784-785, 788, 797, 799, 804-805, 813, 818, 820, 830, 833, 835, 838-839, 849, 853, 859, 861, 864-865, 869-871, 873, 881, 886-887, 890, 897, 900, 902-903, 905, 908-909, 919, 928, 934, 936-937, 939, 941-942, 944-945, 952-953, 958, 962, 964-965, 967, 970-971, 987, 997-998, 1001, 1005-1006, 1015-1016, 1021, 1024-1025, 1035-1036, 1043, 1049-1050, 1052-1053, 1073, 1075, 1078-1079, 1089</p>
<p>Sld: Students will design and conduct different kinds of scientific investigations.</p>	<p>18, 20, 23, 27, 47, 59-61, 89, 124, 168-169, 173, 215, 236, 280-281, 336-337, 347, 421, 512-513, 538-539, 558, 560-561, 618-619, 645, 683, 754-755, 780-781, 792, 799, 860-861, 897, 940-941, 996-997, 1025, 1059, 1062</p>
<p>Sle: Students will communicate and defend the designs, procedures, observations, and results of scientific investigation</p>	<p>6, 14, 18, 23, 27, 31, 38, 56, 61, 69, 75, 89, 96, 109, 131, 155, 169, 195, 215, 221, 242, 245, 260, 281, 316, 333, 337, 355, 358, 363, 379, 395, 415, 423, 433, 439, 447, 456, 475, 506, 513, 522, 539, 546, 554, 561, 586, 591, 606, 609, 629, 640, 647, 654, 677, 679, 703, 707, 719, 732, 735, 755, 781, 788, 797, 801, 818, 835, 856, 861, 869, 871, 883, 890, 900, 905, 941, 964, 967, 997, 1019, 1060, 1067</p>
<p>Slf: Students will review and analyze scientific investigations and explanations of other investigators, including peers.</p>	<p>27, 31, 65, 74, 99, 113, 119, 173, 232, 249, 281, 307, 355, 367, 407, 451, 517, 527, 543, 561, 565, 630, 639, 644, 647, 851, 897, 902</p>



Kentucky Core Content for Science

Assessment Correlations

APPLICATIONS/CONNECTIONS STANDARDS	STUDENT EDITION PAGES
SCIENCE AND TECHNOLOGY:	
ACa: Students will apply scientific theory and conceptual understandings to solve problems of technological design and examine the interaction between science and technology.	15, 25, 175-179, 197, 349, 353, 356-361, 364-365, 462, 680, 756, 836, 906, 998, 1050, 1076
SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES:	
ACb: Students will explore the impact of scientific knowledge and discoveries on personal and community health; recognize how science influences human population growth, use science to analyze the use of natural resources by an increasing human population; investigate how science can be used to solve environmental quality problems, use science to investigate natural and human-induced hazards; and analyze how science and technology are necessary but not sufficient for solving local, national, and global issues.	24, 25, 28, 29, 33, 62, 87, 118, 122, 126, 217, 353, 355, 356, 359-361, 364-365, 373, 456, 488, 489-499, 508-511, 514, 515, 524, 525, 540, 556, 562, 566, 568, 580-583, 592, 599, 620, 680, 708, 730, 732, 736, 768, 782, 836, 862, 906, 998, 999, 1022, 1050, 1055-1076
HISTORY AND NATURE OF SCIENCE:	
ACc: Students will analyze the role science plays in everyday life and compare different careers in science; recognize that scientific knowledge comes from empirical standards, logical arguments, and skepticism, and is subject to change as new evidence becomes available; and investigate advances in science and technology that have important and long-lasting effects on science and society.	8, 11-12, 16-20, 24-25, 28, 32, 40, 154, 175-179, 197, 217, 236, 259-262, 282, 286, 290, 303, 349, 353, 356-361, 364-365, 368, 378, 382, 388-390, 392-393, 397, 401-404, 440, 456-458, 460-463, 495, 497, 504, 511, 514, 515, 529, 555-556, 559, 562, 567, 577, 580-583, 592, 598, 616, 680, 694, 752, 756, 836, 896, 986, 990, 998, 1006, 1022, 1046, 1050, 1076



Kentucky Core Content for Science Assessment Correlations

Correlated by Chapter and Section

Contents	Student Edition Pages	Kentucky Core Content for Science Assessment
Chapter 1 Biology: The Study of Life		
1.1 What Is Biology?	3–10	3.1.1, 3.2.2, 3.4.1, 3.6.1; Slb, Slc, Sle, Slf; ACc
1.2 The Methods of Biology	11–20	Sla, Slb, Slc, Sld, Sle; ACa, ACc
1.3 The Nature of Biology	21–31	Sla, Slb, Sld, Sle, Slf; ACa, ACb, ACc
BioDigest What Is Biology?	32–33	3.1.5, 3.1.6, 3.6.1; ACb, ACc
Chapter 2 Principles of Ecology		
2.1 Organisms and Their Environment	37–47	3.5.3, 3.5.4; Sla, Slb, Slc, Sld, Sle; ACc
2.2 Nutrition and Energy Flow	48–65	3.1.5, 3.5.1, 3.5.2, 3.5.3, 3.5.5, 3.6.1, 3.6.2, 3.6.3; Sla, Slb, Slc, Sld, Sle, Slf; ACb
Chapter 3 Communities and Biomes		
3.1 Communities	67–71	3.1.5, 3.5.4; Slb, Slc, Sld, Sle; ACb
3.2 Biomes	72–93	3.5.4, 3.5.5; Sla, Slb, Slc, Sle, Slf
Chapter 4 Population Biology		
4.1 Population Dynamics	95–103	3.5.4; Slb, Slc, Sle, Slf
4.2 Human Population Growth	104–113	3.5.4; Slb, Slc, Slf
Chapter 5 Biological Diversity and Conservation		
5.1 Vanishing Species	115–124	3.5.3, 3.5.4, 3.5.5; Slb, Slc, Sld, Sle, Slf; ACb
5.2 Conservation of Biodiversity	125–135	Sla, Slb, Slc; ACb
BioDigest Ecology	136–141	3.1.5, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.6.1; Slc
Chapter 6 The Chemistry of Life		
6.1 Atoms and Their Interactions	145–155	3.1.2, 3.5.1, 3.6.3; Sla, Slb, Slc, Sld, Sle; ACc
6.2 Water and Diffusion	156–160	Slb, Slc
6.3 Life Substances	161–173	3.1.2, 3.1.3, 3.3.1, 3.5.1, 3.6.3; Slb, Slc, Sld, Slf
Chapter 7 A View of the Cell		
7.1 The Discovery of Cells	175–180	3.1.1; Slb, Slc, Sle; ACa, ACc
7.2 The Plasma Membrane	181–184	3.1.1, 3.1.4, 3.6.3; Sla, Slc
7.3 Eukaryotic Cell Structure	185–199	3.1.1, 3.1.2, 3.1.3, 3.1.5, 3.6.1, 3.6.3; Slb, Slc; ACa, ACc
Chapter 8 Cellular Transport and the Cell Cycle		
8.1 Cellular Transport	201–206	3.1.1, 3.1.4
8.2 Cell Growth and Reproduction	207–216	3.1.1, 3.1.3, 3.1.6, 3.3.2; Slb, Slc, Sld, Sle
8.3 Control of the Cell Cycle	217–225	3.1.3, 3.1.4; Slb, Slc; ACb, ACc
Chapter 9 Energy in a Cell		
9.1 ATP in a Molecule	227–230	3.1.1, 3.1.2, 3.6.1, 3.6.2, 3.6.3; Slc
9.2 Photosynthesis: Trapping the Sun's Energy	231–236	3.1.2, 3.1.5, 3.6.1, 3.6.2, 3.6.3; Slb, Slc, Sld, Sle, Slf; ACc
9.3 Getting Energy to Make ATP	237–249	3.1.2, 3.1.5, 3.6.1, 3.6.2, 3.6.3; Sla, Slb, Slc, Sle, Slf
BioDigest The Life of a Cell	250–255	3.1.1, 3.1.2, 3.1.3, 3.1.5, 3.6.1, 3.6.2, 3.6.3



Kentucky Core Content for Science Assessment Correlations

Correlated by Chapter and Section

Contents	Student Edition Pages	Kentucky Core Content for Science Assessment
Chapter 10 Mendel and Meiosis		
10.1 Mendel's Laws of Heredity	259–268	3.3.2; Sla, Slb, Slc, Sld, Sle, Slf; ACc
10.2 Meiosis	269–285	3.3.2; Slb, Slc; ACc
Chapter 11 DNA and Genes		
11.1 DNA: The Molecule of Heredity	287–293	3.1.2, 3.1.3, 3.3.1; Slc; ACc
11.2 From DNA to Protein	294–301	3.1.3; Slc
11.3 Genetic Changes	302–313	3.1.3, 3.3.1, 3.3.3, 3.4.1; Slb, Slc, Slf; ACc
Chapter 12 Patterns of Heredity and Human Genetics		
12.1 Mendelian Inheritance of Human Traits	315–320	Slb, Slc, Sle
12.2 When Heredity Follows Different Rules	321–328	Sla, Slc, Sld, Sle
12.3 Complex Inheritance of Human Traits	329–341	Slb, Slc, Sle, Slf
Chapter 13 Genetic Technology		
13.1 Applied Genetics	343–348	Slb, Sld
13.2 Recombinant DNA Technology	349–356	Slc, Sle; ACa, ACb, ACc
13.3 The Human Genome	357–367	Slb, Slc, Sle, Slf; ACa, ACb, ACc
BioDigest Genetics	368–373	3.1.3, 3.3.1, 3.3.2; ACb, ACc
Chapter 14 The History of Life		
14.1 The Record of Life	377–387	3.4.1, 3.4.2; Slb, Slc, Sle; ACc
14.2 The Origin of Life	388–399	3.4.1, 3.4.2; Slb, Slc; ACc
Chapter 15 The Theory of Evolution		
15.1 Natural Selection and the Evidence for Evolution	400–411	3.4.1, 3.4.2; Slc, Slf; ACc
15.2 Mechanisms of Evolution	412–427	3.3.3, 3.4.1, 3.4.2; Slb, Slc, Sld, Sle
Chapter 16 Primate Evolution		
16.1 Primate Adaptation and Evolution	429–437	3.4.1, 3.4.2; Slb, Slc, Sle
16.2 Human Ancestry	438–451	3.4.1, 3.4.2; Slb, Slc, Sle, Slf; ACc
Chapter 17 Organizing Life's Diversity		
17.1 Classification	452–463	3.4.2, 3.4.3; Slb, Slc, Sle; ACa, ACb, ACc
17.2 The Six Kingdoms	464–479	3.4.1, 3.4.2, 3.4.3; Slb, Slc
BioDigest Change Through Time	480–485	3.4.1, 3.4.2, 3.4.3
Chapter 18 Viruses and Bacteria		
18.1 Viruses	489–499	3.3.1; Slb, Slc; ACb, ACc
18.2 Archaeobacteria and Eubacteria	500–517	3.3.1, 3.1.5, 3.4.2, 3.4.3; Sla, Slb, Slc, Sld, Sle, Slf; ACb, ACc
Chapter 19 Protists		
19.1 The World of Protists	519–525	3.1.1; Slb, Slc, Sle; ACb
19.2 Algae: Plantlike Protists	526–532	3.1.5, 3.5.5; Sla, Slb, Slc, Sld, Sle, Slf; ACc
19.3 Slime Molds, Water Molds, and Downy Mildews	533–543	Slb, Slc, Slf; ACb

Kentucky Core Content for Science Assessment Correlations

Correlated by Chapter and Section

Contents	Student Edition Pages	Kentucky Core Content for Science Assessment
Chapter 20 Fungi		
20.1 What Is a Fungus?	545–550	Slb, Slc, Sle
20.2 The Diversity of Fungi	551–565	3.4.2, 3.4.3; Sla, Slb, Slc, Sld, Sle, Sif; ACb, ACc
BioDigest Viruses, Bacteria, Protists, and Fungi	566–571	3.1.1, 3.1.5, 3.3.1, 3.4.3; ACb, ACc
Chapter 21 What Is a Plant?		
21.1 Adapting to Life on Land	575–583	3.1.5, 3.4.1, 3.4.2; Slb, Slc; ACb, ACc
21.2 Survey of the Plant Kingdom	584–595	3.4.1; Slb, Slc, Sle; ACb, ACc
Chapter 22 The Diversity of Plants		
22.1 Nonvascular Plants	596–600	Slc; ACb, ACc
22.2 Non-seed Vascular Plants	601–607	3.4.1; Sla, Slb, Slc, Sle
22.3 Seed Plants	608–623	3.4.1; Sla, Slb, Slc, Sld, Sle; ACb, ACc
Chapter 23 Plant Structure and Function		
23.1 Plant Cells and Tissues	625–631	3.1.1, 3.1.5, 3.1.6; Slb, Slc, Sle, Sif
23.2 Roots, Stems, and Leaves	632–641	3.1.1, 3.1.4, 3.1.6; Slb, Sle, Sif
23.3 Plant Responses	642–651	3.1.4, 3.1.5, 3.1.6; Slb, Slc, Sld, Sif
Chapter 24 Reproduction in Plants		
24.1 Life Cycles of Mosses, Ferns, and Conifers	653–660	Slb, Slc, Sle
24.2 Flowers and Flowering	661–666	Slc, Sle
24.3 The Life Cycle of a Flowering Plant	667–683	Sla, Slb, Slc, Sld, Sle; ACa, ACb, ACc
BioDigest Plants	684–689	3.1.5; Slc
Chapter 25 What Is an Animal?		
25.1 Typical Animal Characteristics	693–699	3.1.6; Slb, Sle; ACc
25.2 Body Plans and Adaptations	700–711	3.4.1, 3.4.2, 3.5.5; Slb, Sle; ACb
Chapter 26 Sponges, Cnidarians, Flatworms, and Roundworms		
26.1 Sponges	713–717	3.1.6; Slb
26.2 Cnidarians	718–725	3.1.6, 3.2.1, 3.4.1, 3.4.2; Sla, Slb, Slc, Sle
26.3 Flatworms	726–730	3.2.1, 3.2.2; Slb, Slc, Sle; ACb
26.4 Roundworms	731–739	Slb, Slc, Sle; ACb
Chapter 27 Mollusks and Segmented Worms		
27.1 Mollusks	741–747	3.2.1; Slb, Slc
27.2 Segmented Worms	748–759	3.2.1; Sla, Slb, Slc, Sld, Sle; ACa, ACc
Chapter 28 Arthropods		
28.1 Characteristics of Arthropods	761–766	3.2.1; Sla, Slb, Slc
28.2 Diversity of Arthropods	767–785	3.2.1; Sla, Slb, Slc, Sld, Sle; ACb
Chapter 29 Echinoderms and Invertebrate Chordates		
29.1 Echinoderms	787–793	3.2.1; Slb, Slc, Sld, Sle
29.2 Invertebrate Chordates	794–805	3.4.3; Slb, Slc, Sld, Sle
BioDigest Invertebrates	806–813	3.2.1, 3.4.1; Slb, Slc



Kentucky Core Content for Science Assessment Correlations

Correlated by Chapter and Section

Contents	Student Edition Pages	Kentucky Core Content for Science Assessment
Chapter 30 Fishes and Amphibians		
30.1 Fishes	817–826	3.4.1, 3.4.2; Sla, Slb, Slc, Sle
30.2 Amphibians	827–839	3.4.1, 3.4.2; Sla, Slb, Slc, Sle; ACa, ACb, ACc
Chapter 31 Reptiles and Birds		
31.1 Reptiles	841–851	3.2.1, 3.2.3, 3.4.1, 3.4.2; Slb, Slc, Slf
31.2 Birds	852–865	3.2.2, 3.4.1, 3.4.2; Sla, Slb, Slc, Sld, Sle; ACb
Chapter 32 Mammals		
32.1 Mammal Characteristics	867–873	3.2.2, 3.4.3; Sla, Slb, Slc, Sle
32.2 Diversity of Mammals	874–887	3.4.2, 3.4.3; Slb, Slc
Chapter 33 Animal Behavior		
33.1 Innate Behavior	889–897	3.2.1, 3.2.2, 3.2.3, 3.4.1; Slb, Slc, Sld, Sle, Slf; ACc
33.2 Learned Behavior	898–909	3.2.2, 3.2.3; Sla, Slb, Slc, Sle, Slf; ACa, ACb
BioDigest Vertebrates	910–919	3.1.4; Slc
Chapter 34 Protection, Support, and Locomotion		
34.1 Skin: The Body's Protection	923–928	3.1.4, 3.1.6; Slb, Slc
34.2 Bones: The Body's Support	929–934	3.1.6; Slb, Slc
34.3 Muscles for Locomotion	935–945	3.1.1, 3.1.4, 3.1.6, 3.6.2; Sla, Slb, Slc, Sld, Sle
Chapter 35 The Digestive and Endocrine Systems		
35.1 Following Digestion of a Meal	947–953	3.1.2, 3.6.1, 3.6.2; Slb, Slc
35.2 Nutrition	954–958	3.1.2, 3.6.1, 3.6.2; Sla, Slb, Slc
35.3 The Endocrine System	959–971	3.1.4; Slb, Slc, Sle
Chapter 36 The Nervous System		
36.1 The Nervous System	973–982	3.2.1, 3.4.1, 3.4.2; Slb
36.2 The Senses	983–987	3.2.1; Slb, Slc; ACc
36.3 The Effects of Drugs	988–1001	3.2.1; Sla, Slb, Slc, Sld, Sle; ACa, ACb, ACc
Chapter 37 Respiration, Circulation, and Excretion		
37.1 The Respiratory System	1003–1006	3.1.2; Slc; ACc
37.2 The Circulatory System	1007–1016	3.1.6; Slb, Slc
37.3 The Urinary System	1017–1025	Sla, Slb, Slc, Sld, Sle; ACb, ACc
Chapter 38 Reproduction and Development		
38.1 Human Reproductive Systems	1027–1036	Slb, Slc
38.2 Development Before Birth	1037–1043	3.1.6; Slb, Slc
38.3 Birth, Growth, and Aging	1044–1053	3.1.4; Slb, Slc; ACa, ACb, ACc
Chapter 39 Immunity from Disease		
39.1 The Nature of Disease	1055–1062	Slb, Slc, Sld, Sle; ACb
39.2 Defense Against Infectious Diseases	1063–1079	3.1.6, 3.3.1; Slb, Slc, Sle; ACa, ACb, ACc
BioDigest The Human Body	1080–1089	3.4.1, 3.1.6, 3.2.1; Slc