ENLIGHTIUM ACADEMY

BJU Press - 7th Grade - Science - Quarter 3 Map

Week	Unit/ Lessons	Project/ Activity	Modification	Submit	Objectives
1	Unit 12 Section 12E Thru Chapter 13 Section 13A	Day 1: Section 12 E Day 2: Section 12F Day 3: Chapter 12 review and test Day 4; Chapter 13 Section 13A		Submit Chapter 12 Test	*Compare the body structure, movement and feeding methods of the octopus and the clam *Identify examples of mollusks and echinoderms *Describe major characteristics of phylum Arthropoda *Give several examples of non-insect arthropods *Describe the structure of a typical insect's body *Review and Test the concepts of Chapter 12 *Describe the major characteristics of vertebrates *Differentiate between endothermic and ectothermic
2	Chapter 13 Section 13B thru 13C	Day 1and 2: Section 13B Day 3: Investigation 13e Day 4: Section 13c			*Describe the circulation in two-, three-, and four-chambered hearts *Compare respiration of gills and lungs *Describe the two parts of a typical vertebrate nervous system. *Identify the structures of a vertebrate's digestive system and describe the functions of each *Explain the role of the kidneys, urine, ureters, and bladder in the excretory systems *Observe the respiration rates of the fish *Determine the effects of temperature on the respiration rate of a fish *Explain why fish are especially suited for living in water, mentioning specific fish characteristics *Describe each of the three groups of fish.

3	Chapter 13 Section 13D thru 13E	Day 1: Section 13D Day 2: Investigation 13f Day 3: Section 13E Day 4: field trip: Serpentarium Day 5: Section 13E	You might switch day 4 and 5.		*Explain what the same amphibian means *Describe the metamorphosis of the frog *Distinguish between hibernation and estivation *Describe the eating habits of a frog *Give examples of tailless and tailed amphibians *Identify organs of a frog *Prepare for studying human organs by studying frog organs *Describe the major characteristics of reptiles *Summarize the differences between the major groups of reptiles *Distinguish between snakes and lizards *Describe the body, special senses, and eating habits of snakes *Learn about career opportunities as a herpetologist *See how reptiles are kept and studied *Explain the differences between crocodiles and alligators *Differentiate between the three basic types of turtles.
4	Chapter 13	Day 1: Chapter 13 Review and test Day 2; Chapter 14 Section 14A Day 3 and 4 Section 14B		Submit chapter 13 Test	*Review and test concepts from Chapter 13 *Explain how God specifically designed birds' skeletal, digestive, and respiratory systems for flight *Describe the structure of a feather *Compare down and contour feathers *Describe the parts of a bird egg *Identify ways birds care for their young *Recognize key characteristics of mammals *Distinguish between the four types of teeth in mammals *Name and describe several orders of placental mammals *Name and describe two egg-laying mammals *Name and describe several pouched mammals
5		Day 1: Section 14D Day 2: Chapter Review and Test Day 3: Chapter 15 section 15a Day 4: Section 15A		Submit Chapter 14 Test	*Compare the effectiveness of wool (fur), down (feathers and fat as insulators. *Review and test concepts from chapter 14 *Compare the three levels of animal behavior *Explain the role of pheromones in animal behavior *Give examples of learned behaviors in animals *Discuss the intelligence seen in animals
6		Day 1: Section 15B Day 2: Chapter 15 Review and test		Submit Chapter 15 Test	*Distinguish between eggs and sperm, ovaries and testes, haploid and diploid, meiosis and fertilization, and gametes and zygotes *Differentiate between external and internal fertilization and identify

		Day 3: Chapter 16 Section 16A Day 4: Section 16B			animals that use each *Describe spawning as an example of external fertilization *Identify animals that exhibit internal fertilization and lay eggs *Identify animals that exhibit internal fertilization and give birth to live young *Explain the function of a placenta and an umbilical cord *Review and Test concepts from Chapter 15 *Describe the three main types of interactions studied by ecologists *Explain what an ecosystem is, and differentiate between the two main components *Describe abiotic factors in an environment *Trace the water cycle *Describe succession in an ecosystem
7		Day 1: Section 16C Day 2: Section 16D Day 3: Investigation 16g Day 4: Chapter 17 Section 17A	Skip Chapter 16 test	Submit Chapter 16 Activity	*Outline levels of organization in an ecosystem *Trace carbon, oxygen, and nitrogen cycles through an ecosystem *Describe limiting factors and how they affect populations *Explain the importance of rhythms in ecosystems *Identify how plants and animals survive seasonal rhythms *Identify components of the abiotic environment and the biotic community in an ecosystem *Chapter 16 review and test
8		Day 1 and 2: Section 17B Day 3: Section 17c Day 4: Investigation 17f and 17h			*Differentiate between cyclic and noncyclic materials in ecosystems *Discuss energy exchange between organisms *Differentiate between food changs, food webs, and ecological pyramids *Describe and give examples of independent organisms, couple relationships, and animal societies *Describe and give examples of social insects *Identify and give examples of camouflage, warning coloration and mimicry *Describe and give examples of the following relationships between different populations within an ecosystem: competition, predation, commensalism, mutualism, and parasitism *Observe the effects of overcrowding on bean seedlings *Observe relationships among organisms in a natural environment

9		Day 1 Chapter 17 test and review Day 2: Section 18A Day 3: Section 18B Day 4:Section 18C Day 5: Field Trip		Submit Chapter 17 test	*Review and test concepts from Chapter 17 *Describe and give examples of natural resources *Differentiate between renewable and nonrenewable natural resources *Analyze the events that may lead to extinction *Describe methods of replenishing the soil *List some resources that may need to be conserved *Describe the growth of the population since the time of Christ *Explain factors that may affect the growth of a population *List some resources that may need to be conserved *Differentiate between a substance pollutant and an energy pollutant *Analyze the effects of different types of pollution *List several common components of air pollutions *Describe water sewage treatment