

ANIMAL SCIENCE SYLLABUS

Week 1	Topics	Activities / Materials
Day 1 Morning	Introductions Goals & Expectations Course Objectives/syllabus Class Procedures Pre-Assessment Exercise Break Nature of Science/Branches of Science Science Processes/Steps in research Steps in the Scientific Method	Icebreaker (Animal types) On index cards/cartolina Syllabus Handout Discussion Written Test / Recognition Exercise Break Chart on different sciences Group exercises, See pp. 367-371 Discuss sample experiments
Afternoon	Lab Rules & Safety Procedures Lab Structure & Organization Lab # 1: Intro to Experimental Design Lab Write-up Evening Assignment	Lab Video Walk thru the lab, Identify lab tools Ward's Laboratory Set-ups Fill in worksheets Written on board & discussed
Evening	Application Ex. : The Scientific method Read textbook pages 367-371	Group work : Experimental Designs

Week 1	Topics	Activities / Materials
Day 2 Morning	Evening Assignment Characteristics of Living Things 5 Kingdoms of Living Things Invertebrates & Vertebrates Break The Microscope : Parts & Functions Cells, the Virus & Microorganisms	Sharing/Evaluation: Experimental Designs Handouts Diagram of 5 Kingdoms Animal Taxonomy Chart Break See pp. 3-17, 75-107, Explain how microscope works. Draw & describe representative cells & microorganisms.
Afternoon	Lab # 2 : Use of the Microscope View Cells & Tissues	Parts & Functions of the microscope. Prepared slides of cells and tissues.
Evening	Video : The Coral Reef Discussion	TV-VCR, video Application / Journal Writing

Week 1	Topics	Activities / Materials
Day 3 Morning	Icebreaker Levels of organization (macro,micro) Tissues & Organs & Organ Systems Mitosis & Meiosis Break Model of a Cell	Contest : review on vocabulary Define terms. Make a concept map. Describe significance. Chart Work on Tissues pp. 63-64. See pp. 18-45 Break Make a 3 dimensional model of a plant or animal cell. Styrofoam, clay, cutter
Afternoon	Lab # 3 : View live protists, Mitosis Effect of Chemicals on Daphnia Heartbeat	Draw & label cells, tissues seen through the microscope. Follow lab procedure. Complete lab report. Answer discussion questions.
Evening	Guidelines for field trip Research : Animal Behavior/Adaptations	Computer/magazine research. Outline & its contents .

Week 1	Topics	Activities / Materials
Day 4 Morning to afternoon	Lab # 4 : Whole day Field trip to Philadelphia ZOO	Observe, describe, evaluate animals & their situation. Work on Zoo guidesheets.
Evening	Zoo Evaluation	Discuss Zoo experience / Evaluate zoo structure, services Complete answers to Zoo guidesheet.

Week 1	Topics	Activities / Materials
Day 5 Morning	Review : Types of protists Levels of Organization in Living Systems 10 Human Body Systems Break Student Reports : Animal Studies/ Adaptations	See pages 71-72, 165-166 , p. 228 Define terms. Choose/plan body system for research/report. Break Listen, ask questions, evaluate. Wall gallery of projects.
Afternoon	Lab # 5 : Regeneration in Planaria Student reports : Animal Studies	Lab guide, planaria. Listen, ask questions, apply, evaluate.
Sun. Evening	Research : Human Body Systems	Computer/book research.

Week 2	Topics	Activities / Materials
Day 6 Morning	Hello to a CAT ! Comparative Anatomy of Invertebrates Student Report on Animal Studies Break Student Report on Animal Studies	Guest : Mrs. Notaro's CAT - Sharing, open forum Chart Work on Invertebrate Anatomy pp.261-364 Listen, ask questions, apply, evaluate Break Chart Work, Color, Guess what ?
Afternoon	Lab # 6 : Observing Invertebrates Worksheets on Invertebrate Structure	Sample Invertebrates Color, Word Search, Crossword Puzzle.
Evening	Research : Human Body System	Computer, book research. Make poster project display.

Week 2	Topics	Activities / Materials
Day 7 Morning	Icebreaker Test on Invertebrates Comparative Chart of Vertebrates Skin & Muscle System Break Skeletal System	Game : Not Just an Animal game Test papers Chart work Draw & label parts & functions. See pp. 330-342. Break Building a Skeleton
Afternoon	Lab # 7 : Skeleton / Muscle Activity	Follow directions. Complete lab report.
Evening	Video : The Amazing Panda Adventure ANIMAL MAGAZINE Project Work	Discuss Theme on Conservation Creative compilation of work on animals

Week 2	Topics	Activities / Materials
Day 8 Morning	Hello to a DOG ! Animal Worksheets Discuss test on invertebrates Break Respiratory System	Guest : Mrs. Roth's Chocolate LABRADOR Color, matching, crossword puzzle Point out trends in evolution. Break Draw, label parts. Explain how breathing occurs.
Afternoon	Digestive System Respiratory System	Student reports . Make an outline. Discuss structure & function.
Evening	Simulated Frog Dissection	Computer work : Online dissection

	ANIMAL MAGAZINE Project Work	Color, cut, paste, summarize animal articles.
Week 2	Topics	Activities / Materials
Day 9 Morning	Review : Animals Adaptive Behavior Test on Vertebrates Student reports : Circulatory System Break Student reports : Reproductive System	Color, discuss pictures & situations Test papers Blood & Lymph System : Board Outline & posters Break. Outline & posters on board
Afternoon	Hello to BIRDS ! Lab # 9 : Simulated Blood Typing	Guest Speaker : DAVID LEIBMANN Lab guidesheet, Ward's Lab kit
Evening	Discuss Lab # 9 Student reports : Nervous & Endocrine	Complete lab report . Complete worksheets. Pp.348-351 Outline & posters on board

Week 2	Topics	Activities / Materials
Day 10 Morning	Review : Animals' Helpful Appendages Discuss Test on Vertebrates Human Characteristics Research topics for Week 3 Break ANIMAL MAGAZINE Project Work	Analyze, interpret animal pictures Review answers to test questions What characteristics make human a superior species ? Choose one topic re Animal Care & Conservation Break Finish work on Animal feature Magazine. Submit today.
Afternoon	Lab # 10 : Fetal Pig Dissection	Fetal pigs, dissecting kit, Fetal pig manuals Finish worksheet on internal organs.
Sun. Evening	Finish work on ANIMAL MAGAZINE	Final Collation of Animal magazine.

Week 3	Topics	Activities / Materials
Day 11 Morning	Icebreaker Food Chain / Food Web Animal Survival / Extinction Break Changing Attitudes towards Animals Veterinary Science & Valuing Animals	Predator Game Draw food chain / food web. Roles in a food chain. Discuss factors leading to survival & extinction. Break Board work
Afternoon	Lab # 11 : Comparing Animal Bones Measuring Lung capacity	Lab guidesheets
Evening	Hello to ZOO EXPERIENCE Research : Animal Care & Conservation Topics	Guest speaker : MATT BUCHANAN Computer work

Week 3	Topics	Activities / Materials
Day 12 Morning	Review: Digestive & Circulatory Systems Changing Attitudes Towards Animals Veterinary Medicine & Valuing Animals Break Nature of DNA Structure of DNA	Monitoring One's Diet / Measuring Pulse rate Board work Question / Answer Break Diagrams
Afternoon	Lab # 12 : DNA Extraction Model of a DNA Molecule	Ward's lab Kit Wires, straw, push pins , papers, strings, clay
Evening	Farm Life, Factory Farms Report Preparation	Video : Babe , TV / VCR Student teams make outline, plan report.

Week 3	Topics	Activities / Materials
Day 13 Morning	Animal Care & grooming Animal Nutrition Break Emergency Vets	Student reports - Outlining - Student presentations Break Film Viewing : 2 episodes
Afternoon	Trip to EASTON ANIMAL HOSPITAL	Observe, interview, ask questions.
Evening	Discussion : Animal Hospital Experience DNA : Gene Engineering Student reports : Animal Diseases	Evaluation of Animal Hospital Services Dolly Experiment / Herbicide Resistant Plants Board Outline Student Report presentations

Week 3	Topics	Activities / Materials
Day 14 Morning	Icebreaker Student reports : Animal Diseases Diet Preparations for young/ill mammals Prescriptions for sick mammals	Game : Oh deer !! Student reports / presentations Board Outline Question / Answer Portion
Afternoon	Breeding & Inbreeding ESSAY WRITING	Video : Extreme Animals FINALIZE / SUBMIT ESSAYS (with comic strip)
Evening	Student DANCE	

Week 3	Topics	Activities / Materials
Day 15 Morning	Task Completion Period Application/ Evaluation Exercise	Game / Clean-Up Evaluation Exercise Crossword Puzzles / Hangman Game
Afternoon	Parent Conferences	