





<b>Veterinary Science – On The Cutting Edge</b>	
Level 3 – Grade 9 – 12	
Project 2061 Benchmarks (Grade 9 – 12)	
<b>The Nature of Science</b>	
Activity	<b>Scientific Inquiry</b>
1 – 14	Investigations are conducted for different reasons, including to explore new phenomena, to check on previous results, to test how well a theory predicts, and to compare different theories.
<b>The Living Environment</b>	
	<b>Diversity of Life</b>
2, 3	The degree of kinship between organisms or species can be estimated from the similarity of their DNA sequences, which often closely matches their classification based on anatomical similarities.
3, 6 – 8	The variation of organisms within a species increases the likelihood that at least some members of the species will survive under changed environmental conditions, and a great diversity of species increases the chance that at least some living things will survive in the face of large changes in the environment.
	<b>Heredity</b>
3	Some new gene combinations make little difference, some can produce organisms with new and perhaps enhanced capabilities, and some can be deleterious.
3	The sorting and recombination of genes in sexual reproduction results in a great variety of possible gene combinations from the offspring of any two parents.
	<b>Cells</b>
4	Every cell is covered by a membrane that controls what can enter and leave the cell. In all but quite primitive cells, a complex network of proteins provides organization and shape and, for animal cells, movement.
4	Within every cell are specialized parts for the transport of materials, energy transfer, protein building, waste disposal, information feedback, and even movement. In addition, most cells in multicellular organisms perform some special functions that others do not.
	<b>Interdependence of Life</b>
9	Human beings are part of the earth's ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems.

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NH Science Frameworks (Grade 7 - 10)	
<b>Science as Inquiry</b>	
Activity	<b>1a. Students will demonstrate an increasing understanding of how the scientific enterprise operates</b>
2 - 14	Formulate questions and use appropriate concepts to guide scientific investigations and to solve real world problems
<b>Life Science</b>	
	<b>3a. Students will demonstrate an increasing ability to recognize patterns and products of evolution, including genetic variation, specialization, adaptation, and natural selection.</b>
2, 3	Describe how genetic material is passed from parent to offspring during asexual and sexual reproduction, e.g. mitosis, meiosis
	<b>3b. Students will demonstrate an increasing ability to understand how environmental factors affect all living systems (i.e. individuals, community, biome, the biosphere) as well as species to species interactions.</b>
1	Trace the history of an interaction between man and the environment that demonstrates how human activities can deliberately or inadvertently alter the equilibrium in an ecosystem

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NH Career Development Frameworks (Grade 11 - 12)	
<b>Career Learning</b>	
	<b>6. Students will acquire the knowledge, attitudes and skills to make a successful transition from school to the world of work and adult life.</b>
10 – 14	Use their analyses of role model to improve the planning and implementation of projects.
14	Explain how the changing workplace requires lifelong learning and upgrading of skills.
	<b>7. Students will understand the relationship between individual qualities, education and training, and the world of work.</b>
14	Share and discuss their individual educational and career plan, including decisions to be implemented after high school.
14	Identify the steps required for transition from high school to entry into Postsecondary education, training, and/or employment.
14	Apply job readiness skills to seek employment opportunities