TEKS-Aligned Scope & Sequence

The guide on these pages suggests time allocations and the TEKS-aligned scope and sequence for the core activities in each Experience and Investigation (including labs), as well as time allocations for the "Got More Time" activities or projects you may choose to add.

	INVESTIGATION 1 Biomolecules and Cells	Periods	Blocks	INVESTIGATION 2 Energy in Cells	Periods	Blocks
ANCHORING PHENOMENON	Why is this water sparkling?	0.5	0.25	How can algae be used as an energy source?	0.5	0.25
Experiences	**1** The Molecules of Life **TEKS 5A; SEP 2A, 2B**	2.5	1.25	**1** Energy and Life **TEKS 11A**	2.5	1.25
	2 Chemical Reactions and Enzymes **TEKS 11B; SEP 2B**	2.0	1.0	**2** Cellular Respiration **TEKS 11A, 11B; SEP 2B**	2.75	1.5
	3 Prokaryotic and Eukaryotic Cell Structure **TEKS 5B; SEP 1E, 1F, 2A, 4B**	2.5	1.25	**3** Fermentation **TEKS 11A**	1.75	0.75
	4 Cell Transport and Homeostasis **TEKS 5C; SEP 1B, 1G, 2A, 2B, 2C, 3A, 4A**	4.5	2.25	**4** Photosynthesis **TEKS 11A, 11B; SEP 1B, 1E, 2B**	4.0	2.0
Evaluate	Investigation Assessment	1.75	0.75	Investigation Assessment	1.75	0.75
TOTAL ✔	**Fast Track**	**13.75**	**6.75**	**Fast Track**	**13.25**	**6.5**
TOTAL +	**Got More Time?**	1.75	0.75	**Got More Time?**	1.75	0.75

	INVESTIGATION 3 Cell Growth and Differentiation	Periods	Blocks	INVESTIGATION 4 Inheritance and Variation of Traits	Periods	Blocks
ANCHORING PHENOMENON	How does this limb regrow?	0.5	0.25	Why don't organisms look exactly like their parents?	0.5	0.25
Experiences	**1** Cell Growth and Division **TEKS 6A; SEP 1C, 1D, 1F, 1G, 3A, 4B**	4.0	2.0	**1** Mendelian Patterns of Inheritance **TEKS 8A, 8B; SEP 1G, 4B**	3.5	1.75
	2 Control of the Cell Cycle **TEKS 6C; SEP 1A, 2B**	2.0	1.0	**2** Other Patterns of Inheritance **TEKS 8A, 8B; SEP 2B**	3.0	1.5
	3 Cell Specialization and Differentiation **TEKS 6B; SEP 1A, 2C, 3A**	2.0	1.0	**3** Meiosis **TEKS 8A; SEP 1F, 1G, 2A**	4.0	2.0
Evaluate	Investigation Assessment	1.75	1.0	Investigation Assessment	1.5	0.75
TOTAL ✔	**Fast Track**	**10.25**	**5.25**	**Fast Track**	**12.5**	**6.25**
TOTAL +	**Got More Time?**	1.0	0.5	**Got More Time?**	3.25	1.5

FAST TRACK Assign only the core assets, which are the activities indicated with check marks.

GOT MORE TIME? Allow students to personalize their learning by choosing from the activities with the plus signs.

	INVESTIGATION 5 DNA	Periods	Blocks	INVESTIGATION 6 RNA and Gene Expression	Periods	Blocks
ANCHORING PHENOMENON	How can we be sure this fish is cod?	0.5	0.25	How did these tadpoles come to be so different from each other?	0.5	0.25
Experiences	**1** The Structure of DNA **TEKS 7A; SEP 2A, 2B, 2D, 3A, 4B**	2.5	1.25	**1** RNA and Protein Synthesis **TEKS 7B; SEP 1G, 2A**	1.5	0.75
	2 DNA Replication **TEKS: 5B, 6A; SEP 2A, 2C, 3A**	4.5	2.25	**2** Gene Regulation and Expression **TEKS 7B, 11B; SEP 1B, 1C, 1E, 2B, 3A**	3.5	1.75
				3 Mutations **TEKS 7C; SEP 1G**	1.25	0.75
Evaluate	Investigation Assessment	1.5	0.75	Investigation Assessment	2.0	1.0
TOTAL ✓	**Fast Track**	**9.0**	**4.5**	**Fast Track**	**8.75**	**4.5**
TOTAL +	**Got More Time?**	0.25	0.25	**Got More Time?**	0.25	0.25

	INVESTIGATION 7 The Humane Genome	Periods	Blocks	INVESTIGATION 8 Biotechnology	Periods	Blocks
ANCHORING PHENOMENON	Why do some people have extra fingers and toes?	0.5	0.25	How can organisms be modified to combat disease?	0.5	0.25
Experiences	**1** Human Genetics **TEKS 8A, 8B; SEP 1G**	3.0	1.5	**1** Molecular Technology **TEKS 7D; SEP 1B, 1G, 4B**	2.5	1.25
	2 Human Genetic Disorders **TEKS 7C, 8A; SEP 2B**	3.0	1.5	**2** Applications of Biotechnology **TEKS 7D, 11B; SEP 1B, 2B, 3A, 3C, 4A, 4B**	5.0	2.5
	3 Studying the Human Genome **TEKS 7D; SEP 1B, 1D, 1E, 1F, 1G, 2B**	4.5	2.25			
Evaluate	Investigation Assessment	2.0	1.0	Investigation Assessment	2.0	1.0
TOTAL ✓	**Fast Track**	**13.0**	**6.5**	**Fast Track**	**10.0**	**5.0**
TOTAL +	**Got More Time?**	3.0	1.5	**Got More Time?**	3.0	1.5

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	INVESTIGATION 9 Mechanisms of Evolution	Periods	Blocks	INVESTIGATION 10 Evidence of Evolution	Periods	Blocks
ANCHORING PHENOMENON	How does this insect's appearance improve its chances of surviving and reproducing?	0.5	0.25	How did whales evolve from land mammals?	0.5	0.25
Experiences	**1** Darwin's Theory: Natural Selection **TEKS 10B; SEP 1H, 4B**	2.0	1.0	**1** The Fossil Record **TEKS 9A, 9B**	1.0	0.5
	2 Evolution as Genetic Change in Populations **TEKS 10A; SEP 2B**	2.0	1.0	**2** Biogeography and Homologies **TEKS 9A; SEP 1F, 1G, 2B**	3.0	1.5
	3 Other Mechanisms of Evolution **TEKS 8A, 10D**	1.0	0.5	**3** Rates of Change **TEKS 9B; SEP 2B**	1.0	0.5
	4 The Process of Speciation **TEKS 10B, 10C; SEP 1B, 1G, 2A, 2B**	1.0	0.5	**4** Earth's Early History **TEKS 5B, 7A, 9A**	0.5	0.25
Evaluate	Investigation Assessment	1.5	0.75	Investigation Assessment	2.0	1.0
TOTAL ✔	**Fast Track**	**8.0**	**4.0**	**Fast Track**	**7.5**	**3.75**
TOTAL ✚	**Got More Time?**	1.5	0.75	**Got More Time?**	2.5	1.25

	INVESTIGATION 11 Plant Systems	Periods	Blocks	INVESTIGATION 12 Animal Systems	Periods	Blocks
ANCHORING PHENOMENON	What is the world's largest organism?	0.5	0.25	Why is this bird dancing?	0.5	0.25
Experiences	**1** Plant Systems and Interactions **TEKS 12B; SEP 1B**	2.25	1.0	**1** Animal Organization and Homeostasis **TEKS 12A**	1.0	0.5
	2 Reproduction in Plants **TEKS 12B; SEP 1F, 3C**	2.25	1.0	**2** Nutrient and Waste Regulation in Animals **TEKS 11B, 12A; SEP 1C, 1F**	2.5	1.25
	3 Transport in Plants **TEKS 12B**	2.0	1.0	**3** Reproduction in Animals **TEKS 12A**	1.0	0.5
	4 Response in Plants **TEKS 12B; SEP 2B, 3C**	1.25	0.75	**4** Response to the Environment **TEKS 12A**	1.0	0.5
Evaluate	Investigation Assessment	2.0	1.0	Investigation Assessment	3.0	1.5
TOTAL ✔	**Fast Track**	**10.25**	**5.0**	**Fast Track**	**9.0**	**4.5**
TOTAL ✚	**Got More Time?**	3.25	1.5	**Got More Time?**	2.0	1.0

FAST TRACK Assign only the core assets, which are the activities indicated with check marks. ✓

GOT MORE TIME? Allow students to personalize their learning by choosing from the activities with the plus signs. +

	INVESTIGATION 13 The Challenge of Disease	Periods	Blocks	INVESTIGATION 14 The Biosphere	Periods	Blocks
ANCHORING PHENOMENON	Why do I need a flu shot every year?	0.5	0.25	Why is the water turning green?	0.5	0.25
Experiences	**1** Understanding Disease **TEKS 5D; SEP 1B, 1F**	2.75	1.4	**1** Ecology on a Living Planet **TEKS: 13, 13C; SEP 1G, 2B, 3A**	2.5	1.25
	2 The Immune Response to Disease **TEKS 5D, 12A; SEP 2B, 3B**	3.25	1.6	**2** Energy Flow **TEKS 13B**	2.5	1.25
	3 Emerging Diseases and Pandemics **TEKS 5D; SEP 1A, 1E, 1F, 1G, 2B, 3A**	3.25	1.6	**3** Cycles of Matter **TEKS 11A, 13C; SEP 1B, 1C, 1G, 3A**	4.5	2.25
Evaluate	Investigation Assessment	2.0	1.0	Investigation Assessment	2.0	1.0
TOTAL ✓	**Fast Track**	**11.75**	**5.75**	**Fast Track**	**12.0**	**6.0**
TOTAL +	**Got More Time?**	0.75	0.4	**Got More Time?**	1.0	0.5

	INVESTIGATION 15 Ecosystem Stability and Change	Periods	Blocks	INVESTIGATION 16 Human Impact on the Biosphere	Periods	Blocks
ANCHORING PHENOMENON	How has this ecosystem changed?	0.5	0.25	How do invasive species impact the environment?	0.5	0.25
Experiences	**1** Ecological Relationships **TEKS 13A; SEP 1C, 1D, 1F, 2B, 2C, 3A**	4.5	2.25	**1** Human Activity and Ecosystem Stability **TEKS 13D; SEP 2B, 4B**	2.25	1.0
	2 Ecological Succession **TEKS 13D; SEP 2D, 3A**	2.5	1.25	**2** Biodiversity and Environmental Change **TEKS 13D; SEP 1G, 3A, 4B**	3.0	1.5
	3 Population Growth **TEKS 13D; SEP 2B, 2C**	2.5	1.25	**3** Humans and the Environment **TEKS 13D; SEP 1C, 1E, 1F, 2D, 3A, 4A, 4B**	2.75	1.25
Evaluate	Investigation Assessment	2.0	1.0	Investigation Assessment	2.0	1.0
TOTAL ✓	**Fast Track**	**12.0**	**6.0**	**Fast Track**	**10.5**	**5.25**
TOTAL +	**Got More Time?**	2.5	1.25	**Got More Time?**	2.25	1.0