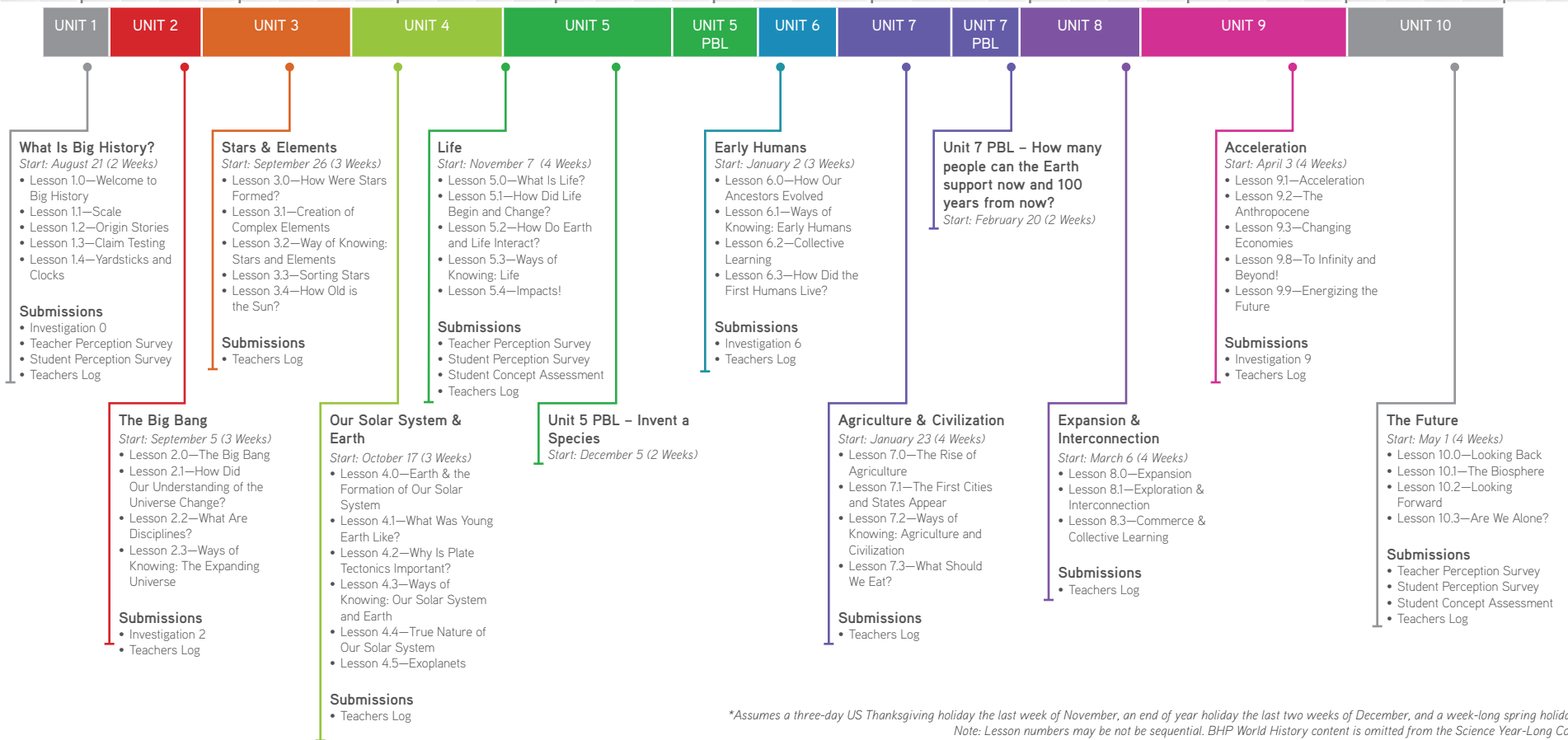


2019/20 Science: Sample Year-Long Course Plan

Content Pacing Guide

2019 2020

August September October November December January February March April May June



*Assumes a three-day US Thanksgiving holiday the last week of November, an end of year holiday the last two weeks of December, and a week-long spring holiday in April. Note: Lesson numbers may not be sequential. BHP World History content is omitted from the Science Year-Long Course Plan.

BHP Science

2019/20 SAMPLE YEAR-LONG COURSE PLAN

Course Learning Outcomes

1. Explain how thresholds of increasing complexity, differing scales of time and space, claim testing, and collective learning help us understand historical, current, and future events as part of a larger narrative.
2. Integrate perspectives from multiple disciplines to create, defend, and evaluate the history of the Universe and Universal change.
3. Deepen an understanding of key historical and scientific concepts and facts; use these in constructing explanations.
4. Engage in meaningful scientific inquiry and historical investigations by being able to hypothesize, form researchable questions, conduct research, revise one's thinking, and present findings that are well-supported by scientific and historical evidence.
5. Critically evaluate, analyze, and synthesize primary and secondary historical, scientific, and technical texts to form well-crafted and carefully supported written and oral arguments.
6. Communicate arguments to a variety of audiences to support claims through analysis of substantive texts and topics; use valid reasoning and relevant and sufficient evidence through individual or shared writing, speaking, and other formats.
7. Locate and understand how our own place, our community's place, and humanity as a whole fit into and impact Big History's narrative.
8. Engage in historical analysis using the theories and practices from multiple disciplines, toward an integrated, interdisciplinary understanding of the history of the Universe.

Projected Pacing Guide*

Unit / Activity	Estimated Start	Estimated Duration
1	August 21	2 weeks
2	September 5	3 weeks
3	September 25	4 weeks
4	October 23	4 weeks
5	November 20	4 weeks
Unit 5 PBL	January 2	1 week
6	January 8	9 weeks
7	January 22	4 weeks
Unit 7 PBL	February 19	1 week
8	February 26	3 weeks
9	March 19	5 weeks
10	April 30	4 weeks

**Takes into account school holidays, in-service days, and other commonly missed time such as testing days*



Unit 1—What Is Big History?

Start Date: August 21, 2017 (2 weeks)

Learning Outcomes

1. Define thresholds of increasing complexity, origin stories, and scale.
2. Understand that Big History is a modern, science-based origin story that draws on many different types of knowledge.
3. Understand how you fit into the Big History narrative, using the concept of “thresholds” to frame your past, present, and future as well as the history of the Universe.
4. Understand what disciplines are and consider how the viewpoints of many different scholars can be integrated for a better understanding of a topic.
5. Learn to use timelines as a way to compare the scale of personal and historic events.
6. Identify a thesis statement and how writing is structured, and evaluate both of those elements in writing.

Unit 1 Driving Question

“Why do we look at things from far away and close up?”

Lesson 1.0—Welcome to Big History

1. **Activity:** History as Mystery
2. **Activity:** Easter Island Mystery
3. **Read:** Easter Island
4. **Activity:** Vocab – Word Wall
5. **Watch:** *What Is Big History?*
6. **Watch:** *The Big Bang – Crash Course*
7. **Activity:** Big History Website Scavenger Hunt
8. **Watch:** *A Big History of Everything – H2 (Clip 0:00 to 8:20)*
9. **Closing:** Investigation 0

Lesson 1.1—Scale

1. **Activity:** Scale - History of Me
2. **Watch:** *To Scale: The Solar System*
3. **Activity:** Vocab Tracking
4. **Activity:** Threshold Name Game
5. **Read:** “Big History Overview”
6. **Activity:** DQ Notebook
7. **Activity:** Scale - Big History on a Football Field
8. **Activity:** Human History on a String
9. **Activity:** Scale - Timelines

Lesson 1.2—Origin Stories

1. **Watch:** *Big Questions – H2*
2. **Activity:** “Intro to Origin Stories”
3. **Read:** “Origin Stories Introduction”
4. **Read:** “Origin Story: Modern Scientific”
5. **Activity:** “Origin Stories Article Collection”
6. **Read:** “Origin Story: Chinese”
7. **Read:** “Origin Story Judeo-Christian”
8. **Read:** “Origin Story: Iroquois”
9. **Read:** “Origin Story: Mayan”
10. **Read:** “Origin Story: Greek”



11. **Read:** “Origin Story: Zulu”
12. **Read:** “Origin Story: Efik”
13. **Read:** “Cosmology and Faith”

Lesson 1.3—Claim Testing

1. **Opening:** Claim Testing – Snap Judgment
2. **Activity:** DQ Notebook
3. **Activity:** Vocab – Live Concept Mapping
4. **Read:** “Approaches to Knowledge”
5. **Watch:** *How Do We Decide What to Believe?*
6. **Activity:** Claim Testing – What are the Claim Testers?
7. **Activity:** Analyzing Investigation Writing – Claim and Focus
8. **Closing:** Investigation 1

Lesson 1.4—Yardsticks and Clocks

1. **Opening:** Measuring Great Distances (Part 1) (Sci)
2. **Read:** “How Did We Find the Distance to the Sun?” (Sci)
3. **Watch:** Distances: Crash Course Astronomy #25 (Sci)
4. **Activity:** Measuring Distances Using Parallax (Sci)
5. **Watch:** How Old is the Earth? (Sci)
6. **Activity:** Modeling Measuring Time Using Radioactivity (Sci)
7. **Closing:** Measuring Great Distances (Part 2) (Sci)

Unit 2—The Big Bang

Start Date: September 5, 2017 (2 weeks)

Learning Outcomes

1. Explain the basics of the Big Bang theory and the primary evidence that supports this theory.
2. Using evidence from texts and claim testing, explain why views of the Universe have changed over time and the roles that scientists played in shaping our understanding of the origin of the Universe.
3. Understand how to use claim testing to evaluate a claim or resource.
4. Locate Ptolemy, Copernicus, Galileo, Newton, and Hubble on a timeline and explain what each added to our collective understanding of the structure of the Universe.

Unit 2 Driving Questions

“How and why do individuals change their minds?”

Lesson 2.0—The Big Bang

1. Opening/Activity – Causation: Natural Disasters
2. **Activity:** Vocab – Word Wall
3. **Watch:** *A Big History of Everything – H2 (Clip 8:25 to 12:04)*
4. **Read:** “Complexity and Thresholds”
5. **Activity:** Narrative and Thresholds – The Big Bang
6. **Watch:** *Threshold 1 – The Big Bang*
7. **Activity:** This Threshold Today: The Big Bang
8. **Watch:** *Questions About the Big Bang*
9. **Closing:** Big Bang Infographic

Lesson 2.1—How Did Our Understanding of the Universe Change?



1. **Activity:** Claim Testing - Authority
2. **Activity:** DQ Notebook
3. **Activity:** Vocab Tracking
4. **Watch:** *Crash Course Big History: Why Cosmic Evolution Matters*
5. **Read:** "Claudius Ptolemy"
6. **Read:** "Galileo Galilei"
7. **Read:** "Nicolaus Copernicus"
8. **Read:** "Isaac Newton"
9. **Read:** Henrietta Leavitt
10. **Read:** "Edwin Hubble"
11. **Activity:** Scale - Changing Views Timeline
12. **Activity:** Views of the Universe Debate

Lesson 2.2—What Are Disciplines?

1. **Opening:** Disciplines – Who Knows What?
2. **Activity:** DQ Notebook
3. **Activity:** Vocab – Word Wheel
4. **Watch:** *Are We Alone?* – H2
5. **Watch:** *Ways of Knowing – Introduction to Cosmology*
6. **Watch:** *Ways of Knowing – Introduction to Astrophysics*
7. **Activity:** Disciplines - What Do You Know? What Do You Ask?
8. **Activity:** Analyzing Investigation Writing – Use of Evidence
9. **Closing:** Investigation 2

Lesson 2.3—Ways of Knowing: The Expanding Universe

1. **Opening:** Doppler Effect Demonstration (Sci)
2. **Watch:** What is the Universe Expanding Into? (Sci)
3. **Activity:** Big Bang Balloon (Sci)
4. **Watch:** Hubble's Expanding Universe, Redshifts, and the Big Bang (Sci)
5. **Read:** "Hubble Finds Ghostly Ring of Dark Matter" (Sci)
6. **Watch:** What Are Dark Matter and Dark Energy (Sci)
7. **Closing:** Universe Comics (Sci)

Unit 3—Stars & Elements

Start Date: September 25, 2017 (4 weeks)

Learning Outcomes

1. Describe how stars form.
2. Explain what happens in the life of a star and explain what happens when a star dies.
3. Explain how the death of stars results in the creation of heavier elements.
4. Explain why the formation of stars and the emergence of elements are so important in our world.
5. Understand what scholars from multiple disciplines know about a topic and the questions they can ask to gain an understanding of the topic from an integrated perspective.
6. Understand how to use and apply the concept of periodization.
7. Identify various types of causes and consequences, including short-term, long-term, and triggering events.

Unit 3 Driving Question

"How can looking at the same information from different perspectives pave the way for progress?"



Lesson 3.0—How Were Stars Formed?

1. **Opening:** The Life of a Star
2. **Activity:** Vocab – Word Wall
3. **Watch:** *How Were Stars Formed?*
4. **Activity:** Narratives and Thresholds – The Stars Light Up
5. **Watch:** *Threshold 2 – The Stars Light Up*
6. **Activity:** Causation – Star Formation Part 1
7. **Watch:** *A Big History of Everything – H2 (Clip 12:05 to 16:47)*
8. **Activity:** This Threshold Today: The Stars Light Up
9. **Activity:** DQ Notebook
10. **Closing:** Star Comics

Lesson 3.1—Creation of Complex Elements

1. **Opening:** Is It in There?
2. **Activity:** Narratives and Thresholds – New Chemical Elements
3. **Activity:** Vocab Tracking
4. **Watch:** *Threshold 3 – New Chemical Elements*
5. **Watch:** *What Did Stars Give Us?*
6. **Watch:** *Crash Course Big History: Why Star Stuff Matters*
7. **Activity:** Causation – Star Formation Part II
8. **Read:** “A Little Big History of Silver”
9. **Closing:** Superhero Element

Lesson 3.2—Ways of Knowing: Stars and Elements

1. **Opening:** Claim Testing - Intuition
2. **Activity:** DQ Notebook
3. **Activity:** Vocab – Word Relay
4. **Watch:** *Ways of Knowing – Intro to Chemistry*
5. **Activity:** Disciplines - What Do You Know? What Do You Ask?
6. **Watch:** *Crash Course Chemistry – Periodic Table of Elements*
7. **Read:** “Dmitri Mendeleev – Building the Periodic Table of Elements”
8. **Read:** “Marie Curie – Chemistry, Physics, and Radioactivity”
9. **Activity:** Scale - Timelines and Periodization
10. **Activity:** Analyzing Investigation Writing – Applying BHP Concepts
11. **Closing:** Investigation 3

Lesson 3.3—Sorting Stars

1. **Opening:** Colors of Stars (Part 1) (Sci)
2. **Watch:** Crash Course Astronomy — Stars (Sci)
3. **Read:** “Morgan-Keenan Luminosity Class” (Sci)
4. **Read:** “Wonder Women of History: Annie Jump Cannon” (Sci)
5. **Activity:** Star Class - Blue, White, Yellow and Red (Sci)
6. **Closing:** Colors of Stars (Part 2) (Sci)

Lesson 3.4—How Old is the Sun?

1. **Opening:** Solar Phenomena (Sci)
2. **Watch:** How Do We Know How Old the Sun Is? (Sci)
3. **Read:** “Why Does the Sun Shine?” (Sci)
4. **Watch:** Crash Course Astronomy — The Sun (Sci)
5. **Closing:** Plasma Party (Sci)



Unit 4—Our Solar System & Earth

Start Date: October 23, 2017 (4 weeks)

Learning Outcomes

1. Explain why planets are more complex than stars.
2. Use evidence to explain how the Earth and its atmosphere developed and changed over time.
3. Explain the basic mechanisms and key pieces of evidence for plate tectonics, and how plate tectonics impacts life on Earth.
4. Define geology, the types of questions geologists ask, and the tools they use to answer those questions.
5. Explain why geology is important to understanding the history of the Earth.
6. Understand how geologists can work with scientists and historians from other disciplines to form a deeper understanding of the history of the Earth.
7. Understand multiple causes and how identify them.
8. Demonstrate an ability to construct an argument in writing.

Unit 4 Driving Question

"How and why do theories become generally accepted?"

Lesson 4.0—Earth & the Formation of Our Solar System

1. **Opening:** Planet Card Sort
2. **Activity:** Vocab – Word Wall
3. **Activity:** Narratives and Thresholds – Earth & the Solar System
4. **Watch:** *Threshold 4 – Earth & the Solar System*
5. **Watch:** *How Did Earth and the Solar System Form?*
6. **Read:** "How Our Solar System Formed"
7. **Activity:** Causation – Categorizing Causes
8. **Activity:** Active Accretion

Lesson 4.1—What Was Young Earth Like?

1. **Opening:** Analyzing Investigation Writing – Organization
2. **Activity:** DQ Notebook
3. **Activity:** Vocab Tracking
4. **Watch:** *What Was the Young Earth Like?*
5. **Watch:** *The Early Atmosphere*
6. **Closing:** This Threshold Today – Earth and the Solar System

Lesson 4.2—Why Is Plate Tectonics Important?

1. **Watch:** Crash Course: *The Solar System & the Earth*
2. **Watch:** *Our Shifting Globe*
3. **Read:** "Why We're All Lava Surfers"
4. **Closing:** Biography of a Continent

Lesson 4.3—Ways of Knowing: Our Solar System and Earth

1. **Opening:** Vocab – Word Sneak
2. **Activity:** DQ Notebook
3. **Watch:** *Introduction to Geology*
4. **Read:** "Alfred Wegener & Harry Hess"
5. **Activity:** Claim Testing - Evidence
6. **Read:** "Eratosthenes"

7. **Watch:** *Introduction to the Geologic Time Chart*
8. **Read:** “Principles of Geology”
9. **Activity: Disciplines** - What Do You Know? What Do You Ask?
10. **Activity:** Was There Science Before the Scientific Revolution?
11. **Activity:** Revising Investigation Writing – Claim and Focus
12. **Closing:** Investigation 4

Lesson 4.4—True Nature of Our Solar System

1. **Activity:** *Fleeing the Surface of the Earth (Part 1) (Sci)*
2. **Watch:** *Crash Course Astronomy: Introduction to the Solar System (Sci)*
3. **Read:** “A Brief History of Pluto” (Sci)
4. **Activity:** *Scale Model Solar System (Sci)*
5. **Watch:** *To Scale: The Solar System*
6. **Read:** “Comets - Portents of Doom?” (Sci)
7. **Activity:** *Fleeing the Surface of the Earth (Part 2) (Sci)*

Lesson 4.5—Exoplanets

1. **Opening:** *Observing Transit (Sci)*
2. **Watch:** *Crash Course Astronomy — Exoplanets (Sci)*
3. **Read:** “How We Find Exoplanets” (Sci)
4. **Activity:** *Interpreting Transit Graphs (Sci)*
5. **Activity:** *What Do You Know? Who Do You Ask? (Sci)*
6. **Closing:** *Fleeing the Surface of the Earth (Part 3) (Sci)*

Unit 5—Life

Start Date: November 20, 2017 (4 weeks)

Learning Outcomes

1. Describe the conditions that made it possible for life to emerge on Earth.
2. Explain the differences between life and nonlife.
3. Describe the major events in the development of life on Earth and explain what is meant by the term *biosphere*.
4. Use evidence to explain adaptation and evolution, including Darwin’s theory of natural selection and DNA.
5. Demonstrate using texts as evidence in historical writing.

Unit 5 Driving Question

“How and why do theories evolve?”

Lesson 5.0—What Is Life?

1. **Opening:** DQ Notebook
2. **Activity:** Vocab – Word Wall
3. **Watch:** *A Big History of Everything – H2 (Clip 26:45 to 39:42)*
4. **Activity:** How Closely Related Are We?
5. **Watch:** *Crash Course: The Origin of Life*
6. **Read:** “Life and Purpose”

Lesson 5.1—How Did Life Begin and Change?

1. **Opening:** Spontaneous Generation



2. **Activity:** Vocab Tracking
3. **Watch:** *How Did Life Begin and Change?*
4. **Activity:** Narratives and Thresholds – Life
5. **Watch:** *Mini Thresholds of Life*
6. **Activity:** Are These the Right Mini Thresholds of Life?
7. **Watch:** *Life in All Its Forms*
8. **Activity:** The Tree of Life Infographic
9. **Watch:** *Crash Course Big History: Why the Evolutionary Epic Matters*

Lesson 5.2—How Do Earth and Life Interact?

1. **Opening:** Living in the Extremes of the Biosphere
2. **Activity:** Vocab – What’s My Word?
3. **Activity:** DQ Notebook
4. **Read:** “What Is the Biosphere?”
5. **Watch:** *How Do Earth and Life Interact?*
6. **Activity:** A Year in the Life of a Species
7. **Watch:** *How We Proved an Asteroid Wiped Out the Dinosaurs*

Lesson 5.3—Ways of Knowing: Life

1. **Activity:** The Voyage of the Beagle
2. **Read:** “Darwin, Evolution, and Faith”
3. **Read:** “Crick, Watson, and Franklin”
4. **Watch:** *Codes – H2*
5. **Activity:** Scale – Evolution and Life Timeline
6. **Activity:** Revising Investigation Writing: Use of Evidence
7. **Closing:** Investigation 5

Lesson 5.4—Impacts!

1. **Opening:** Predicting Disaster (Part 1) (Sci)
2. **Watch:** The Three Biggest Space Impacts Ever (Sci)
3. **Read:** “Found: First Amino Acid on a Comet” (Sci)
4. **Activity:** Making Craters (Sci)
5. **Watch:** The Chelyabinsk Meteor: What We Know (Sci)
6. **Closing:** Predicting Disaster (Part 2) (Sci)

Unit 6—Early Humans

Start Date: January 8, 2018 (2 weeks)

Learning Outcomes

1. Describe human evolution, using evidence and connection to other species of mammals.
2. Explain whether or not symbolic language makes humans different.
3. Describe how early humans lived.
4. Explain collective learning.
5. Understand what scholars from multiple disciplines know about a topic and the questions they can ask to gain an understanding of the topic from an integrated perspective.
6. Show early human migration on a map.
7. Demonstrate using BHP concepts accurately in writing.
8. Demonstrate an understanding of multiple causes and how they complicate the relationship between causes, consequences, and their interaction with one another.



Unit 6 Driving Question

"What makes humans different from other species?"

Lesson 6.0—How Our Ancestors Evolved

1. **Activity:** Vocab – Word Wall
2. **Opening:** Early Ancestors
3. **Watch:** *Threshold 6 – Humans and Collective Learning*
4. **Watch:** *Human Evolution – Crash Course*
5. **Activity:** Evolution Comic
6. **Read:** "Lucy and the Leakeys"
7. **Read:** "Jane Goodall"

Lesson 6.1—Ways of Knowing: Early Humans

1. **Activity:** Vocab Tracking
2. **Activity:** DQ Notebook
3. **Watch:** *Intro to Anthropology*
4. **Watch:** *Intro to Archaeology*
5. **Activity:** Disciplines - What Do You Know? What Do You Ask?
6. **Activity:** Historos Cave
7. **Closing:** Little Big History Kickoff

Lesson 6.2—Collective Learning

1. **Opening:** Collective Learning Snap Judgment
2. **Read:** "Collective Learning" (Part 1)
3. **Watch:** *Crash Course Big History: Why Human Evolution Matters*
4. **Watch:** *Common Man – H2*
5. **Watch:** *Early Evidence of Collective Learning*
6. **Activity:** Culture and Collective Learning Debate
7. **Closing:** Causation - Alphonse the Camel

Lesson 6.3—How Did the First Humans Live?

1. **Opening:** DQ Notebook
2. **Watch:** *How Did the First Humans Live?*
3. **Read:** "Foraging"
4. **Watch:** *From Foraging to Food Shopping*
5. **Activity:** Hunter Gatherer Menu
6. **Watch:** *Crash Course Big History: Why Human Ancestry Matters*
7. **Activity:** Human Migration Patterns
8. **Activity:** Little Big History – Choosing Your Focus
9. **Activity:** Revising Investigation Writing – Applying BHP Concepts
10. **Closing:** Investigation 6

Unit 7—Agriculture & Civilization

Start Date: January 22, 2018 (4 weeks)

Learning Outcomes

1. Define agriculture and describe where it emerged.
2. Identify the features of agrarian civilizations.



3. Understand the similarities and differences between the lifestyles of hunter-gatherers and farmers.
4. Describe how early civilizations formed and their key features.
5. Understand what scholars from multiple disciplines know about agriculture and civilization and the information they can derive from them using an integrated perspective.
6. Describe how agrarian civilizations formed and analyze their key similarities and differences.
7. Use sentence starters to strengthen making an argument in writing.

Unit 7 Driving Question

"To what extent was farming an improvement over foraging?"

Lesson 7.0—The Rise of Agriculture

1. **Activity:** Vocab – Word Wall
2. **Activity:** This Threshold Today - Agriculture
3. **Watch:** *Threshold 7 —Agriculture*
4. **Activity:** DQ Notebook
5. **Watch:** *Why Was Agriculture So Important?*
6. **Watch:** *Jacqueline Howard Presents: History of Domestic Animals*
7. **Read:** “Collective Learning” (Part 2)
8. **Activity:** Biography of a Crop
9. **Read:** “What’s for Dinner Tonight? Evidence of Early Agriculture – The First Farmers”
10. **Closing:** Little Big History Biography

Lesson 7.1—The First Cities and States Appear

1. **Opening:** Comparing Crops
2. **Activity:** Vocab Tracking
3. **Watch:** *Where and Why Did the First Cities and States Appear?*
4. **Read:** Agrarian Civilizations Introduction
5. **Activity:** Comparing Civilizations
6. **Read:** “Uruk”
7. **Read:** “Mesoamerica”
8. **Read:** “Jericho”
9. **Read:** “East Asia”
10. **Read:** “Greco Roman”
11. **Read:** “Aksum”
12. **Read:** “Ghana”
13. **Read:** “We’re Not in Kansas Anymore: The Emergence of Early Cities”
14. **Read:** “The Origin of World Religions”
15. **Closing:** Early Civilization Museum Project
16. **Activity:** Comparing More Civilizations

Lesson 7.2—Ways of Knowing: Agriculture and Civilization

1. **Opening:** Social Status, Power, and Human Burials
2. **Watch:** *Intro to History*
3. **Read:** “Recordkeeping and History”
4. **Activity:** Disciplines - What Do You Know? What Do You Ask?
5. **Watch:** *Migrations & Intensification – Crash Course*
6. **Activity:** DQ Notebook
7. **Read:** “The Origin of Agriculture in Africa”
8. **Activity:** Little Big History – Research Questions
9. **Activity:** The Rise, Fall, and Collapse of Civilizations
10. **Closing:** Were They Pushed or Did They Jump?



11. **Activity:** Revising Investigation Writing – Sentence Starters Part 1
12. **Closing:** Investigation 7

Lesson 7.3—What Should We Eat?

1. **Opening:** Best Lunch Ever (Part 1) (Sci)
2. **Watch:** Fundamentals of Nutrients and the History of Nutrition (Sci)
3. **Read:** “Protein-Rich Diet Helps Gorillas Keep Lean” (Sci)
4. **Read:** “For Most People Eating Bugs Is Only Natural” (Sci)
5. **Activity:** Nutrition Hunt (Sci)
6. **Watch:** The Real Paleo Diet (Sci)
7. **Opening:** Best Lunch Ever (Part 2) (Sci)

Unit 8—Expansion & Interconnection

Start Date: February 26, 2018 (3 weeks)

Learning Outcomes

1. Analyze what propelled the expansion and interconnection of agrarian civilizations.
2. Investigate the implications of interconnected societies and regions by looking at spread of people, plants, animals, disease, goods, and ideas.
3. Explain how new networks of exchange accelerated collective learning and innovation.
4. Describe the changing characteristics of societies in the four world zones before and after oceanic travel and the thickening of global networks.
5. Use sentence starters to strengthen the use of texts as evidence in writing.
6. Analyze a complex historical event through the lens of causality.

Unit 8 Driving Question

“What are the positive and negative impacts of interconnection?”

Lesson 8.0—Expansion

1. **Opening:** What Caused Expansion?
2. **Activity:** Vocab – Word Wall
3. **Opening:** DQ Notebook
4. **Watch:** *Why Did Civilization Expand?*
5. **Watch:** *The Modern Revolution – Crash Course*
6. **Activity:** World Zone Game
7. **Read:** “The Four World Zones”
8. **Closing –** Causation – The Modern Revolution

Lesson 8.1—Exploration & Interconnection

1. **Opening:** World Travelers
2. **Activity:** **Vocab Tracking**
3. **Watch:** *Crash Course Big History: Why Early Globalization Matters*
4. **Read:** “China: The First Great Divergence”
5. **Read:** “An Age of Adventure”
6. **Activity:** An Age of Adventure
7. **Read:** “Ibn Battuta”
8. **Read:** “Marco Polo”
9. **Read:** “Zheng He”
10. **Activity:** Explorers Mini Project



11. **Watch:** *Brain Boost* – H2
12. **Activity:** Human Migration Patterns II
13. **Closing:** Issues of Colonization Mini Project

Note: Lesson 8.2 is for BHP World History implementations.

Lesson 8.3—Commerce & Collective Learning

1. **Opening:** Quick Poll – Has the Scientific Revolution Ended?
2. **Activity:** DQ Notebook
3. **Watch:** *Jacqueline Howard Presents: The History of Money*
4. **Read:** “One Lump or Two? The Development of a Global Economy”
5. **Watch:** *Systems of Exchange and Trade*
6. **Read:** “Benjamin Banneker: Science in Adversity”
7. **Read:** “The First Silk Roads”
8. **Read:** “Lost on the Silk Road”
9. **Read:** “A Curious Case: African Agrarianism”
10. **Activity:** Personal Supply Chain
11. **Activity:** Little Big History Final Project
12. **Read:** “She Blinded Me with Science: Collective Learning and the Emergence of Modern Science”
13. **Activity:** Debate: Has the Scientific Revolution Ended?
14. **Activity:** Revising Investigation Writing – Sentence Starters Part 2
15. **Closing:** Investigation 8

Unit 9—Acceleration

Start Date: March 19, 2018 (5 weeks)

Learning Outcomes

1. Describe accelerating global change and the factors that describe it.
2. Understand the key features that define the Anthropocene.
3. Describe the acceleration in world population, technology, science, communication, and transportation. Explain how they have benefited and threatened humanity.
4. Explain the changes in the use, distribution, and importance of natural resources on human life.
5. Use sentence starters to build skills in applying BHP concepts to writing.

Unit 9 Driving Question

“To what extent has the Modern Revolution been a positive or a negative force?”

Note: Lesson 9.0 is for BHP World History implementations.

Lesson 9.1—Acceleration

1. **Opening:** The Appetite for Energy
2. **Activity:** Vocab – Word Wall
3. **Activity:** DQ Notebook
4. **Watch:** *Crash Course World History: The Industrial Revolution*
5. **Read:** “The Industrial Revolution”
6. **Watch:** *How Did Change Accelerate?*
7. **Read:** “Acceleration”
8. **Activity:** Debate: Is Change Accelerating?



Lesson 9.2—The Anthropocene

1. **Watch:** *Crash Course: The Anthropocene and the Near Future*
2. **Activity:** Vocab Tracking
3. **Read:** “The Anthropocene”
4. **Read:** “Anthropocene Africa”
5. **Activity:** Graphing Population Growth
6. **Closing:** The Impact of Population Growth Essay

Lesson 9.3—Changing Economies

1. **Opening:** DQ Notebook
2. **Read:** “Collective Learning” (Part 4)
3. **Watch:** *A Big History of Everything – H2 (Clip 1:07 to 1:14)*
4. **Read:** “Smith, Marx, and Keynes”
5. **Activity:** This Threshold Today
6. **Activity:** Revising Investigation Writing: Sentence Starters Part 3
7. **Closing:** Investigation 9

Note: Lessons 9.4 to 9.7 are for BHP World History implementations.

Lesson 9.8—To Infinity and Beyond!

1. **Opening:** Surviving on Mars (Part 1) (Sci)
2. **Watch:** Ted-Ed - Who Won the Space Race? (Sci)
3. **Read:** “Which Way to Space?” (Sci)
4. **Activity:** Debate — Collaboration or Completion in Space (Sci)
5. **Read:** “Will We Ever Colonize Mars?” (Sci)
6. **Watch:** Ted-Ed – Could We Actually Live on Mars? (Sci)
7. **Closing:** Surviving Mars (Part 2) (Sci)

Lesson 9.9—Energizing the Future

1. **Opening:** Energy Sort (Sci)
2. **Watch:** Crash Course World History: Humans and Energy (Sci)
3. **Watch:** Nuclear Energy Explained: How Does It Work? (Sci)
4. **Read:** “Benefits of Renewable Energy” (Sci)
5. **Read:** “Comparing Costs of Renewable and Conventional Energy Sources” (Sci)
6. **Watch:** Running on Renewable Energy (Sci)
7. **Activity:** Elsewhere’s Energy (Sci)

Unit 10—The Future

Start Date: April 30, 2018 (4 weeks)

Learning Outcomes

1. Explain the Big History story and its defining features and patterns.
2. Identify important human and environmental issues that affect the future of our species and the biosphere.
3. Propose a vision of the future based on new understandings of the past.

Unit 10 Driving Question

“What’s the next threshold?”



Lesson 10.0—Looking Back

1. **Opening:** Timeline Review
2. **Activity:** Vocab – Word Wall
3. **Watch:** *The History of Everything* – TED
4. **Activity:** DQ Notebook
5. **Activity:** Scale
6. **Closing:** Disciplines: What Do You Know? What Do You Ask?

Lesson 10.1—The Biosphere

1. **Opening:** Natural Disasters
2. **Activity:** Vocab Tracking
3. **Watch:** *Crash Course World History: Globalization II – Good or Bad*
4. **Watch:** *The Atmosphere and Climate*
5. **Watch:** *Jacqueline Howard Presents: A Day on Mars*
6. **Activity:** Gapminder Card Sort
7. **Closing:** Visions of the Future

Lesson 10.2—Looking Forward

1. **Watch:** A Big History of Everything – H2
2. **Read:** “Complexity and the Future”
3. **Watch:** Bill Gates: Visions of the Future
4. **Watch:** Crash Course: The Deep Future
5. **Read:** “Biography of Sylvester James Gates, Jr”
6. **Activity:** DQ Notebook
7. **Closing:** The Future of Our Planet

Lesson 10.3—Are We Alone?

1. **Opening:** Alien Life – What Might It Look Like? (Sci)
2. **Watch:** *The Fermi Paradox - Where Are All the Aliens?* (Sci)
3. **Activity:** Anyone Out There? (The Drake Equation) (Sci)
4. **Watch:** *Neil deGrasse Tyson - Are We Alone* (Sci)
5. **Read:** “Are We Alone? Now is the Time to Find Out” (Sci)
6. **Read:** “40 Years Ago, Earth Beamed Its First Postcard to the Stars” (Sci)
7. **Activity:** First Contact (Sci)

