

PHYSICAL SCIENCE UNIT 1 OVERVIEW CHECKLIST

This is your checklist to be sure you have received all of the correct lessons with their accompanying readings, student pages, and teacher pages. No core texts will be provided (for this unit, the core text is *Kirinyaga* by Michael Resnick and *The Periodic Table* by Primo Levi). You will need to provide the core text. In addition, you will receive a **Physical Science Year Long Outline** and a **Physical Science Unit 1 Calendar**.

LESSON #	LESSON TITLE	READING/S	STUDENT PAGES	TEACHER PAGES
Lesson 1	What is Science? <i>Nature of Matter: How do tribes define science?</i>	<i>What is Science</i> , R.P. Feynman from <i>The Character of the Physical Law</i> at . http://accept.la.asu.edu/courses/phs110/ds1/chapter1.html	-----	List of Supplies Introduction to Unit 1 Physical Science Sample Course Syllabus
Lesson 2	<i>Système Internationale</i> aka the Metric System <i>Nature of Matter: How do tribes standardize their lives</i>	<i>Kirinyaga</i> by Michael Resnick – Prologue (not provided by ESubjects)	-----	Scientific Notation Dialectical Journal
Lesson 3	Significant Digits and Scientific Notation <i>Nature of Matter: How do tribes standardize their lives?</i>	<i>Hydrogen</i> from <u>The Periodic Table</u> by Primo Levi (not provided by ESubjects)	Significant Digits	Significant Digit Key Addition, Subtraction, Multiplication, and Division Lecture
Lesson 4	How to Conduct a Lab <i>Nature of Matter: How do tribes experiment?</i>	<i>Kirinyaga</i> by Michael Resnick– Ch. 1 (not provided by ESubjects)	Lab 1: Testing a Hypothesis Lab Safety Contract	Lab 1 Key Quiz 1 Quiz 1 Key They Scientific Method Diagram
Lesson 5	Lab 1: Testing a Hypothesis <i>Nature of Matter: How do tribes experiment?</i>	-----	Lab 1: Testing a Hypothesis	Lab 1: Testing a Hypothesis Key
Lesson 6	What is Matter? <i>Nature of Matter: How do tribes define the substances around them and their interactions?</i>	<ul style="list-style-type: none"> Iron, an excerpt from the short story Iron in <i>The Periodic Table</i> by Primo Levi <i>Kirinyaga</i> by Michael Resnik – Chapter 2 (not provided by ESubjects) <i>Matter</i> from http://www.chem4kids.com <i>States of Matter</i> from http://www.chem4kids.com <i>Mixtures</i> from http://www.chem4kids.com 	How to Write Up a Lab Report*	-----

Lessons 7	Pure Substances and Mixtures <i>Nature of Matter: How do tribes define the substances around them and their interactions</i>	<ul style="list-style-type: none"> • Nitrogen, an excerpt from the short story Nitrogen in <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) • First 2 pages of Book 1 of the <i>Odyssey</i> http://www.perseus.tufts.edu/cgi-bin/text?lookup=hom.+od.+1.1 	-----	Matter ID Key
Lesson 8	Lab 2: Identifying Substances <i>Nature of Matter: How do tribes define the substances around them and their interactions?</i>	Cerium in <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects)	Lab 2: How to Separate a Mixture How to Write a Lab Report*	Lab 2 Key
Lesson 9	Matter and Energy <i>Nature of Matter: How do tribes define the substances around them and their interactions?</i>	<ul style="list-style-type: none"> • <i>Kirinyaga</i> by Michael Resnick – Chapter 2 (pp. 33-47) (Not provided by ESubjects) • <i>Cerium</i>, <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) 	Phase Change	Phase Change Key Fig. 2-14
Lesson 10	Chemical and Physical Properties and Changes <i>Nature of Matter: How do tribes define the substances around them and their interactions?</i>	<ul style="list-style-type: none"> • <i>Potassium</i> from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) • <i>Tin</i> from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) • <i>Kirinyaga</i> by Michael Resnick – Chapter 2 (pp. 48-61) (Not provided by ESubjects) 	-----	Physical Chemical Change Key
Lesson 11	Properties of Matter <i>Nature of Matter: How do tribes define the substances around them and their interactions?</i>	<ul style="list-style-type: none"> • <i>Tin</i> from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) • <i>Chromium</i> from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) 	Density Worksheet	Density Key
Lesson 12	Lab 3: Density <i>Nature of Matter: How do tribes define the substances around them and their interactions</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 3 (pp. 62-84) (Not provided by ESubjects)	Lab 3: Density	Lab 3 Key Separating Plastics
Lesson 13	Review for Test	-----	-----	Test 1: Matter Lab Report Revision

Lessons 14	Test 1: Matter	<i>Kirinyaga</i> by Michael Resnick – Chapter 3 (pp. 84-94) (Not provided by ESubjects)	-----	Test 1: Matter Test 1: Matter Key
Lesson 15	Atomic Structure	<ul style="list-style-type: none"> • <i>Growth from Within</i> by Errol Strider • <i>Kirinyaga</i> by Michael Resnick – Chapter 3 (pp. 94-113) (Not provided by ESubjects)	-----	Atomic Structure Key Editing Skills List* Lab Report Grading Procedure* Lab Report Rubric*
Lesson 16	Class Periodic Table	<i>Kirinyaga</i> by Michael Resnick – Chapter 4 (Not provided by ESubjects)	Periodic Table 1 Periodic Table 2	Too Busy for a Friend Class Periodic Table Grading Procedure
Lesson 17	Class Periodic Table Presentations	<i>Kirinyaga</i> by Michael Resnick – Chapter 4 (pp. 114-131) (Not provided by ESubjects)	-----	Too Busy for a Friend Class Periodic Table Grading Procedure
Lesson 18	The Periodic Table	<ul style="list-style-type: none"> • <i>Iron</i> (excerpt 2) – <i>Reading</i> • <i>Carbon</i> from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects)	Periodic Table Worksheet	Periodic Table Key
Lesson 19	Families of Elements	<ul style="list-style-type: none"> • <i>Carbon</i> from <i>The Periodic Table</i> by Primo Levi • <i>Kirinyaga</i> by Michael Resnick – Ch. 4 (pp. 132 – 142) (Not provided by ESubjects)	Family of Elements	Family of Elements Key
Lesson 20	Lab 4: Element Families <i>Nature of Matter: Do Elements in the Same Family Have Similar Properties?</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 4 (pp. 142-150) (Not provided by ESubjects)	Lab 4: Element Families How to Write a Lab Report*	Lab 4 Key
Lesson 21 Computer Lab	Final Project: Research <i>Nature of Matter: How do tribes comprehend items at the atomic and molecular level?</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 5 (Not provided by ESubjects)	Family of Elements Tribe Stat Sheet Periodic Table Worksheet Researching Family of Elements	Lab Report Revision* Conducting Internet Research

Lesson 22 Computer Lab	Final Project: Research Continued <i>Nature of Matter: How do tribes comprehend items at the atomic and molecular level?</i>	<i>Kirinyaga</i> by Michael Resnic – Chapter 6 (pp. 174-181) (Not provided by ESubjects)	-----	-----
Lesson 23	The Mole <i>Nature of Matter: How do tribes comprehend items at the atomic and molecular level?</i>	-----	Mole Worksheet	Mole Key Editing Skills List*
Lessons 24	Review for Test 2 <i>Nature of Matter: How do tribes comprehend items at the atomic and molecular level?</i>	-----	-----	Test 2: Atoms and Periodicity Test 2 Key Lab Report Grading Procedure* Lab Report Rubric*
Lesson 25	Test 2: Atoms and Periodicity <i>Nature of Matter: How do tribes comprehend items at the atomic and molecular level?</i>	<ul style="list-style-type: none"> • <i>Kirinyaga</i> by Michael Resnick – Chapter 6 (pp. 188-195) (Not provided by ESubjects) • <i>Arsenic, The Periodic Table, Primo Levi</i> (Not provided by ESubjects) 	-----	Test 2: Atoms and Periodicity Test 2 Key
Lesson 26	Compounds and Molecules <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	<ul style="list-style-type: none"> • <i>Uranium, The Periodic Table, Primo Levi</i> (Not provided by ESubjects) • <i>Kirinyaga</i> by Michael Resnick – Chapter 7 (Not provided by ESubjects) 	Molecules Worksheet	Molecules Key
Lesson 27	Types of Bonds <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 7 (pp. 196-214) (Not provided by ESubjects)	Types of Bonds	Types of Bonds Key
Lesson 28	Lab 5: Ionic or Molecular? <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	-----	Lab 5: Ionic or Molecular How to Write a Lab Report*	Lab 5 Key
Lesson 29	Naming Compounds <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	-----	Naming Worksheet	Naming Key Lab Report Revision*

Lesson 30	Organic and Biochemical Compounds <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 7 (pp. 214-228) (Not provided by ESubjects)	Simple Organic Worksheet	Simple Organic Key Editing Skills List* Lab Report Grading Procedure* Lab Report Rubric*
Lesson 31	Organic and Biochemical Compounds <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	<i>Kirinyaga</i> by Michael Resnick – Chapter 8 (pp. 229-248) (Not provided by ESubjects)	Biochemical Worksheet	Biochemical Key
Lesson 32 Computer Lab	Review for Test 3 <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	-----	Word Table Requirements: Study Guide 1	Test 3: Compounds Test 3 Key
Lesson 33	Test 3: Compounds <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	<ul style="list-style-type: none"> <i>Kirinyaga</i> by Michael Resnick – (pp. 248-256) (Not provided by ESubjects) <i>Silver, The Periodic Table</i>, Primo Levi (Not provided by ESubjects) 	-----	Test 3: Compounds Test 3 Key
Lesson 34	Chemical Reactions <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	<ul style="list-style-type: none"> <i>Silver, The Periodic Table</i>, Primo Levi (Not provided by ESubjects) <i>Kirinyaga</i> by Michael Resnick – Epilogue (pp. 264-276) (Not provided by ESubjects) 	Chemical Reactions	Chemical Reactions Key
Lesson 35	Types of Reactions <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	<ul style="list-style-type: none"> <i>Kirinyaga</i> by Michael Resnick – Epilogue (pp. 276-287) (Not provided by ESubjects) <i>Sulpher</i> – Reading from <i>The Periodic Table</i> by Primo Levi (Not provided by ESubjects) 	Types of Reactions	Types of Reactions Key
Lesson 36	Lab 6: Single Displacement <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	-----	Lab 6: Single Displacement	Lab 6 Key

Lesson 37 Computer Lab	Balancing Equations <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	-----	Balancing Equations ChemBalance Word Table Requirements: Lab Report*	Balancing Equations Key ChemBalancer Key Lab Report Revision*
Lesson 38	Rate of Reaction <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	-----	Lab 7: Reaction Rates	Editing Skills List* Lab 7 Key
Lessons 39	Reaction Rates <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	-----	Le Chatelier's Principle	Le Chatelier's Principle Key Lab Report Revision*
Lesson 40	Review for Test 4 <i>Nature of Matter: How do tribes attain understanding of chemical reactions?</i>	-----	-----	Test 4: Chemical Equations Test 4 Key Editing Skills List*
Lessons 41	Test 4: Chemical Equations <i>Nature of Matter: How do tribes gain understanding of compounds and molecules?</i>	-----	-----	Test 4: Chemical Equations Test 4 Key Lab Report Rubric* Lab Report Grading Procedure*
Lesson 42 Computer Lab	Final Project: Visual Aids	-----	Final Project Unit 1 Rubric* Word Table Requirements: Final Project*	-----
Lesson 43 Computer Lab	Final Project: Visual Aids, Continued <i>Nature of Matter: How do tribes gain an understanding of families?</i>	-----	Final Project Unit 1 Rubric* Word Table Requirements: Final Project*	Editing Skills List*
Lessons 44	Final Project: Final Preparation <i>Nature of Matter: How do tribes gain an understanding of families?</i>	-----	Final Project Unit 1 Rubric* Word Table Requirements: Final Project*	-----
Lesson 45	Final Project: Presentation <i>Nature of Matter: How do tribes gain an understanding of families?</i>	-----	Final Project Unit 1 Rubric* Word Table Requirements: Final Project*	-----

*These are pages you will use more than once. You will receive only one copy of each to be used with multiple lessons.