### PHYSICAL SCIENCE 35-WEEK SCHEDULE

## WEEK 1 INTRODUCTION

Class 1: Physical Science: Introduction, Part 1

Class 2: Physical Science: Introduction, Part 2

Class 3: Physical Science: Introduction, Part 3

Activity: Data Collection

### WEEK 2 CHEMISTRY

Class 4: Introduction

Class 5: Matter and How It's Made, Introduction

Class 6: Matter and How It's Made, Molecules

Activity: Making a Ball-and-Stick Diagram

# WEEK 3 CHEMISTRY

Class 7: Matter and How It's Made, Introduction to Atoms

Class 8: Matter and How It's Made, Atoms

Class 9: Matter and How It's Made, Atoms and Charge

## WEEK 4 CHEMISTRY

Class 10: Matter and How It's Made, Atoms and Why They Don't Fly Apart

Class 11: Matter and How It's Made, Building Matter From the Ground Up

Class 12: Matter and How It's Made, Elemental and Compound Matter

### WEEK 5 CHEMISTRY

Class 13: Matter and How It's Made, The Periodic Table of Elements, Part 1

Activity: Periodic Table of Elements, Build a Box

Class 14: Matter and How It's Made, The Periodic Table of Elements, Part 2

Activity: Periodic Table of Elements, Build a Box, Part 2

Class 15: Matter and How It's Made, The Periodic Table of Elements, Part 3

### WEEK 6 CHEMISTRY

Class 16: Matter and How It's Made, The Periodic Table of Elements, Part 4

Activity: Periodic Table of Elements, Build a Box, Part 3

Class 17: Matter and How It's Made, The Periodic Table of Elements, Part 5

Class 18: Matter and How It's Made, The Periodic Table of Elements, Part 6

Activity: Periodic Table of Elements, Build a Box, Part 4

## WEEK 7 CHEMISTRY

Class 19: Matter and How It's Made, The Periodic Table of Elements, Part 7

Activity: Periodic Table of Elements, Build a Box, Part 5

Class 20: Matter and How It's Made, The Periodic Table of Elements, Part 8

Activity: Periodic Table of Elements, Build a Box, Part 6

Class 21: Matter and How It's Made, Review

## WEEK 8 CHEMISTRY

Class 22: Matter and How It's Made, Bonds, Part 1

Class 23: Matter and How It's Made, Bonds, Part 2

Class 24: Matter and How It's Made, Bonds, Part 3

## WEEK 9 CHEMISTRY

Class 25: Matter and How It's Made, The Chemical Formula

Class 26: States of Matter

Activity: Oobleck

Class 27: Physical Changes to Matter, Part 1

#### WEEK 10 CHEMISTRY

Class 28: Physical Changes to Matter, Part 2

Class 29: Physical Changes to Matter, Part 3

Class 30: Physical Changes to Matter, Part 4

WEEK 11 CHEMISTRY	WEEK 15 PHYSICS
Class 31: Chemical Changes in Matter, Part 1	Class 43: Gravity, Part 2
Class 32: Chemical Changes in Matter, Part 2	Class 44: Gravity, Part 3
Class 33: Chemical Changes in Matter, Part 3	Class 45: Gravity, Part 4
WEEK 12 CHEMISTRY	WEEK 16 PHYSICS
Class 34: Chemical Changes in Matter, Signs	Class 46: Vectors, Part 1
of a Chemical Reaction  Activity: Elephant Toothpaste  Class 35: Review, Part 1	Class 47: Vectors, Part 2  Activity: Vectors in Sports  Class 48: Vectors, Part 3
Class 36: Review, Part 2	
WEEK 13 PHYSICS	WEEK 17 PHYSICS
Class 37: Introduction	Class 49: Forces
Class 38: History, Part 1	Class 50: Newton's 3 <sup>rd</sup> Law of Motion, Part 1
Class 39: History, Part 2	Class 51: Newton's 3 <sup>rd</sup> Law of Motion, Part 2
WEEK 14 PHYSICS	WEEK 18 PHYSICS
Class 40: Introduction to Forces, Part 1	Class 52: The Normal Force, Part 1
Class 41: Introduction to Forces, Part 2	Class 53: The Normal Force, Part 2
Class 41: Introduction to Forces, Part 2  Activity: Push, Pull, Gravity	Class 53: The Normal Force, Part 2 Class 54: Tension Force, Part 1

WEEK 19 PHYSICS	WEEK 23 PHYSICS
Class 55: Tension Force, Part 2	Class 67: Electrostatic Force, Part 1
Class 56: Friction Force, Part 1	Class 68: Electrostatic Force, Part 2
Class 57: Friction Force, Part 2	Class 69: Charge and Charge Transfer, Part 1
WEEK 20 PHYSICS	WEEK 24 PHYSICS
Class 58: Friction Force, Part 3	Class 70: Charge and Charge Transfer, Part 2
Class 59: Friction Force, Part 4	Class 71: Charge and Charge Transfer, Part 3
Class 60: Friction Force, Part 5	Class 72: The Flow of Electrons and Electricity
Activity: Friction and Ice	Activity: Light Bulb
WEEK 21 PHYSICS	WEEK 25 PHYSICS
Class 61: Buoyancy Force, Part 1	Class 73: Magnetism, Part 1
Class 62: Buoyancy Force, Part 2	Class 74: Magnetism, Part 2
Class 63: Buoyancy Force, Part 3	Class 75: Magnetism at the Atomic Level
Activity: Buoyancy	Activity: Magnets
WEEK 22 PHYSICS	WEEK 26 PHYSICS
Class 64: Lift Force, Part 1	Class 76: Energy, Introduction
Class 65: Lift Force, Part 2	Class 77: Kinetic and Potential Energy, Part 1
Activity: Paper Airplanes	Class 78: Kinetic and Potential Energy, Part 2
Class 66: Drag and Thrust Forces	Activity: Identifying Energy

### WEEK 27 PHYSICS AND ASTRONOMY

Class 79: Review, Part 1

Class 80: Review, Part 2

Class 81: Astronomy: Introduction

#### WEEK 30 ASTRONOMY

Class 88: The Solar System, Scale and

Distances, Part 1

Class 89: The Solar System, Scale and

Distances, Part 2

Class 90: The Solar System, The Sun, Part 1

Activity: Periodic Table of the Solar

System, Part 1

#### WEEK 28 ASTRONOMY

Class 82: History

Class 83: God's Creation

Class 84: Solar System, Introduction

#### WEEK 31 ASTRONOMY

Class 91: The Solar System, The Sun, Part 2

Class 92: The Solar System, Planets, Part 1

Activity: Periodic Table of the Solar

System, Part 2

Class 93: The Solar System, Planets, Part 2

Activity: Periodic Table of the Solar

System, Part 3

#### WEEK 29 ASTRONOMY

Class 85: Introduction, Telescopes, Part 1

Class 86: Introduction, Telescopes, Part 2

Activity: Telescope Practicum

Class 87: The Solar System, Overview

#### WEEK 32 ASTRONOMY

Class 94: The Solar System, Dwarf Planets,

Comets and Asteroids

Activity: Periodic Table of the Solar

System, Part 4

Class 95: Stars, Part 1

Class 96: Stars, Part 2

#### WEEK 33 ASTRONOMY

Class 97: Stars, Part 3

Class 98: Stars, Part 4

Activity: Star Projector

Class 99: Exoplanets, Binary Stars, Star

Clusters, Brown Dwarfs

#### WEEK 34 ASTRONOMY

Class 100: Supernovas, Nebulas, Neutron

Stars and Black Holes

Class 101: Galaxies and Nebulas

Activity: Galaxy Shapes

Class 102: Constellations

Activity: Constellation Connect the

Dots

#### WEEK 35 ASTRONOMY

Class 103: Science and Origins, Part 1

Class 104: Science and Origins, Part 2

Class 105: Science and Origins, Part 3