



LJC CREATE™
Learning for life

Living with STEM Digital Library

ljcreate.com

Living with STEM

Living with STEM Digital Library: Courses

SCIENCE

Science Practice	3
Earth Science	3
Weather Systems	4
Space Science	5
Force, Motion and Energy	5
Matter	6
Organisms and Environment	6
Technology and Engineering	7

ENGLISH

English Language	8
------------------	---

MATH

Mathematics	10
-------------	----

Science

LIB 1: 01 Science Practice

Science and Society

- Starting Science
- Science and Scientists
- Science and the Weather
- Ideas about the Earth and Sun
- History of Earth Science
- The Nature of Science
- Discoveries in Optics

Using Equipment

- Reading Graduated Cylinders
- Measuring Volume

Scientific Method

- Doing Science
- Planning an Investigation
- Investigating Habitats
- Evaluating Scientific Data
- Conducting a Science Investigation
- Investigating Light
- Science Communication
- Evaluating Scientific Explanations
- Experimental Investigations
- Analyze and Interpret Information
- Communicate Valid Conclusions
- Analyze, Evaluate, and Critique Scientific Explanations

Data and its Uses

- Measuring and Collecting Data
- Exploring Scientific Data
- Collecting and Recording Data
- Analyzing Data
- Collect and Record Data
- Organize Information Using Maps

Safety

- Staying Safe
- Safety and Safety Equipment
- Working Safely
- Safety Practice
- Laboratory Safety
- Field Safety

LIB 1: 02 Earth Science

Earth Resources

- Using Water, Soil, and Rocks
- Natural Water Sources
- Freshwater and Saltwater
- Natural Resources
- Natural Materials
- Earth Systems

Water

- Using Water
- Water Droplets
- Water in Motion
- Water Cycle

Soil

- Using Soil
- Origin of Soil
- Analyzing Soil
- Soil and Water
- Soil and Plants

Rocks

- Looking at Rocks
- Using Rocks
- Investigating Rocks
- Patterns in the Rocks
- Rock Formation

Fossils

- Fossil Formation
- Fossil Fuels

Weathering

- Changing Landscapes
- Modeling Landscapes
- Landforms
- Erosion
- Deposition
- Natural Forces

Natural Hazards

- Volcanoes and Earthquakes
- Reducing the Impact of Natural Hazards

LIB 1: 03 Weather Systems

Weather and Climate

- Weather Watching
- Recording Weather
- Wind
- Measuring Weather
- Weather and the Water Cycle
- Effects of Sunlight
- Weather Data
- Weather Patterns
- Weather Maps
- Climate
- Reducing Weather Hazards

Seasons

- Patterns of the Seasons
- Weather and Seasons

Understanding the Earth

- Air All Around

LIB 1: 04 Space Science

Observing Space

- Looking at the Sky
- The Sun in the Sky
- The Moon
- The Sun and Stars
- Planets
- Patterns of Stars

Earth and Space

- Pattern of Day and Night
- Day and Night
- Modeling Day and Night
- The Moon and Tides
- How the Sun Affects the Earth
- Sun, Earth, and Moon

LIB 1: 05 Force, Motion, and Energy

Forces

- Making Things Move
- Forces and Motion
- Forces at a Distance
- Gravity
- Effects of Force
- Effect of Force on an Object

Movement and Position

- Describing Position
- Describing Movement
- Near or Far
- Recording Movement
- Tracking Movement
- Comparing Movement

Electricity and Magnetism

- Magnets and Objects
- Magnets
- Using Magnets
- Electric Circuits
- Electromagnets
- Conductors and Insulators
- Electricity in Circuits

Energy

- Sensing Energy
- Sound and Vibration
- Seeing Light
- Light and Objects
- Energy Everywhere
- Objects and Energy
- Exploring Forms of Energy
- Forms of Energy
- Speed, Energy, and Collisions
- Waves
- Heat Transfer
- Uses of Energy
- Light

LIB 1: 06 Matter

States of Matter

- Heating
- Cooling
- Heating and Cooling Water
- Solid or Liquid
- Heating and Cooling
- Solids, Liquids, and Gases
- Heating and Cooling Changes
- Changing Matter
- Volume and State
- Predicting Heating and Cooling Changes
- Classifying Matter
- Physical Properties of Water

Measurement

- Temperature
- Measuring Temperature
- Measuring Size
- Measuring Mass

Material Properties

- Properties of Objects
- Sorting Objects
- Shapes in Nature
- Heavy or Light
- Hot or Cold
- Rough or Smooth
- Stiff or Flexible
- Changing Materials
- Mass
- Floating and Sinking
- Analyzing Floating and Sinking
- Magnetic Forces
- Magnetism

Mixtures and Solutions

- Introducing Mixtures
- Mixtures
- Physical Properties of Mixtures and Solutions

LIB 1: 07 Organisms and Environment

Needs of Living Things

- It is Alive
- Living or Non-Living
- Living Together
- Parental Care
- Shelter
- Responding to Change
- Structure and Function of Living Things

Humans and Animals

- Parts of an Animal
- Animal Structures
- Young Animals
- Human Body Systems
- Senses
- Investigating Heart Rate

Plants

- Basic Needs of Plants
- Parts of a Plant
- Young Plants
- Life of a Plant
- Plant Structures
- Plant Reproduction
- Modeling Pollination

Classification

- Sorting Plants
- Sorting Animals
- Animals and Groups

Habitats and Ecosystems

- Severe Weather and Forecasts
- Diversity in Nature
- Exploring Environments
- Ecosystems
- Environmental Change
- Energy from the Sun
- Effect of Changes in Ecosystems

Cycles in Nature

- Animal Life Cycles
- Insect Life Cycles
- Life Cycles
- Comparing Insect Life Cycles
- Comparing Plant Life Cycles
- Life Cycles of Insects
- Carbon Dioxide – Oxygen Cycle

Feeding Relationships

- Food Chains
- Depending on Each Other
- Food Chains and Energy
- Producers, Consumers, and Decomposers
- Food Webs and Energy Flow

Evolution and Inheritance

- Variation in Living Things
- How Animals have Adapted
- How Plants have Adapted
- Adaptation
- Traits
- Adapted to Survive
- Inherited or Learned
- Evidence from Fossils
- Inheritance

LIB 1: 08 Technology and Engineering

Engineering and Design

- Introduction to Engineering
- Ideas from Nature in Design
- Building Blocks
- Bridge Building
- Alternative Energy

Materials and the Environment

- Using and Conserving Natural Resources
- Man-Made Resources
- Use of Natural Resources
- Conservation of Resources
- Renewable Resources
- Non-Renewable Resources
- Conservation
- Sustainability

Communication

- Communicating with Light and Sound
- Sending Information
- Checking Information about Products
- Maps and Patterns
- Labels and Advertisements
- Promotional Materials

LIB 1: 09 English Language

Language

- Learning to Use Uppercase and Lowercase Letters
- Using Common Nouns and Verbs
- Understanding and Using Plural Nouns
- Learning to Use Question Words
- Prepositions
- Learning How to Use Sentences
- Learning to Use Capital Letters
- Identifying End Punctuation
- Learning Phonemes
- Spelling Words
- Understanding the Meanings of Words
- Understanding Words Using Affixes
- Learning About Categories
- Understanding Opposites
- Words and Their Uses

Verbs and Their Meanings

- Writing Uppercase and Lowercase Letters
- Using Different Types of Nouns
- Using Singular and Plural Nouns
- Different Types of Pronouns
- Using Verbs to Show the Past, Present, and Future
- Using Adjectives and Adverbs
- Learning to Use Conjunctions
- Learning to Use Determiners
- Using Prepositions
- Writing Sentences
- Using End Punctuation
- Using Commas
- Using Apostrophes
- Spelling Patterns
- Understanding Spelling
- Finding the Meaning of a Word
- Understanding Affixes, Prefixes, and Suffixes
- Understanding Root Words
- Understanding Compound Words
- Using Glossaries and Dictionaries
- Sorting Words into Categories
- Categories and Words
- Connecting Words and Their Use
- Learning about Levels of Meaning
- Learning Language

Reading

- Answering and Asking Questions About a Text
- Explaining a Text
- Thinking About Connections
- Learning About Unknown Words
- Understanding the Structure of a Book
- Thinking About Authors and Illustrators
- Connecting Pictures and Ideas
- Finding Points and Reasons in a Text
- Things That Are the Same and Different
- Questions About a Text
- Summing Up a Text
- Making Connections
- Understanding Words and Their Meanings
- Understanding Where to Find Information
- Understanding the Purpose of a Text
- Understanding Images in Texts
- Finding Reasons in a Text
- Comparing Texts
- Finding and Using Evidence From a Text
- Summarizing a Text
- Understanding How Things are Connected in a Text
- Understanding the Vocabulary of a Text
- Understanding the Structure of a Text
- Perspectives from Different Texts
- Interpreting and Using Information
- Using Evidence and Reasoning to Support Points
- Comparing and Using More Than One Text

Writing

- Forming an Opinion
- Forming and Expressing an Opinion
- Expressing an Opinion
- Making an Informative Text
- Informing a Reader About a Topic
- Writing Instructions
- Creating a Storyboard
- Writing a Postcard
- Writing About an Event
- Expressing an Opinion About an Event
- Having an Opinion When Comparing Topics
- Writing an Informative Fact sheet
- Writing a Speech
- Writing a Recipe
- Storyboarding an Event
- Describing Your Day
- Writing a Description
- Creating a Perspective
- Thinking About Arguments
- Persuading an Audience
- Writing an Informative Text
- Writing an Instruction Manual
- Describing the Events of a Day
- Writing a Diary Entry
- Writing Poetry
- Storyboarding a Narrative

Speaking and Listening

- Discussing Points as a Group
- Presenting an Idea
- Controlling Speech
- Making Decisions as a Group
- Talking About an Opinion
- Group Discussion
- Working as a Group
- Presenting What You Know
- Thinking About Speaking
- Discussing Ideas as a Group
- Summarizing and Prioritizing Knowledge about a Topic
- Speaking to an Audience
- Working Together
- Persuading Your Audience as a Group
- Debating Ideas

LIB 1: 10 Mathematics

Number and Operations: Whole Numbers

- Taking Apart Big Numbers
- Place Value
- Number Lines
- Building Number Lines
- Comparing Whole Numbers

Number and Operations: Fractions

- Fractions on a Number Line
- Representing Fractions
- Unit Fractions
- Making Unit Fractions
- Taking Fractions Apart
- Parts of a Group
- Introducing Equivalent Fractions
- Making Equivalent Fractions
- Equivalent or Not?
- Comparing Fractions

Number and Operations: Calculation

- Odd and Even
- Rules of Addition
- Arrays and Repeated Addition
- Rules of Multiplication
- Multiplying 2 Digit Numbers
- Multiplication Facts
- Representing Multiplication Facts
- Finding the Missing Number
- Relationship Triangles
- Using Relationship Triangles
- Solving Multiplication and Division Problems
- Sharing into Equal Groups
- The Value of Money
- Rounding Money
- Rounding Numbers
- Rounding Measurements
- Estimating Using Rounding

Algebraic Reasoning

- Introducing Equations
- Representing Math Problems
- Multiplication Expressions
- Function Tables

Geometry and Measurement: Problem Solving

- Perimeter of a Polygon
- Liquid Volume
- Determining Liquid Volume
- Weighing Objects
- Volume or Weight?
- Time Calculations

Geometry and Measurement: Shapes

- Faces, Edges, and Vertices
- Quadrilaterals
- Length and Area
- Areas of Composite Shapes
- Parts of Equal Areas

Tables and Charts

- Reading Tables
- Making Tables
- Reading Bar Graphs
- Making Bar Graphs
- Reading Line Graphs
- Graphic Organizers

Data Analysis

- Measuring, Units, and Rounding
- Summarizing Data
- Bar Graphs and Pictographs

Personal Financial Literacy

- Budgets
- Planned and Unplanned Spending
- Supply and Demand
- Working to a Budget
- Labor and Income
- Savings Plan
- Getting Credit



For more information on our range of learning resources, please contact:

LJ Create

6900 Tavistock Lakes Blvd,
Suite 400
Orlando, FL 32827

T: 1-800-237-3482
E: info@ljcreate.com

ljcreate.com

LJ Create recognizes all product names used in this document as trademarks or registered trademarks of their respective holders. We reserve the right to change the contents of any module or program. For the latest information on any of our products, please visit our website.