

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: September

Science - Week 1 – Chapter 1 – Introduction

Enduring Understandings:

I can identify the steps in the scientific method

I can know describe scientists form and test a hypothesis

Essential Questions:

How can we look for animals in their natural habitat? What kinds of animals would you see in a forest? What do they need to survive?

How do you know answers to these questions? Who discovered answers to them? How do scientists find answers to these questions?

Activities:

Discuss the main idea and outline the scientific method in a diagram

Science - Week 2 – Chapter 1 – Lesson 1

Enduring Understandings:

I can define matter

I can describe matter

I can describe properties of matter

I can know the difference between mass, weight, and volume

Essential Questions:

How can we define and describe matter?

What are the different types of matter?

How can we describe different types of matter?

Why is it important to describe properties of matter?

Activities:

Draw a ‘what we know’ vs. what we want to know’ vs. ‘what we learned chart to observe matter

Write the chapter vocabulary words with their definitions and examples

Draw a diagram with the passage's main idea and three supporting details

In a chart, write the properties of matter with a one word or sentence description and example

Science - Week 3 – Chapter 1 – Lesson 2

Enduring Understandings:

I can identify what matter is made up of

I can identify how matter is measured

I can describe how distance, volume, and temperature are measured

Essential Questions:

What is matter made of?

How is matter measured?

How can you measure distance? How can you measure volume? How could you measure temperature? How is mass measured?

Activities:

Complete chart on the lesson's vocabulary words with their definitions and examples

Draw a diagram with the passage's main idea and three supporting details

Science - Week 4 – Chapter 1 – Review and Assessment

Review chapter 1, lessons 1 and 2: Multiple choice and short response questions

Test on chapter 1, lessons 1 and 2: Multiple choice and short response questions

Resources

Science Textbook

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: October

Science - Week 1 – Chapter 1 – Lesson 3

Enduring Understandings:

I can define the three common states of matter: solid, liquid, and gas

I can explain the properties of solid, liquid, and gas

Essential Questions:

What are the three state of matter?

How are the three states of matter different?

How can we observe, measure, and identify different types of matter?

Why would a person weigh less on the Moon than he or she does on Earth?

Explain why some objects float in water while others sink.

How can we measure mass and volume of matter?

Activities:

Create a diagram on the main idea and three details from the lesson.

Complete a chart on states of matter, their properties, and examples.

Science - Week 2 – Chapter 2 – Introduction

Enduring Understandings:

I can know what work is

I can know how energy changes from one object to another

Essential Questions:

What is work?

How can we describe energy?

Why is work important?

Activities:

Complete chart on What we know vs. What we want to know vs. What we learned

Science - Week 3 – Chapter 2 – Lesson 1

Enduring Understandings:

I can explain what work is

I can explain what energy is

I can discuss the forms of energy and how energy changes from one form to another

Essential Questions:

What are examples of work? Why do you think these actions were work?

What type of energy is being used when objects move?

How can we describe kinetic and potential energy? What is the difference between the two?

Activities:

Complete chart on the lesson's vocabulary words with their definitions and examples

Draw a diagram with the passage's main idea and three supporting details

Science - Week 4 – Review and Assessment

Review chapter 1, lessons 1-3

Test on chapter 1, lessons 1-3

Resources

Science Textbook

YouTube videos

Anchor charts/diagrams/pictures

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: November

Science - Week 1 – Chapter 2 – Lesson 2 - Heat

Enduring Understandings:

I can describe how heat moves

I can describe identify sources of heat

I can describe how heat is measured

Essential Questions:

What is heat?

How does heat affect matter?

How is heat measured?

How is heat transferred?

How does conduction occur?

How is convection different from conduction?

Activities:

Main idea, details chart on how matter changes with heat

Split students into groups: Write the definitions for the vocabulary words: conduction, convection, radiation, conductor, insulator.

Complete a comparison chart on conduction, convection, and radiation

Science - Week 2 – Chapter 2 – Lessons 1 and 2 Review

Enduring Understandings:

I can describe how heat moves

I can describe identify sources of heat

I can describe how heat is measured

I can explain what work and energy are

I can discuss the forms of energy and how energy changes from one form to another

Essential Questions:

What are work, energy, and heat?

What are convection, conduction, and radiation?

What are work and energy?

What are the different types of work and energy?

How can we describe heat?

Activities:

Answer end-of the lesson quiz questions

Science - Week 3 – Chapter 2 – Lessons 1 and 2 Test

Science - Week 3 and 4 – Chapter 2 – Lesson 3 - Sound

Enduring Understandings:

I can describe what sound is

I can describe how vibrations produce sound

I can compare the pitch and volume of a sound

Essential Questions:

How is sound produced?
How is sound produced?
How does sound travel?
How are sounds different?
What is the difference between pitch and volume?

Activities:

Main idea chart on how sound travels, volume, and pitch.

Science - Week 3 and 4 – Chapter 2 – Lesson 4 - Light**Enduring Understandings:**

I can describe what light is
I can describe how light travels
I can understand what happens when light hits different objects
I will know why we see colors

Essential Questions:

What are some different sources of light?
How does light travel?
How can we describe reflected light?
What type of material lets light pass through?
Why and how can you see colors?
How does light pass through opaque, translucent, and transparent objects?

Activities:

Main idea chart: Main idea (Light travels...; Light is made of...,), what I learned, sketches of examples
Main idea chart: What happens when light hits different objects?

Resources

Science Textbook
YouTube videos
Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili
Grade: 3
Subject: Science
Month: December

Science - Week 1 – Chapter 2 – Lesson 5 - Electricity

Enduring Understandings:

I will know what electricity is

I can describe how electricity affects us

I can understand what happens when electrical charge is transferred from one object to another

Essential Questions:

What is electrical charge?

How does electricity affect us?

How is electricity transferred from one object to another?

What kind of energy is used to turn on a light bulb or TV?

What items in your home use electricity?

What are effects of electrical charge?

How can electricity be used to produce different forms of energy?

What is an electrical current?

Activities:

Create a chart on cause and effect scenarios with electrical charge

Video: What is electrical energy? – Write two facts you learned.

Video: The Power of Circuits – Write two facts you learned.

Create a sequence chart on electrical charge scenarios

Science - Week 2 – Chapter 2 – Lessons 3-5 Review and Test

Enduring Understandings:

I can describe how vibrations produce sounds; I can compare the pitch and volume of a sound

I can explore how light travels; I can describe how colors are seen

I can describe electrical charge; I can identify the parts of a circuit

Essential Questions:

What is vibration?

How is sound produced?

What is the difference between pitch and volume?

How does light pass through opaque, translucent, and transparent objects?

Activities:

Answer questions end-of the lesson quizzes

Science - Week 3 – Chapter 3 – Lesson 1 – Position and Motion

Enduring Understandings:

I can identify and describe different positions

I can understand and describe what motion is

I can find the difference between position and motion

I can define speed using distance and time

Essential Questions:

What are position and motion?
How can you describe position?
What is position?
How does motion occur?
How do you describe position?
How do we measure speed?
How do we know if an object moves fast or slow?

Activities:

Label the positions
Video: Motion – Give another example for the different types of motion.
Match the motions
Video: What is speed? – Write three facts you learned.

Science - Week 4 – Chapter 3 – Lesson 2 - Forces**Enduring Understandings:**

I will know types of forces
I understand and describe what magnetism and gravity are
I can identify and describe friction

Essential Questions:

What is force?
What are push and pull?
What is force?
How can we move objects?
What are magnetism and friction?
What are magnetism, gravity, and friction?
Does a magnet exert force on all objects?
What type of objects does a magnet exert a force on?
What effect does gravity have on objects?
How does friction help you walk? What does friction do to objects?

Activities:

Video: What is force? – Write one fact you learned.
Label pictures with push or pull
Video: Types of forces

Resources

Science Textbook
YouTube videos
Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: January

Science - Week 1 – Chapter 3 – Lesson 1 and 2 - Review

Enduring Understandings:

I will know types of forces

I understand and describe what magnetism and gravity are

I can identify and describe friction

Essential Questions:

What are types of forces?

What are magnetism, gravity, and friction?

Does a magnet exert force on all objects?

What type of objects does a magnet exert a force on?

Does gravity exert force on all objects?

What effect does gravity have on objects?

How does friction help you walk? What does friction do to objects?

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Science - Week 2 – Chapter 3 – Lessons 1-2 Test

Science - Week 2 – Chapter 3 – Lessons 3 – Part 1 – Simple Machines

Science - Week 3 – Chapter 3 – Lessons 3 – Part 2 – Compound Machines

Enduring Understandings:

I will know what a simple machine is

I will identify different types of simple machines

I will explain why we need simple machines and how they are helpful

I will know what a simple machine is

I will identify different types of simple machines

I will explain why we need simple machines and how they are helpful

I will know what a compound machine is and give examples.

Essential Questions:

What are simple machines?

What are machines?

What are levers?

How do machines help solve people's problems?

How do machines reduce force?

What simple machines do we use every day?

How can you move a heavy rock?

What are compound machines?

Activities:

YouTube video: Simple machines.

YouTube video: Compound machines.

Label the machines.

Problem-solve: Identify which machine can solve the problem in the given scenarios.

End-of-the lesson quiz questions.

Science - Week 3 – Chapter 3 – Lessons 1-3 Review and test

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Resources

Science Textbook

End-of-the Chapter quizzes

McGraw Hill Website lesson videos

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: February

Science - Week 1 – Chapter 4 – Lesson 1

Enduring Understandings:

I will identify what plants need

I will identify what animals need

I will understand food chains and food webs

Essential Questions:

What do living and nonliving things need to survive?

What do plants need to survive?

What do animals need to survive?

Which word means 'changing'?

Which need is missing in the web?

Activities:

Video: Plants Need Energy (Lesson video on McGraw Hill)

Video: Animals Using Energy (Lesson video on McGraw Hill)

Create a chart on plant and animal needs.

Identify the missing animal in the food chain.

Science - Week 2 – Chapter 4 – Lesson 2 – Part 2

Enduring Understandings:

I will know plant structures

I will know plant structure functions

I will understand why plants are important in an ecosystem

Essential Questions:

What are plant structures?

What are plant structure functions?

Why are these structures and functions important?

Why are plants important in an ecosystem?

Activities:

Video: Plant Structures and Functions

Label the diagram. Identify structure functions.

Science - Week 4 – Chapter 4 – Lesson 2 – Part 2

Science - Week 4 – Chapter 4 – Lessons 1 & 2 – Review

Enduring Understandings:

I will know what photosynthesis is

I will know how and why leaves are important

I will see how the photosynthesis process works

Essential Questions:

How do leaves help plants survive?

How could air change if there were fewer plants?

What are ways to group plants?

What is photosynthesis?

How is photosynthesis helpful to plants, animals, and humans?

What do living things need to grow? How are plant structures and functions?

Activities:

Video: Photosynthesis

Label the photosynthesis diagram.

Answer questions from end-of the chapter quizzes.

Science - Week 3 – Chapter 3 – Lessons 1-3 Review and test

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Resources

Science Textbook

End-of-the Chapter quizzes

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: March

Science - Week 1 – Chapter 4 – Lessons 1 & 2 Test

Science - Week 1 – Chapter 4 – Lesson 3 – Part 1 (Continued Part 2 in Week 2)

Enduring Understandings:

I can identify animal parts as structures

I will identify functions of animal parts

I will identify how animals get what they need

I will identify and explain how animals stay safe

Essential Questions:

How can animals stay safe?

Think of two animals. How do they stay safe?

What do plants and animals both need?

What is different about their needs?

What are lungs?

What is one thing all animals have in common?

What is an example of a structure that helps keep an animal safe?

Activities:

Video: How do animals protect themselves?

Complete the Venn diagram: How are an animal's needs like a plant's needs? How are they different?

Science - Week 2 – Chapter 4 – Lesson 4 – Classifying Animals

Enduring Understandings:

I will describe vertebrate animals' features

I will describe invertebrate animals' features

I will identify examples of invertebrates and their features

Essential Questions:

How do you think we can put animals into groups that are alike?

How can we classify animals?

What are invertebrates and vertebrates?

How are vertebrates and invertebrates different?

How do bones help vertebrates?

How can you tell if an animal is an invertebrate?

What kind of vertebrate is a frog?

Do you think turtles breathe with lungs or gills? Why?

What do all reptiles have? What do all amphibians, fish, and birds have?

What is one invertebrate that lives in water?

What is one invertebrate that lives on land?

Is an octopus an invertebrate? How can you tell?

Activities:

Video: Vertebrates

Video: Invertebrates

Identify/color vertebrates vs. invertebrates.

Science - Week 3 – Chapter 4 – Lesson 3 & 4 – Review & Test

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Science - Week 4 – Ecosystems

Enduring Understandings:

I will identify living and non-living things

I will understand what an ecosystem is

I will know what is in an ecosystem

Essential Questions:

What is in an ecosystem?

What is in an ecosystem?

How do living and non-living things interact in an ecosystem? Give examples.

What are different types of ecosystems?

Activities:

Video: Ecosystems (Dr. Binocs)

Video: Ecosystem for Kids

Resources

Science Textbook

End-of-the Chapter quizzes

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: April

Science - Week 1 – Chapter 5 – Lesson 1 – Plant Life Cycles

Enduring Understandings:

I will see how seeds grow into plants
I will understand how plants reproduce
I will know how plants make seeds
I will know what a plant life cycle is
I will know the life cycle of a cherry tree and pine tree

Essential Questions:

How do seeds grow into plants?
How do plants grow?
What does a seed need?
What is germination?
What are the steps for germination?
Why is the seed coat important?
What are the components of a seed?
How does a plant grow its roots and stem?
What is a plant's life cycle?
How do plants get nutrients?
How do seedlings grow? What do they need?
How does pollination happen?

Activities:

Video: Germination
Draw how seeds grow into plants. Label your drawing. Write the steps.

Science - Week 2 – Chapter 5 – Lesson 2 – Animal Life Cycles

Science - Week 2 – Chapter 5 – Lessons 1 & 2 – Review

Enduring Understandings:

I will know what metamorphosis is
I will describe different animals' life cycles
I will reflect on similarities and differences between life cycles

Essential Questions:

What is metamorphosis?
How do reptiles, fish, birds, and mammals change as they grow?
What happens after a fish lays eggs?
How is a reptile life cycle similar to a frog's? How does it differ?
What does a cheetah do first: reproduce or learn to hunt?
How might growing bigger help an animal survive?
What is another name for a young frog?
What is hard case in which a pupa lives called? How is this feature helpful?
How are birds, fish, and reptiles alike?

Activities:

Draw the life cycle of a butterfly.
Videos: Life cycles of a frog, ladybug, sea turtle, and trout.

Complete the missing boxes in the frog's life cycle diagram.
Draw and label the life cycles of a sea turtle, trout, and cheetah

Science - Week 4 – Chapter 5 – Lessons 1 & 2 – Test

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Resources

Science Textbook
End-of-the Chapter quizzes
YouTube videos
Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: May

Science - Week 1 – Chapter 6 – Lesson 1

Enduring Understandings:

I will know what a producer does

I will know what a consumer is

I will understand what a food chain is

Essential Questions:

What is a food chain?

What do producers, consumers, and decomposers do?

Why do we need producers, consumers, and decomposers?

Activities:

Video: What is a Food Chain? (Dr. Binocs)

Write two examples for each: producer, consumer, decomposer

Color the producer/consumer/decomposer in the mentioned colors.

Kahoot quiz.

Science - Week 1 – Chapter 6 – Lesson 1 – Review and Test

Science - Week 2 – Chapter 6 – Lesson 2

Enduring Understandings:

I will know what an adaptation is

I will learn examples of adaptations

I will explain how certain animal adaptations are helpful

Essential Questions:

What is an adaptation?

What helps these animals to survive?

How do adaptations help animals survive?

Activities:

Video: Adaptations

Complete the chart on how each adaptation helps animals.

Science - Week 3 – Chapter 6 – Lesson 2 – Review and Test

Activities:

Answer questions based on end-of-the lesson quizzes, workbook, and textbook.

Resources

Science Textbook

End-of-the Chapter quizzes

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson

Teacher: Khalida Jalili

Grade: 3

Subject: Science

Month: June

Science - Week 1 – Chapter 6 – Lesson 3

Enduring Understandings:

I will know what pollution is

I will understand types of pollution

I will know what recycling, reducing, and reusing are

Essential Questions:

How do people change their environment?

How do trees and plants change the environment?

How do beavers, wood peckers, elephants, and ants change their environment?

What are the types of pollution?

What causes pollution?

How can we reduce pollution?

How can we reduce, reuse, and recycle?

Activities:

Video: How animals and plants change their environment.

Write down causes and effects in a chart on how animals or plants change the environment.

Video: Pollution

Video: 10 ways to take care of the environment

Science - Week 2 – Chapter 6 – Lesson 3 – Review and Test

Activities:

Answer questions based on end-of the lesson quizzes, workbook, and textbook.

Science - Week 3 – Chapter 6 – Lesson 4

Enduring Understandings:

I will know about environmental changes

I will know how environmental changes affect living things

Essential Questions:

What are some environmental changes?

How can changes in an environment affect living things?

How do organisms respond to change?

Activities:

List the causes and effects of environmental changes.

Create a cause and effect chart on how changes in an environment affect animals, plants, and other parts of the community.

Resources

Science Textbook

End-of-the Chapter quizzes

YouTube videos

Anchor charts/diagrams/pictures

Timeframe

Two periods on one lesson