# Bluff Dale ISD

# Second Grade Science with Mrs. McNicholas

Syllabus with Scope & Sequence 2025-2026

Instructor: Meghan McNicholas Email: mcnicholas.meghan@bdisd.net Conference Period: 8:49-9:49

Welcome to Second Grade Science! This year, your child will explore the world like a young scientist—asking questions, making observations, and discovering how things work. Our science instruction is guided by the **Texas Essential Knowledge and Skills (TEKS)** and includes hands-on investigations, nature studies, simple experiments, and lots of wonder-filled learning.

Students will build scientific thinking skills while learning about the physical, life, and Earth sciences in ways that are meaningful and fun.

**Key Areas of Focus:** 

## **Physical Science**

- Properties of matter (texture, size, flexibility, temperature)
- Changes in materials (melting, freezing, mixing)
- Forms of energy (light, sound, and heat)
- Force and motion (pushes, pulls, magnets)

#### Life Science

- Basic needs and life cycles of plants and animals
- How organisms depend on each other
- Comparing different habitats and ecosystems

#### **Earth and Space**

- Weather patterns and seasons
- Water cycle and precipitation
- Earth materials: rocks, soil, and natural resources

Conservation and ways to care for our environment

## What Parents Can Do to Support Learning:

- Explore outside: talk about animals, clouds, plants, and weather
- Watch science documentaries or nature shows together
- Ask questions like "What do you notice?" or "Why do you think that happened?"
- Keep a small science journal for observations or drawings

## Why This is Important:

Science in second grade helps students begin thinking critically and curiously about the world. They'll learn to test ideas, collect information, and communicate what they discover. These early experiences support future learning in all STEM areas.

## **Units of Study:**

#### **Unit 1: Scientific Investigation**

## **Key Concepts:**

- Asking questions, predicting, observing
- Using tools: hand lens, thermometer, measuring tape
- Recording data and communicating results

#### **Unit 2: Matter and Energy**

# **Key Concepts:**

- Describing matter by properties
- Physical changes: cutting, folding, melting
- Exploring sources of light, sound, and heat

#### **Unit 3: Force and Motion**

## **Key Concepts:**

- Pushes and pulls
- Investigating movement on different surfaces
- Observing magnetism

#### **Unit 4: Earth and Weather**

## **Key Concepts:**

- Daily and seasonal weather
- Water cycle and changes in water
- Using weather tools and vocabulary

#### **Unit 5: Resources and Environment**

## **Key Concepts:**

- Rocks, soil, water, and their uses
- Reducing, reusing, recycling
- Caring for natural resources

### **Unit 6: Life Science**

# **Key Concepts:**

- Life cycles of plants and animals
- How living things interact in habitats
- Comparing animals by structures and behaviors