# Sixth Grade Science Mrs. Foley & Mrs. Safka

#### 2022-2023

### 1. District 123 Vision:

A dynamic and supportive environment that ignites lifelong learners who embrace diversity and contribute positively to our community and global society.

#### 2. District 123 Mission:

Preparing today's learner for tomorrow's world

## 3. Course Description

In 6th grade science class, students will have the opportunity to actively engage in relevant, real-world science content on a daily basis.

## 4. Learning Outcomes or Big Ideas

The content of sixth grade science is based upon the implementation of the Next Generation Science Standards. Students will be using the StemScopes curriculum.

By the end of this course, students will be able to...

- Properly handle and operate basic scientific tools
- Accurately follow a set of lab directions
- Collect and analyze experimental data
- Comprehend science content through informational text
- Solve problems by utilizing concepts learned in class
- Communicate ideas backed by scientific evidence

<sup>\*\*\*</sup>See Curriculum Map (#11) below for specific content information

## 5. Daily Procedures

Each day, students will...

- Begin with a content-related bell-ringer activity
- Engage in whole-group, small-group, or independent activities related to current content (watching a demonstration, participating in discussions, making predictions, completing experiments, comparing results, etc.)
- Complete assigned classwork (take notes, draw a diagram, etc.)
- End class with short wrap-up discussion, exit slip, or preview of the next lesson

# 6. Expectations of Student

In science class, students are expected to:

- Communicate respectfully with adults and peers
- Use science materials and tools respectfully and safely
- Contribute to small and whole group activities and discussions
- Be responsible by completing all classwork and homework

# 7. Expectations of Teacher

In science class, the teacher will:

- Provide engaging science activities
- Promote collaboration
- Encourage students to ask questions and make predictions
- Communicate feedback to students in a timely manner
- Ensure student safety during science experiments

#### 8. Assessment Criteria

Formative and summative assessments are graded using rubrics that are individualized for each assessment. All students and families are given advance notice and study materials for summative assessments. Once feedback is provided, students are welcome to discuss retake options with their teacher if needed.

# 9. Materials

- Three 3-pronged folders (one for each major unit throughout the year)
- Assignment Notebook/Organizer
- Pencil
- ChromeBook
- Occasional items: headphones, coloring supplies, glue sticks

## 10. Instruction and Directions for Help

If you have questions or concerns regarding science class, lessons, or assignments, please ask your child to access and show you his or her assignments online using the STEMscopes website or Google Classroom.

If you have further questions or concerns, please contact your child's science teacher.

OLHMS Phone Number: (708)499-6400
Team 6A Science Teacher: Mrs. Safka <u>csafka@d123.org</u>
Team 6B Science Teacher: Mrs. Foley <u>mfoley@d123.org</u>

## 11. Curriculum Map (Units of Study)

Students at OLHMS will experience daily science lessons that follow the Next Generation Science Standards with a curriculum called STEMscopes.

#### Introduction to 6th Grade Science! Mini Unit

- Proper handling and use of science materials and tools
- Direction giving and following activities
- Collaboration practice
- Practice Experiment

#### STEMscopes Units

Students will work through "scopes" within four separate "bundles," which are like mini unit of study within a larger overarching unit. During the 2022/2023 school year, we will begin with Bundle 2, which has a heavy focus on physical science, then shift into our life science units.

**<u>Bundle 1:</u>** Systems and Subsystems in Earth and Life Science Scopes in this bundle:

- Cells
- Anatomy of a Cell
- Bodies and Systems
- Water Cycle
- Influences of Weather and Climate

# **<u>Bundle 2:</u>** Earth Systems Interactions Cause Weather Scopes in this bundle:

- Kinetic Energy
- Energy Transfer and Temperature
- Thermal Energy Transfer
- Water Cycle (review)
- Influences of Weather and Climate (review)
- Ocean Currents

# <u>Bundle 3:</u> Causes and Effects of Regional Climates Scopes in this bundle:

- Sensory Receptors
- Reproduction in Plants and Animals
- Growth of Organisms
- Inheritance and Genetic Variation
- Influences of Weather and Climate (review)
- Ocean Currents (review)
- Thermal Energy Transfer (review)
- Energy Transfer and Temperature (review)
- Predicting Weather

# <u>Bundle 4:</u> Effects of Global Warming on Living Systems Scopes in this bundle:

- Reproduction in Plants and Animals (review)
- Growth of Organisms (review)
- Human Impact on the Environment
- Human Activities and Global Climate Change