# Team Oasis Curriculum

**Mathematics** 

**Humanities** 

**Science** 

## Mathematics - Karla Snyder

#### 7th Grade:

#### **Unit 1: Ratios and Proportional Relationships**

Students will learn about proportional relationships in tables, graphs and equations. They will use proportions to solve problems involving percent and scale drawings. Students will compare quantities using unit rate and solve unit rate problems involving fractions.

#### **Unit 2: Operations with Rational Numbers**

Students will learn how to add, subtract, multiply and divide integers and rational numbers.

#### **Unit 3: Expressions and Equations**

Students will learn how to use the distributive property and combine like terms. They will write and identify equivalent expressions. Students will solve one- and two-step equations and inequalities.

#### **Unit 4: Geometry**

Students will understand how the formulas for finding the area of triangles, quadrilaterals and circles were derived. They will use these formulas to find surface area and volume. Students will learn about angle relationships and solve for missing angle measures.

#### 8th Grade:

#### **Unit 1: Expressions and Equations**

- **Part 1: Solving Equations** Students will extend their knowledge of solving equations to include multi-step equations with rational number coefficients and different types of solutions.
- Part 2: Graphing Linear Equations Students will find slope graphically and algebraically. They will graph linear equations on the coordinate plane using tables, slope-intercept form and vertical and horizontal lines. Students will write equations for lines on a graph or given certain criteria.
- Part 3: Analyze and Solve pairs of Simultaneous Linear Equations Students will solve systems of linear equations graphically and algebraically.

**Unit 2: Exponents** Students will understand negative and zero exponents and use them to simplify expressions. Students will learn scientific notation and perform operations given numbers in scientific notations

**Unit 3: Geometry** Students will explore similarity and congruence through transformations. They will also extend their previous knowledge of volume adding spheres, cones and cylinders. Students will learn the pythagorean theorem and use it to solve

# **Humanities-** Kassidy O'Connell, ELA & Eric Fisher, Social Studies

Humanities is a loose combination of two separate disciplines: English language arts and social studies. Sometimes we work closely, other times we go our separate ways, but there is a basic framework that holds the two subjects together. And we read every day.

#### **Social Studies:**

Here are the **three main skills** that we will work on in the **social studies** half this year:

- **Inquiry:** Construct compelling and supporting questions and determine the kinds of sources that will be helpful in answering compelling and supporting questions.
- **Analysis and evaluation of sources:** Gather relevant information from multiple sources while using the origin, authority, structure, context, and corroborative value of the sources.
- Communicating Conclusions and Taking Informed Action: Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations.

The **content focus** will be world geography and civilizations past and present.

#### ELA:

#### Unit 1: Finding my place in the world

- Use and identify precise, figurative and sensory language
- Create a personal essay
- Get to know each other and ourselves
- Think about our individual stories
- Read excerpts from Born a Crime and other short stories

#### <u>Unit 2: How Does Where We Live Impact How We Live?</u>

- Use textual evidence that supports my ideas.
- Apply grammar, usage, and mechanics to write in a way that is easy for readers to understand.
- Read, reflect and write about the novel Long Walk to Water

#### Everyday we will:

- Read for 20 minutes (ten in ELA, and ten in Social Studies)
- Practice general Grammar skills such as capitalization, sentence structure, commas, and punctuation.

## Science

## **7/8 Science** Olivia Honigman Room C9



### Topics we will explore:

Natural Inheritance
Selection Geologic Time
Human Impact on Climate
Plate Motions

Evolution Cycling of Earth's
Materials

# Science practices we will focus on include...

- Asking Questions
- Developing & Using Models
- Planning & Carrying Out Investigations
- Analyzing & Interpreting Data
- Engaging in Argumentation from Evidence