

# Unit of Inquiry – Third and Fourth Grade

Transdisciplinary Theme: How The World Works

## Central Idea:

Communication takes various forms and can be transferred in many ways.

## Lines of Inquiry:

- There are Many ways of Communicating
- Knowledge has been persevered over time.
- Energy, like communication, travels in various ways
- The technology of communication is continually changing.

## Key concepts:

- Change: How is it changing?
- Causation: Why is it like it is?

## Content & Standards Covered:

### Math

Students will be able to:

- Identify Fractions on a number line
- Divide any given whole into parts- (both on a number line and with any given shapes)
- Add, Subtract, and Multiply Fractions and Mixed Numbers.
- Review equivalent fractions, and compare fractions by using base fractions (like  $\frac{1}{2}$ )
- Convert Fractions to decimals and partition a whole into 10 parts and 100 parts.
- Solve word problems using fractions, mixed numbers, and decimals
- Identify Fractions within inches on a ruler and label halves quarters and wholes with a ruler
- Explore geometrical shape attributes, sides, angles, and perimeter
- Use properties of multiplication to find area, perimeter, circumference, and angles within geometry

### Reading/Language Arts

Students will be able to:

- Develop grade appropriate vocabulary comprehension and word use. Students will need to use reference tools, as well as identify word meanings by using context clues within text.
- Use and identify literal and figurative language within poetry, prose, and literature.
- Read Poetry and prose with fluency and expression.
- Summarize poetry and identify the theme and topic by giving specific examples within and using identifying words to describe location (Stanza, line)

- Gain familiarity with reference materials (dictionary, thesaurus, glossary)
- Use conventional Grade appropriate Spelling conventions
- Understand words when a known affix is added to the beginning (agreeable... DIS-agreeable)
- Understand points that a speaker is making by listening- as well as make and express their own points by speaking clearly and with purpose.
- Listen to oral speech and then provide clear ideas on what they think, feel, and know from what was presented.
- Ask and answer questions appropriate to context.
- Write poetry using different formats and expressing themselves using language following steps to plan, revise, edit, and publish.

## Science

Students will be able to:

- Students know how to design and build simple series and parallel circuits by using components such as wires, batteries, and bulbs.
- Students know how to build a simple compass and use it to detect magnetic effects, including Earth's magnetic field.
- Students know electric currents produce magnetic fields and know how to build a simple electromagnet.
- Students know the role of electromagnets in the construction of electric motors, electric generators, and simple devices, such as doorbells and earphones.
- Students know electrically charged objects attract or repel each other.
- Students know that magnets have two poles (north and south) and that like poles repel each other while unlike poles attract each other.
- Students know electrical energy can be converted to heat, light, and motion.

## Social Studies

Students will be able to:

- Use a map as a resources to locate and label areas or objects on a map
- Use maps as a resource to develop understanding of location and geography
- Identify and Label grade appropriate defined areas on a map.
- Use maps to demonstrate how communication travels around the world.
- Understand how communication has changed over time
- Explore how communication impacts our lives today.

## Art

Students will be able to:

- Learn about the principles, tools and techniques used in drawing
- Learn about shading with pencil and in color
- Create a composition using linear and one-point perspective
- Learn about the role of geometry in art

- Identify and describe geometric and organic shapes
- Use math, art, and architecture vocabulary accurately in discussion and writing
- Create a colored drawing showing an awareness of shape, tint, shade, and neutral colors
- Write an organized paragraph describing and reflecting on their learning experiences

## Islamic Studies

Students will be able to:

- Define “Sunnah” and “Hadith”.
- Differentiate between the four classifications of hadith, “Sahih”, “Hasan”, “Daif”, and “Maudu”.
- Name the six major collections of Hadith.
- Explore the authors of Hadith Sittah and their way of life.
- Investigate ways a Muslim can research hadith.
- Discuss the dangers behind finding hadith on the internet.
- Research hadith which encourage the pursuit of knowledge.
- Memorize six different hadith relative to daily actions.
- Present the hadith on knowledge in their summative assessment.

## Arabic

Students will be able to:

- recognize that different forms of grammar are used in different contexts
- read texts at an appropriate level, independently, confidently and with good understanding
- understand sound-symbol relationships and apply reliable phonetic strategies when decoding print
- use a range of strategies to self-monitor and self-correct, for example, meaning, context, rereading, reading on, cross-checking one cue source against another
- use reference books, dictionaries, and computer and web-based applications with increasing independence and responsibility
- engage confidently with the process of writing
- use appropriate writing conventions, for example, word order, as required by the language(s) of instruction
- use increasingly accurate grammatical constructs
- check punctuation, variety of sentence starters, spelling, presentation

