**Grade** **Level**: 1st Grade **Dates**: Feb 23 - Mar 25

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| **School Information****School**: Copeland Elementary **School Code**: 060043**Teachers**: Weegar, BBrown, PLong, Bustos**Buffer**:  | **Transdisciplinary Theme**: How We Express Ourselves **Segment of Theme**: Discover, Creativity and Appreciation **Over Arching Concept:** Light and Sound  |
| **Section 1: Overview** |
| 1. **Central Idea**: Central idea: Light and sound help us communicate
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| 1. **Key Concepts**: Function Connection Change
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| 1. **Guiding Related Concepts**:
 | 1. **Lines of Inquiry**:
 | 1. **Teacher Questions (Guided Questions)**:
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| Adaptations, Impact, Communication  | The effects of light and sound can help keep us safe.Light and Sound can create a link between Science and Art.The impact of light and sound offer experiences throughout our lives. | **DOK Level 3 & 4** What does vibrate mean?What causes things to vibrate?How /why objects can be seenHow do we hear a sound?How are light and sound used to communicate?Where does sound come from?What makes sound?List an example of using a sound to communicate to solve a problem.What device uses sound to communicate over a distance?Design a musical instrument that makes a sound.Where does light come from?Why might you need a flashlight?Why can we only see things when there is light?Why do objects look like a different color in the dark?How does light change when it encounters different materials?What creates a shadow? |
| 1. **Prior Content Knowledge**:
 | 1. **Assessing the Lines of Inquiry**:
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| Students need to be able to recognize purposes of different sounds (ex: safety, attention). Purpose of sounds/light in our world today.  | How will you assess student’s understanding of the lines of inquiry?Students will create projects in visual art with an art project on value, light and shading.Students will create musical instruments and decorate and design their instruments  |
| **Section 2: What Are Our Target Goals?** |
| 1. **Concept Based Summative Assessment:**
 | 1. **Targeted Approaches to Learning (highlight 3):**
 | 1. **Targeted Learner Profile Attributes (highlight 2):**
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| Students will write a story and use shadow puppets or the puppet station in the media center to act out the story and homemade instruments to add sound effects and music.Students will have the following in their puppet show play:Topic: Example of how a light or sound can save you. Investigate light and sounds – Examples Fire AlarmTornado sirenFire TruckAmbulanceScript* Setting
* Plot
* Problem
* Solution
* 2 Characters

Students will investigate types of shadow puppets and recreate the puppets using popsicle sticks. Students will create flat puppets using popsicle sticks. White paper and flashlights will be used to create the shadows. Students will use the media center to share their puppet show performances  | Social Skills, Research Skills, Communication Skills. Thinking Skills, Self-Management Skills  | well-balanced, caring, principled, open-minded, risk taker, knowledgeable, communicator, reflective, thinker, inquirer |
| **Section 3: What Assessments will be provided in this unit of inquiry?** |
| 1. Pre-Assessments:

What assessment will be given at the beginning of the unit to inform current understanding  | 1. Formative Content Based Assessments:

What assessments will be given to monitor student learning of content? | 1. Summative Content Based Assessments:

What assessments will be given for students to show mastery of unit content? |
| Quick check on light and sound. Students will demonstrate their prior knowledge.  | Myon quizzes after books on Light and Sound  Brain Pop Jr. Quizzes on the Video Quick Checks in Georgia Science.Flip Chart Vocabulary check | Apply Concepts Assessments – Student will need to match the description to the picture (light and sound) Myon Quizzes Benchmark Assessment  |
| **Section 4: How will we Facilitate Learning?** |
| 1. Provocation:

How will interest into this unit be sparked? | 1. Learning Experiences:

What activities/experiences will help facilitate the learning? | 1. Evidence of Differentiation:

How will the learning experiences be adjusted to different learning styles/abilities? |
| Center for Puppetry Arts (YouTube Video);(Shoemaker as a resource)Musical Instruments – Students will be exposed and provided with musical instruments and will discuss the types of sounds they hear. Mr. Monroe will provide a mini lesson on music using the piano * Piano
* Xylophone
* Cymbals
* Drum
* Guitar
* Etc

Song – Let's Turn the Light On  | **Week 1: Tuning In** Center for the Puppetry Arts VideoBrainPop, Jr. Video(Shadows)MyOn readings(Light and Shadows)Light and Sound Flip ChartSong – Let's Turn the Light On (Art Activity) - Students will trace their shadows on large paper. Students will observe and measure shadows of their classmates. Students will utilize the sidewalk near the playground to trace and measure their shadows. Read Aloud – My Five Senses:Journal – draw and label two examples of each five sensesPair and share journals**Week 2: Tuning In**BrainPop Jr. Video(Sounds)MyOn readings(Sounds)Listening Walk: Light and Sounds around our school (Students will record in their PYP journals sounds they hear.) They will write a story from the observation using at least five of the sounds they recorded in their journal. Students will have the opportunity to share their writings. When students return to class create a graphic organizer and add everyone’s sounds.**Week 3: Finding Out**Activity: Classroom Scavenger huntStudents will gather objects that are transparentStudents will gather objects that are opaque Students will sort their objects within their group and discuss the properties of transparent and opaque.Read Aloud – All About Sound – discuss new words, especially vibration. Introduce the Sound Song and sing it a couple of times (Youtube)  Students will create instruments using recycled materials. Students will share their instruments and the sounds created with recycled materials. Allow time for free play where students can all play their instruments.Materials: Pie Plates, paper towel rolls, beans, rubber bands, shoe boxes, aluminum foil, Alternative: Have students make Kazoos using toilet paper tubes and rubber bandsStudents will share their instruments and discuss the different sounds they hear. Create a list on the types of sounds they hear. **Week 4: Sorting out**Activity: Water Music – Students will be provided with two bottles the same size and same shape with different amounts of water. Students will blow across the water bottles Identify lights and sounds that keep us safe – Class discussion Cup Phone: Draw a web on an anchor chart and write communication in the middle. Ask students different ways they communicate. Give each student a piece of cotton string and two cups. Students will poke a whole with their pencil and tie the string through it (these can be make in advance for students as needed) students will collaborate with a partner and explore the cub phone in the hallway by trying to talk to each other through the cup phone. Discuss how the sound travels from the cup through the string. (Also can be an outdoor activity on the playground) **Week 5: Going Further:**Journal Writing – In the Dark – Students will write a journal entry about things they could use to see if they were in the dark. They can draw their ideas and label them. Students will write an opinion on the importance of light and sound in emergency situations.Students will investigate types of shadow puppets and recreate the puppets using popsicle sticks. Students will create flat puppets using popsicle sticks. White paper and flashlights will be used to create the shadows. Students will use the media center to share their puppet show performances | Small group / pairs and individual assistance from the teacher and/or para professionalPairs/small groups for the puppet show assignmentModifications to the puppet show/musical instruments as needed. Display information in a variety of ways including through video, flip charts, anchor charts, text, direct instruction, examples Differentiated levels on Myon and through chosen textsOptions to illustrate ideas when journal writing  |
| 1. Learning Experiences in Specials:

How are Specials Courses able to connect to this unit? | 1. Local/National/Global Connections:

How can we connect the content to local/national/global issues? | 1. Student Action:

What learning experiences support potential student-initiated action? |
| **Art** During this unit, students are learning about the connections between light and sound in both science and art. In art, students will focus on the element of art “value” and how tints and shades can be used in their artworks to make their work look three dimensional. We will also discuss how light creates shadows and how to depict this phenomenon in our artworks. | Fire Drills – Talk about the sound we hear when we have a fire drill. The procedures when we hear the sound. Traveling in a car/bus in at night and during the day – precautions and the lights we see (traffic lights, headlights) Electricity in our homes and how people utilized light prior to having electricity (lanterns, utlizing the day light)  | Students may enjoy the puppet show and chose to do a puppet show to demonstrate other skills. Students may engage in playing a musical instrument outside of school or be inspired to learn more about a musical instrument. Students may inform younger siblings, family members or friends on the importance of sounds to keep us safe.  |
| 1. Student Agency and Play:

What learning experiences provide students with voice, choice and ownership? What play opportunities will be provided by Kindergarten/Pre-K?hands on/STEAM for K-5? | 1. Resources:

Which resources will you and the students use? This may include people, places, technologies, learning spaces and physical materials.  |
| Students will write and act out a puppet showStudents will make instruments from recycled materials and play their instrumentsStudents will measure their shadows outdoorsStudents will view/participate in experiments on light and sound  | Ms. Mahon (Art teacher) will work with students on light activity.Mr. Monroe – Music Provocation with studentsStudent will create instruments or objects that will produce sound.(Rubber bands and Straws)Students will use construction paper to create shadow puppets. Students will compare the phone in classroom with a cell phone.Media Specialist – Puppet Show/Read aloudsPlayground/outdoor space – Shadow Observations |
| **Section 5: Reflection** (Write the year, change font color for each year) |
| 1. Reflect on learning experiences:
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| 2022: Weegar: Students had the opportunity to make musical instruments. They used a variety of materials, including boxes, cardboard, peas, beans, straws, paper, etc.2022: Long- The students took a sound walk through the building writing down the different sounds that they heard. We also used 3 glasses and filled them up with different levels of water. The students drawing conclusions that the more energy given causing an object to vibrate than the louder the sound. They were able to make connections as to why some sounds were louder than other sounds. 2022 We made ice-cream. Step one includes us placing directions on our desk. Step two includes us taking ice and placing it in a zip lock bag. Step three includes us using milk and vanilla flavoring in a smaller zip lock bag. Step four includes us shaking the bag . BB |
| 1. How were the tasks differentiated to meet different learning styles?
 | 1. How did the learning experiences and strategies we used throughout the unit help to develop and show students understanding of the central idea?
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| 2022: Weegar: Some students were able to work in pairs, small groups, and even independently. However, some students needed a teacher’s assistance as their cutting skills were not developed.2022 Students were able to work in pairs to make the ice-creams / in groups of 4 BB2022: Long: Some groups had a difficult time doing the writing part of the shadow puppet play and needed more adult support.  | 2022: Weegar: Students took a gallery walk around the school and identified different sounds and their purpose. We discussed how sounds keep us safe.Student watched a learning video which explained how to make ice-cream and completed a short story writing exercise about the time that they made something. BB2022Long Students focused on the central idea and applied gallery walks to how light and sound kept everyone safe in the building under normal circumstances.  |
| 1. What learning experiences best supported students’ development and demonstration of the attributes of the learner profile and approaches to learning?
 | 1. How effective were the summative assessments in measuring student learning? What, if any, changes need to be made to the assessments?
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| 2022: Weegar: Students were definitely risk-takers and knowledgeable as they were designing and planning their instruments. I appreciated their kindness and caring as they worked on these instruments. They were very excited.2022 Class was asked to be Principled and focused when creating the ice-cream many were very excited but had to continue to refocus the group to stay on task but it was really fun.BB2022 The students were definitely risk takers when they turned their story into a play Writing a play seemed too hard for them. However, they were willing to write a story concerning the central idea and then make that into a play.  | 2022: Weegar: Students were able to correctly match sounds with the correct name and identify light as man-made versus natural. Students were able to identify all the steps in the correct order on how to make ice- cream BB2022: Long: The students were able to put together the information on light and sound in doing the play . I felt that they were able to put the concepts together and apply their knowledge. |
| 1. What student-initiated inquiries (questions) arose from this unit of inquiry?
 | 1. What student action arose from this unit of inquiry?
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| 2022: Weegar: Students wanted to know more about the different sounds made by different types of instruments. They had questions about the difference in high and low pitch.Students wanted to know if it was possible if they could make ice creme with different flavors. BBThe students wanted to bring in a fireman, doctor, or a police officer to speak at the school. They felt that they could tell them about many more sounds that keep people safe. | 2022: Weegar: Students were excited to play their musical instruments to The Wildcat Creed.Students were able to create an ice-cream parlor half of the students were the buisness and the other half was a consumer we had an ice-creams parlor and gave the students the chance to purchase ice cream with fake money. It was an awesome experience.BB20222: The students did a play. |
| 1. Any additional notes or changes that need to be considered next year?
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| 2022: Weegar: I believe it is necessary to have practice on cutting skills prior to building instruments.2022 : It is essential that we have more practice with our writing skills as well as our pemanship.BB20222: Long: We need to work on writing stories and plays before the students do the project.  |
| **Section 6: Picture Evidence** |
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\*\*Scroll Down for Unit Standards\*\*

**Unit Standards**:

**ELA**:

**Math**:

**Science**:

**Social Studies**: