

## Lesson Plan Template

**Lesson Segment Focus:** Creating a Kaleidoscope

**Lesson:** 1 of 4

**Course & topic addressed:** Science/Structure, Function, and Information Processing

**Date:** 12/2/19 **Grade:** 4<sup>th</sup>

### Student Outcomes

Specific learning objectives for this lesson.	<ul style="list-style-type: none"> <li>- Students will create their own kaleidoscope following the steps given in the video</li> <li>- Students will understand how light can be reflected and bent to see objects</li> </ul>
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	<ul style="list-style-type: none"> <li>- Lines of symmetry within a two-dimensional object have been discussed in previous in Geometry lessons</li> </ul>
Knowledge of students background (personal, cultural, or community assets)	<ul style="list-style-type: none"> <li>- Students have most likely been exposed to the idea of a kaleidoscope and what it does, even if they don't necessarily connect it to the name</li> </ul>

### State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	<ul style="list-style-type: none"> <li>- 4-PS4-2 Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.</li> </ul>
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### Academic Language Support

<p>What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning?</p> <p>What will you do to provide varying supports for students at different levels of academic language development?</p>	<ul style="list-style-type: none"> <li>- I will make connections to background knowledge, provide vocabulary assistance by having the vocabulary words for the unit written on large, visible posters throughout the room that students can refer back to throughout the week/school year</li> <li>- I will provide a visual instruction through an introduction video and integrated movie, auditory instruction through spoken instruction and discussion, and kinesthetic instruction through the use of the hands-on activity that the students will perform</li> </ul>
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### Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the lesson?	<ul style="list-style-type: none"> <li>- Kaleidoscope, Refraction, Reflection, Iris, Pupil, Lens, Retina, Manipulate</li> </ul>
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## Materials

Materials needed by teacher for <b>this lesson.</b>	- Introduction video link, projector and screen, instruction video, materials for students, drill or screwdriver, instructions hand-out
Materials needed by students for <b>this lesson.</b>	- Pringles can, scissors, pen or pencil, ruler, colored markers

## Lesson Timeline with Instructional Strategies & Learning Tasks (**This should be VERY DETAILED**)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10 minutes	<b><u>Introduction:</u></b>	<ul style="list-style-type: none"> <li>- I will introduce the lesson by playing “Abandoned: Kaleidoscopes by CharmaineZoe with music by Andrew Scott Faust” on YouTube <a href="https://www.youtube.com/watch?v=pselLpVavU4">https://www.youtube.com/watch?v=pselLpVavU4</a></li> <li>- While the students are watching the video, I will be getting all the materials ready for the lesson and make sure that the instruction video is set up to play with no issues</li> </ul>
45 minutes	<b><u>Instruction:</u></b> <ul style="list-style-type: none"> <li>- If not done already, empty out the contents of the can and make sure to wipe the inside clean of crumbs</li> <li>- Have an adult make a hole in the bottom of the can with a drill or screwdriver</li> <li>- Flip the mirror paper over horizontally with the non-shiny side face up and use the ruler to measure three sections</li> <li>- Place the sections of mirror paper into the pringles can so that it forms a triangle with the shiny side facing inward</li> <li>- Use markers to color shapes or designs onto the lid and then place the lid back on</li> <li>- Put the kaleidoscope up to your eye, look up at a light source, and slowly turn it.</li> </ul>	<ul style="list-style-type: none"> <li>- Once the introduction video is completed, I will carry the class through a class discussion about how the students think those patterns in the video are created.</li> <li>- I will then play the video all the way through before passing out the printed out instructions for students to reference throughout the activity</li> <li>- I will monitor the students as they follow the instructions, making myself available for any questions.</li> </ul>

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10 minutes	<b>Closure:</b>	<ul style="list-style-type: none"> <li>- Students will then clean up their area and put away all of their belongings.</li> <li>- After everyone has completed their kaleidoscopes, I will review the content and give students the opportunity to make observations about the activity or ask questions.</li> </ul>

### Accommodations/Modifications

How might I modify instruction for:  Remediation? Intervention? IEP/504? LEP/ESL?	<ul style="list-style-type: none"> <li>- Provide additional instruction and assistance and check on them often throughout the activity in case they have questions</li> </ul>
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### Differentiation:

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	<ul style="list-style-type: none"> <li>- Different types of learning instruction, vocabulary posters, instructional hand-out</li> </ul>
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### Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

### Research/Theory

Identify theories or research that supports the approach you used.	
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### Lesson Reflection/Evaluation

What went well? What changes should be made? How will I use assessment data for next steps?	<i>TO BE FILLED IN AFTER TEACHING</i>
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