

# LESSON PLAN TEMPLATE

<b>Date</b>	November 20 <sup>th</sup>	<b>Lesson Title</b>	Frozen Suncatchers	<b>Grade Level</b>	1
<b>Time in Lesson</b>	~40 minutes	<b>Subject</b>	Interdisciplinary Sky's the Limit	<b>Lesson #</b>	3
<b>Developed by</b>	Cassandra Boland (Pre-Service Educator)				

## IDENTIFY DESIRED RESULTS

### Learner Outcomes from the Program of Studies What are the SPECIFIC outcomes to be addressed in this lesson?

#### Science Curriculum - Alberta Education Programs of Study (POS):

- ✓ Students will learn about seasonal changes and the winter season's impact on nature.
- ✓ Students will be encouraged to explore and investigate to find answers to their questions and interpret the world around them.
- ✓ Students will not only develop their academic knowledge but build upon tangible fine motor skills.
- ✓ Students will explore the various ways they can build their own unique ice suncatcher.
- ✓ Students will experiment with creating colour and build upon their understanding of senses outdoors.
- ✓ Students will explore liquids and the effects of hot and cold temperature.

#### Art Curriculum - Alberta Education Programs of Study (POS):

- ✓ Students will learn to appreciate art in everyday life.
- ✓ Students will experiment with new materials, forms and purposes that promote imagination and problem-solving to create a final piece.
- ✓ Students will enhance their composition skills by designing and implementing the use of nature in their own suncatcher.
- ✓ Students will express their connection to nature and their relationship to the outdoors through an artistic lens.
- ✓ Students will learn to reflect upon the concept of nature being a form of art in itself, and like the changing seasons, their suncatchers will change form as it melts and freezes to create new shapes outside.
- ✓ Students will display their work to enhance their creative agency/pride and students will also show appreciation for peers' work.

#### Physical Education & Health and Life Skills - Alberta Education Programs of Study (POS):

- ✓ Students will identify and demonstrate respectful communication and fair play outdoors with their peers while working through the lesson.
- ✓ Students will recognize their personal abilities while participating in the activity and build upon their self-confidence and independence.
- ✓ Students will work cooperatively and continue to recognize and demonstrate various ways to express their feeling when working with others.

### Assessment Strategies

<b>Objective in student-friendly language</b> <b>What will students understand/experience/appreciate as a result of this lesson?</b>	<b>What will I accept as evidence of learning/development? Have I employed formative assessment? Do I make use of prior assessments in this lesson?</b>
<p>By the end of this lesson, students will understand how nature is impacted during changing seasons. They will also understand how their own creative direction and composition of natural objects can be unique to others, and that this diversity should be celebrated and appreciated. Students will have hands-on experience creating their own frozen suncatcher and will see with their own eyes how liquids (water in this case) are impacted by cold and warm temperatures. Students will appreciate having the autonomy to create this unique piece of natural art amongst their peers outdoors. This connection to the learning community and to nature will be a unique and fun way to learn in an interdisciplinary way. Students will also appreciate having their suncatchers on display for other students to see during recess/lunch on H1's classroom tree.</p>	<p>I will employ prior assessments of students' understanding of seasons, the impacts of hot and cold temperatures on water, and ensure students understand they have unique creative abilities.</p> <p>Evidence of learning/development will be demonstrated if students are visibly engaging with peers positively throughout the lesson, are having fun expressing themselves through unique composition of their suncatcher, feel comfortable asking questions about the real-world in relation to the activity and are partaking in conversations about seasonal changes and how this may impact their final piece.</p> <p>Students will be formatively assessed in the lesson throughout ongoing conversation, authentic questioning, and observation of their interactions with peers and the activity. Summative assessment will occur upon completion of the frozen suncatchers when they are on display in H1's tree. Assessment will be based on each student's ability to follow directions and demonstrate creative expression in their work. For this lesson, formative assessment will be relied on more heavily.</p>
<b>Resources</b> <b>What materials/resources/technology will be required?</b>	<b>Personalization/Differentiation</b> <b>How will you attend to the needs of ALL learners in this lesson?</b>
<ul style="list-style-type: none"> <li>✓ Where Do Icicles Come From? SciShow Kids: <a href="https://www.youtube.com/watch?v=eLBi0iCP1zg">https://www.youtube.com/watch?v=eLBi0iCP1zg</a></li> <li>✓ Compostable paper plates</li> <li>✓ String/ribbon</li> <li>✓ Water jug</li> <li>✓ Water</li> <li>✓ Parchment paper or non-stick cooking spray</li> <li>✓ Food colouring</li> </ul>	<ul style="list-style-type: none"> <li>✓ Throughout this lesson I will ensure all students understand the steps/objectives of the activity in addition to highlighting concepts that will be covered to make sure all students feel included and can work confidently toward the end goal.</li> <li>✓ Students will be encouraged to discuss their project with peers in a positive collaborative space.</li> </ul>

<ul style="list-style-type: none"> <li>✓ Drill</li> <li>✓ Natural items: <ul style="list-style-type: none"> <li>○ Leaves</li> <li>○ Pine needles</li> <li>○ Cranberries</li> <li>○ Branches</li> <li>○ Bird seed</li> </ul> </li> <li>✓ Picture example of the final frozen suncatcher</li> <li>✓ Popsicle sticks</li> </ul>	<ul style="list-style-type: none"> <li>✓ Seeing as there are diverse abilities and skills in this class, I will be readily available to physically guide students with Ms. Hume if there are any questions or concerns.</li> <li>✓ Instructions will be explained on the whiteboard before going outside with an “I do” demonstration, followed by a second “We do” approach outdoors before allowing students to complete the activity alone – “I do”.</li> <li>✓ A video will also be played at the start of the lesson as a “hook” to make sure all students start the activity with similar base knowledge.</li> <li>✓ Throughout the lesson I will ensure that students understand that everyone will have their own unique ice suncatcher and that this diversity in the different pieces are valued.</li> </ul>
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## LESSON PLAN SEQUENCE

<p style="text-align: center;"><b>Introduction</b></p> <p style="text-align: center;">How will you <b>ACTIVATE</b> prior knowledge and <b>ENGAGE</b> them in the lesson and how does this lesson connect to prior lessons?</p>
<p><b>Activate prior knowledge:</b> At the start of class, I will ask students if they have seen any icicles outside or if they have noticed any tree branches or puddles freezing when the temperature changes. We will have a quick conversation about the changing season and ask them if they have ever made a suncatcher before? Who likes playing outside in the snow to make snowmen, skate or make snowballs?! How about we try something new and make <i>frozen</i> suncatchers!?</p> <p><b>Engage students in the lesson:</b> Students will watch the “Where Do Icicles Come From?” YouTube video by SciShow Kids to learn more about the formation of ice during winter before I walk them through a modelled approach of the activity. I will also connect this activity to the colour unit where students can continue experimenting with food colouring and the impacts of mixing colours in water. What might happen when we freeze the coloured water overnight? What will the final frozen suncatcher look like upon reveal a day later?</p> <p><b>How will students learn?</b> Students will participate in the lesson through an “I do. We do. You do” learning approach. The steps of the activity will be written on the board and demonstrated in class by myself, followed by another quick recap outside. Students will also be encouraged to work alongside their peers as we work on the frozen suncatchers together outdoors. During the frozen suncatcher exhibit in the ‘class</p>

tree', students can explore the outcome of their efforts and showcase their artistic nature-inspired science pieces to the whole learning community.

### Learning/Activity Sequence

How will students ENGAGE, EXPLORE, EXPLAIN, ELABORATE, and/or EVALUATE their understandings of the outcomes.

What is the TEACHER doing? What is your plan for the body of the lesson? What steps are taken during the lesson?	What are the STUDENTS doing? How are they engaged while you are teaching the lesson?	Approx. time
<ul style="list-style-type: none"> <li>✓ Ask students if they've seen any icicles outside lately – do they know how they form?</li> <li>✓ Ask students if they've seen/made any suncatchers before. Make sure they understand the concept of suncatchers.</li> <li>✓ Hook students into the lesson by playing this SciShow Kids video: <a href="https://www.youtube.com/watch?v=eLBiOiCP1zg">https://www.youtube.com/watch?v=eLBiOiCP1zg</a></li> <li>✓ Any questions about the video or ice forming outside?</li> </ul>	Students will participate in a group discussion from their desks and watch the video.	<b>6 minutes</b>
<ul style="list-style-type: none"> <li>✓ Explain to students that for today's STL we will be making frozen suncatchers using our knowledge of icicles forming outside during cold temperatures. This will be a fun way to combine science and make art out of things we can find in nature – art is all around us!</li> <li>✓ Show a picture of a frozen suncatcher.</li> <li>✓ Explain to students that we will work outside today to make these frozen suncatchers and then hang them in our class tree.</li> </ul>	Students at their desks with an opportunity to ask questions about the activity.	<b>5 minutes</b>
<ul style="list-style-type: none"> <li>✓ Write out the steps for the lesson on the board: <ul style="list-style-type: none"> <li>○ <i>Select natural items provided by myself and Ms. Hume to add to your plate.</i></li> <li>○ <i>Once your pieces are placed, we will pour a thin layer of water into your plate.</i></li> </ul> </li> </ul>	Students at their desks.	<b>5 minutes</b>

<ul style="list-style-type: none"> <li>○ <i>Use your popsicle stick to move around your natural items in the water. Food colouring can also be added at this time to mix colours.</i></li> <li>○ <i>Leave your plate in a safe place outside to freeze designated by myself and Ms. Hume.</i></li> <li>○ <i>In the afternoon we will return outside to add string to the suncatchers.</i></li> <li>○ <i>Depending on how high the branches are, Ms. Hume and myself will put them in the tree.</i></li> </ul> <ul style="list-style-type: none"> <li>✓ Demonstrate these steps in person (“I do”) with a paper plate, the natural pieces and a popsicle stick.</li> <li>✓ Ask if there are any question before heading outside.</li> </ul>		
<ul style="list-style-type: none"> <li>✓ Ask students to line up outside of the classroom row by row so we can go outside together and abide by COVID safety protocols. Make sure a place is picked for the activity in advance.</li> </ul>	Students will quietly line up before going outside	<b>3 minutes</b>
<ul style="list-style-type: none"> <li>✓ Once everyone is outside and the activity is ready to begin ask students to watch another quick demonstration and listen to an explanation of how they will pick up their items.</li> </ul>	Students will be spread out in our activity area outside.	<b>2 minutes</b>
<ul style="list-style-type: none"> <li>✓ Once outside spread out clusters of the natural items in a row for students to choose from. Spray paper plates with non-stick cooking spray. Hand out paper plates and popsicle sticks to each student. Select three students at a time to come and collect their items – making sure there are enough items for each student to choose from.</li> </ul>	Students will receive a paper plate and popsicle stick. They will be chosen by myself to come up and collect their natural items to ensure social distancing.	<b>3 minutes</b>
<ul style="list-style-type: none"> <li>✓ Observe students as they place their natural items and answer any questions. Ask students what they think their final suncatchers will look like when they’re done.</li> </ul>	Students will work through the activity.	<b>5 minutes</b>

<ul style="list-style-type: none"> <li>✓ Ask students to raise their hand when they're done so I can add water to their plate. Food colouring can also be dropped into their water at this time if they'd like to mix colours – I will add the drops, they can pick the colours (to have less contact with the food colouring).</li> </ul>	<p>Students will raise their hands when they're ready to add water. Students can mix colours into their plate if they'd like to.</p>	<p><b>2 minutes</b></p>
<ul style="list-style-type: none"> <li>✓ Ask students to step away from their plate when done (ensuring everyone is spread out and the plates are in a safe place to not be disturbed by other students). Encourage them to look at each other's and see how unique every catcher is!</li> </ul>	<p>Students will complete their activity and take time to appreciate their peer's work.</p>	<p><b>3 minutes</b></p>
<ul style="list-style-type: none"> <li>✓ If the weather is cold enough students may go outside later in the day to unveil their frozen suncatchers! I will drill holes into the catchers for students to string and hang. If the weather is not cold enough, I can go out at the end of the day to hang the pieces and take photos to share with the students. If we are not able to hand the catchers, we will place them in a circle around the base of the tree.</li> </ul>	<p>*Weather dependent - students will unveil their frozen suncatchers and hang them or see them hung up by myself &amp; Ms. Hume the following day.</p>	<p><b>~5 minutes</b></p>

### Conclusion

**How will you ensure students walk away with a sense of understanding the PURPOSE of the lesson and its IMPORTANCE to their learning?**

- ✓ This lesson will continue to form relationships between students in the class, and encourage students to experiment with new materials, forms and purposes that promote imagination and problem-solving to create their very own frozen suncatcher.
- ✓ In addition to the above, I will ensure students conclude the lesson with a sense of creative confidence, an excitement to learn through play in connection to the outdoors and build upon a continual positive/fun class environment.
- ✓ Students will have a hands-on experience that demonstrates the importance of applying their new knowledge and exploration to new activities. It's ok to explore new concepts/activities and make mistakes – that's part of learning!
- ✓ Students will continue to build upon their real-world knowledge of changing seasons and enhance their fine-motor and composition skills through an artistic approach.
- ✓ Students will continue to build upon their independence and agency through a final exhibition of the frozen suncatchers outside for the learning community to enjoy.

## **PRE-SERVICE TEACHER SELF-REFLECTION**

- **How do you feel your students experienced this lesson?**
- **How were they able to make explicit and self-evaluate their growing understanding, skills and/or knowledge?**
- **How did you employ formative assessment for/of/as learning?**
- **Were you successful in reaching all students? How do you know? How did you accommodate for diverse learners and those requiring accommodations?**
- **Were there opportunities to address Indigenous, multicultural and interdisciplinary activities and knowledge?**
- **What went well and what needs refinement? What might you do differently next time?**