

## Bachelor of Education (Elementary) & Bachelor of Education (Secondary) STEM Unit Plan Template

Unit Title: <u>Metamorphosis</u>	Number of Lessons: <u>10</u>	Time (in weeks): <u>5 weeks</u>
Name: <u>Allyson Marcus, Melissa Green, Anika Jungheim</u>	Subject(s): <u>Science/Arts Education/English Language Arts</u>	Grade(s): <u>2</u>

### Rationale:

This unit is important for students to understand the concept of change and that sometimes change comes in phases. Students will be able to see how the life cycle of a butterfly is similar to and differs from the growth of a human. Students will be able to identify and examine the life cycle of the butterfly and see the changes needed in order to survive. These connections will allow students to see how life cycles go through significant change.

### Overview:

This unit focuses on the life cycle of butterflies. In this particular set of lessons, students will learn about the growth cycle of the butterfly and the metamorphosis it goes through. Students will engage in several different activities to support their learning and they will have several different opportunities throughout the unit to share their new knowledge. The activities in this unit will incorporate Arts Education and English Language Arts into science learning and inquiry.

### CORE COMPETENCIES:

Communication	Thinking	Personal & Social
<ul style="list-style-type: none"> <li>● <i>Communicating</i> Throughout this lesson students are connecting with peers for brainstorming and collaborative work. They will practice the skills around listening and contributing. Through the sharing from others and the engagement with books and videos they will be acquiring information about the life cycle of the butterfly and sharing their learning and wondering.</li> <li>● <i>Collaborating</i> Students are collaborating with one another in various ways in this unit. As a class students will work collectively to complete (and later review) the KWL chart and together the class will create a collaborate ABC book. Students will have the option of collaborating during learning centres.</li> </ul>	<ul style="list-style-type: none"> <li>● <i>Creative thinking</i> This unit invites significant creative thinking as students engage in learning about metamorphosis and expressing their learning through different art forms and art based activities. Students will be generating ideas and considering the thoughts, ideas, and wonders that their peers share.</li> <li>● <i>Critical and reflective thinking</i> This unit involves ongoing journal entries to encourage students to reflect on the metamorphosis of the caterpillars in the classroom. The students will engage in inquiry, questioning, and investigating throughout the engagements within the unit.</li> </ul>	<ul style="list-style-type: none"> <li>● <i>Personal awareness and responsibility</i> Students will be modeled expected behaviours while being expected to self-regulate their behaviour and actions; especially while engaging in group learning and learning outdoors.</li> <li>● <i>Social awareness and responsibility</i> Students will be encouraged to consider the connectedness that they have with the natural world while engaging in learning about the life cycle of the butterfly and having caterpillars in the classroom. Students will learn about interacting with others and the natural world in respectful and caring ways. Students will be encouraged to value the diversity of thoughts and experiences of peers in the classroom.</li> </ul>

**BIG IDEAS: (multiple subject areas for integrated unit)**

Subject Name: Science	Subject Name: Art	Subject Name: English Language Art
Living things have life cycles adapted to their environment	Dance, drama, music and visual arts are each unique languages for creating and communicating	Curiosity and wonder lead us to new discoveries about ourselves and the world around us

**LEARNING STANDARDS:**

Curricular Competencies	Content
<p><b>Science</b>                      CC1 - Demonstrate curiosity and a sense of wonder about the world                      CC2 - Observe objects and events in familiar contexts                      CC3 - Ask questions about familiar objects and events                      CC4 - Make simple predictions about familiar objects and events                      CC5 - Make and record observations                      CC18 - Communicate observations and ideas using oral or written language, drawing, or role-play</p> <p><b>English Language Arts</b>                      CC2 - Use sources of information and prior knowledge to make meaning                      CC3 - Use developmentally appropriate reading, listening, and viewing strategies to make meaning                      CC10 - Exchange ideas and perspectives to build shared understanding                      CC13 - Communicate using sentences and most conventions of Canadian spelling, grammar, and punctuation</p> <p><b>Arts Education</b>                      CC1 - Explore elements, processes, materials, movements, technologies, tools, and techniques of the arts                      CC2 - Create artistic works collaboratively and as an individual using ideas inspired by imagination, inquiry, experimentation, and purposeful play                      CC8 - Express feelings, ideas, stories, observations, and experiences through creative works</p>	<p><b>Science</b>                      C1 - metamorphic                      C3 - First Peoples use of their knowledge of life cycles</p> <p><b>English language Arts</b>                      C1.2 - literary elements and devices                      C1.4 - vocabulary associated with texts                      C2.1 - reading strategies                      C2.3 - metacognitive strategies                      C3.3 - letter formation                      C3.5 - conventions</p> <p><b>Arts Education</b>                      C1.4 - elements in the arts, including: visual arts: elements of design.                      C2 - processes, materials, technologies, tools, and techniques to support arts activities.                      C6 - traditional and contemporary Aboriginal arts</p>

**Prerequisite Concepts and Skills:**

- The student will have experience writing a journal.
- The student will have experience working in small groups.
- The student will be able to use classroom art supplies.
- The student will be familiar with classroom expectations.
- The student will know the expectations for classroom brainstorming and work periods.
- The students will be familiar with the expectations for “nature walks” in the school yard/the local community.

**Teacher Preparation Required:**

Lesson #	Teacher Preparation Required (See Unit Plan Sample)
Lesson 1 - Anika	<ul style="list-style-type: none"> <li>● Create KWL chart template on chart paper</li> <li>● Ensure all preparation steps to order/pick up/set up classroom caterpillar-butterfly kit.</li> <li>● Ensure a copy of the “Caterpillar Dreams” story book.</li> </ul>
Lesson 2 - Anika	<ul style="list-style-type: none"> <li>● Prepare technology and Youtube video of “Austin’s Butterfly”.</li> <li>● Prepare all materials needed for drawing: pencils, drawing paper, erasers.</li> </ul>
Lesson 3 Anika	<ul style="list-style-type: none"> <li>● Ensure a copy of “The Very Hungry Caterpillar”</li> <li>● 25 copies made of comprehension worksheet <ul style="list-style-type: none"> <li>● <a href="https://www.teacherspayteachers.com/Product/The-Very-Hungry-Caterpillar-Drawing-and-Writing-Activities-2968155?st=a00a0c07eee2924afbc58a2d5d2599a0">https://www.teacherspayteachers.com/Product/The-Very-Hungry-Caterpillar-Drawing-and-Writing-Activities-2968155?st=a00a0c07eee2924afbc58a2d5d2599a0</a></li> </ul> </li> </ul>
Lesson 4 Allyson	<ul style="list-style-type: none"> <li>● Gather materials - pasta (couscous, rotini, shells, bow ties), paper plates, glue marker</li> <li>● Produce or have available to view, images of butterfly life cycle</li> <li>● Have video ready <a href="https://www.youtube.com/watch?v=wAhrxrz4EDc">https://www.youtube.com/watch?v=wAhrxrz4EDc</a></li> </ul>
Lesson 5 Melissa	<ul style="list-style-type: none"> <li>● Make copies of butterfly nature craft</li> <li>● Have paper bags for collecting nature items block walk</li> <li>● “Caterpillar in the classroom” journals</li> <li>● Get administration and parental permission for nature walk</li> </ul>
Lesson 6 Allyson	<ul style="list-style-type: none"> <li>● Have video ready <a href="https://www.youtube.com/watch?v=7AUeM8Mbalk&amp;list=PL7C51597323D76DC8&amp;index=2">https://www.youtube.com/watch?v=7AUeM8Mbalk&amp;list=PL7C51597323D76DC8&amp;index=2</a></li> <li>● Copies of cinquain poem templates</li> <li>● Copies of peer rubrics</li> </ul>
Lesson 7 Allyson	<ul style="list-style-type: none"> <li>● Gather supplies for learning centers: life cycle booklets, loose parts, book table/listening center, butterfly matching symmetry cards, playdough butterflies, photographs of butterflies, markers, crayons, pencils, paper, glue, scissors, computers, life cycle maps, template with 4 squares</li> </ul>
Lesson 8 Melissa	<ul style="list-style-type: none"> <li>● Book: The Butterfly Alphabet by Kjell B. Sandved</li> <li>● Copies of ABC book pages</li> <li>● List of words for each letter of the alphabet connected to butterflies/butterfly life cycle</li> </ul>
Lesson 9 - Anika	<ul style="list-style-type: none"> <li>● Sequencing sheet, 25 copies made - summative assessment</li> <li>● Ensure supplies: post-it notes, pencils, crayons, glue, scissors, mini ball</li> </ul>
Lesson 10 Melissa	<ul style="list-style-type: none"> <li>● KWL chart from first lesson</li> <li>● Get butterfly cutouts</li> <li>● Outdoor drawing/writing supplies for journal entry</li> </ul>

**Cross-Curricular Connections:**

\*see above - Curricular Competencies & Content

**Aboriginal Connections/ First Peoples Principles of Learning:**

Learning involves patience and time. This principle acknowledges that understanding and knowledge are not immediate or quick to happen, however, is built over time. Recognizing that students are individuals and learn in their own ways and at their own pace is key as well. Students will do better to review material at various

intervals over a period of time and by having a flexible schedule in their classroom to be able to take the time they require to develop a deeper understanding of the material. Through the observation connected to having caterpillars in the classroom and watching their transformation of becoming butterflies students will get to see that change and development takes patience and time not only in our learning but also in our becoming.

### Universal Design for Learning (UDL)

- Content shared in a variety of ways - stories, video clips, writing, drawing, etc.
- Flexible work spaces when needed
- Provide regular feedback
- Some of the activities require movement and students to use their bodies. Students who learn by doing will benefit from the activities.
- There are written requirements for this lesson in addition to verbal explanations for their understanding.
- Students will learn through reading and viewing information. In addition, students will be able to watch and learn from the activities and media in the lessons.
- Group work is a crucial element of this lesson.
- Students will work on various portions together and other portions will be individually assessed.

### Differentiated Instructions (DI)

- More or less work
- Alternative work spaces
- Noise cancelling headphones
- Students will be assigned to groups by the teacher.
- Groups will be prearranged to ensure positive learning environments for students.
- If students need additional time for some of the activities, it will be adjusted at the discretion of the teacher.
- Students who need a quiet workspace will be permitted to work in the reading room, if vacant.
- Break some students into reading groups to discuss the assignment.
- Allow students to read individually if preferred.
- Flexible seating.
- Token economy charts
- Appeal to a range of learning styles by: Playing videos, Using hands-on activities and crafts, Providing audiobooks as needed, Incorporating written and illustrations within books, Giving both spoken and written directions to tasks, Using relevant physical objects, Allotting time for students to create artistic reflections and interpretations of lessons.

### Overview of Lessons:

#### Lesson 1- Anika

Name & Time (Minutes Allotted):	Intro to unit: Life cycle of a caterpillar - 40 minutes
Learning Standards: Curricular Competencies	Science: CC1, CC2, CC5, CC18 ELA: CC2, CC3, CC10
Learning Standards: Content	Science: C1, C3
Instructional Objectives	TSWBAT identify what they know about metamorphosis, and what they wonder.
Assessment:	Formative for learning - observation during KWL brainstorm
Teaching Strategies:	Brainstorm - know, wonder, story
Materials:	Chart paper, markers, Book - <i>Caterpillar Dreams</i> by Clive McFarland, caterpillar to butterfly kit (similar to <a href="https://www.nature-gifts.com/shop/grow-butterflies/caterpillar-butterfly-kit/">https://www.nature-gifts.com/shop/grow-butterflies/caterpillar-butterfly-kit/</a> )

Lesson Activities:	
Introduction/Hook:	Reveal of classroom “guests”: caterpillars
Body:	As a group brainstorm K and W of KWL chart.
Closure:	Read Caterpillar Dreams: <a href="https://www.goodreads.com/book/show/23288377-caterpillar-dreams">https://www.goodreads.com/book/show/23288377-caterpillar-dreams</a>

### Lesson 2 - Anika

Name & Time (Minutes Allotted): 1 hour	Intro to Austin's butterfly - butterfly symmetry aboriginal connection (This lesson is an intro only. Austin’s butterfly will continue throughout the unit, exploring elements of design as the students move into designing and creating the patterns within the outline they have created).
Learning Standards: Curricular Competencies	Arts Education - CC1 Science - CC18
Learning Standards: Content	Arts Education - C1.4, C2
Instructional Objectives	TSWBAT draw an outline of a butterfly, using different line formations, similar to the one in the picture shown.
Assessment:	Formative <i>for</i> learning - observation and conversation Formative <i>as</i> learning - pair and share Summative <i>of</i> learning - review students' butterfly outline looking for a variety of line formations.
Teaching Strategies:	Video, group discussion, drawing
Materials:	Youtube video, pencils, erasers, plain paper
Lesson Activities:	
Introduction/Hook:	<a href="https://youtu.be/hqh1MRWZjms">https://youtu.be/hqh1MRWZjms</a> Watch youtube video “Austin's Butterfly”
Body:	Students begin the process of creating their own “Austin’s Butterfly”
Closure:	Pair-and-share; students partner to give each other a piece of feedback for the next “Austin's Butterfly” session.

### Lesson 3 - Anika

Name & Time (Minutes Allotted): 45 minutes	The Hungry Caterpillar - Comprehension Worksheet
Learning Standards: Curricular Competencies	ELA - CC2, CC3, CC10, CC13 Arts Education - CC8 Science - CC18
Learning Standards: Content	Science - C1 ELA - C1.2, C2.3, C3.3 Arts Education - C1.4, C2
Instructional Objectives	TSWBAT recall information from the story and apply it to the questions on the worksheet. <b>How:</b> Review comprehensive worksheets once complete
Assessment:	Formative <i>as</i> learning - pair and share
Teaching Strategies:	Reading a story, worksheet, peer feedback
Materials:	Book: “The Very Hungry Caterpillar” by Eric Carle, worksheets (30), pencils, pencil crayons
Lesson Activities:	
Introduction/Hook:	Read the book: “The Very Hungry Caterpillar” by Eric Carle
Body:	Comprehension worksheet: <a href="https://www.teacherspayteachers.com/Product/The-Very-Hungry-Caterpillar-Drawing-and-Writing-Activities-2968155">The-Very-Hungry-Caterpillar-Drawing-and-Writing-Activities-2968155</a>

Closure:	Pair and share - Share with a partner what you would eat on Saturday if you were the Hungry Caterpillar.
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#### Lesson 4 - Allyson

Name & Time (Minutes Allotted):	Pasta Life Cycle 40 minutes
Learning Standards: Curricular Competencies	Science - CC18, CC1 ELA - CC3 AE - CC8
Learning Standards: Content	Science - C1 ELA - C1.4, C3.3 AE - C1.4
Instructional Objectives	TSWBAT create the correct design of the life cycle of a butterfly in pasta on a paper plate as modelled and demonstrated by the teacher and in the video
Assessment:	Summative of Learning - teacher will be able to assess the final product to ensure its accuracy and completion
Teaching Strategies:	video, crafting activity
Materials:	paper plates pasta 4 different kinds (couscous, rotini, shells, bow ties) glue marker
Lesson Activities:	
Introduction/Hook:	<a href="https://www.youtube.com/watch?v=wAhrxrz4EDc">https://www.youtube.com/watch?v=wAhrxrz4EDc</a>  Show this short video to give students a quick idea of what the lesson will be about and to get them excited to craft.
Body:	Introduce craft and model craft activity & students to complete pasta life cycle craft
Closure:	Class discussion on how this activity relates to a life cycle of a butterfly, and how this model is similar or different from the real life cycle of a butterfly. Students to write and/or illustrate what they did during this activity and what they learned from their participation in this activity.

#### Lesson 5 - Melissa

Name & Time (Minutes Allotted):	Butterfly Nature Craft (afternoon activity to include a nature walk, 60-90 minutes depending on location)
Learning Standards: Curricular Competencies	Science - CC 5 Arts Education - CC 1.1
Learning Standards: Content	Science - C 1 Arts Education - C 1.4
Instructional Objectives	TSWBAT complete the "butterfly nature craft" showing principles of design around pattern and symmetry using materials from nature. TSWBAT complete a journal entry expressing their experience with the art project and with an update on the caterpillars in the classroom.
Assessment:	Summative of learning <b>What:</b> Completed "butterfly nature craft".

	<p><b>How:</b> Teacher will review the completed “butterfly nature craft” taking note of the principles of design around pattern and symmetry using materials from nature.</p> <p>Formative <i>for</i> learning</p> <p><b>What:</b> Journal entry</p> <p><b>How:</b> Teacher will read student journal entries and engage in conversation with students.</p>
Teaching Strategies:	Video, outdoor walk, art using nature, journal
Materials:	Youtube video queued, butterfly nature craft sample, copies of art template, brown bags for student collection of natural materials, glue
Lesson Activities:	
Introduction/Hook:	<p><b>View:</b> Symmetry in butterflies:  <a href="https://www.youtube.com/watch?v=XX0XQH8J5Jo">https://www.youtube.com/watch?v=XX0XQH8J5Jo</a></p> <p><b>Invite</b> students to share what they noticed about the marking and colours on the butterflies wings in the video.</p>
Body:	<p><b>Share</b> with students that we will be completing a “butterfly nature craft” with pieces of nature that we collect while going on a walk through the school yard and/or down the block.</p> <p><b>Show</b> students the completed sample and invite them to notice the symmetry between wings. Remind students that while they are collecting items for their piece of art they will need to get two of everything in order to have a symmetrical butterfly.</p> <p><b>Nature Walk:</b> Class walks either down the block or around the school yard to collect items for their art project.</p> <p><b>Students complete</b> their butterfly with the items they collected from outside.</p>
Closure:	<b>Journal Enp[‘]’</b> out their experience around creating a symmetrical butterfly using pieces from nature and providing an update on the caterpillars that are in the classroom.

### Lesson 6 - Allyson

Name & Time (Minutes Allotted):	The Amazing Life Cycle of the Monarch Butterfly video & Cinquain Poem 60 minutes
Learning Standards: Curricular Competencies	Science - CC1, CC18 ELA - CC3, CC10, CC13
Learning Standards: Content	Science - CC1 ELA - C1.2, C2.1, C3.3
Instructional Objectives	SWBAT describe how words and phrases have rhythm and interpret their meaning. SWBAT use vocabulary and ideas from a video to write a cinquain poem
Assessment:	Formative of assessment from qualitative data gained from anecdotal notes and students discussions Formative as assessment from peer rubrics
Teaching Strategies:	Video, pair engagement, peer assessment
Materials:	Video, template for poem, peer rubric, students writing materials
Lesson Activities:	

Introduction/Hook:	Show video <a href="https://www.youtube.com/watch?v=7AUeM8Mbalk&amp;list=PL7C51597323D76DC8&amp;index=2">https://www.youtube.com/watch?v=7AUeM8Mbalk&amp;list=PL7C51597323D76DC8&amp;index=2</a>
Body:	Connect students to learning by reading a few cinquain poems. Divide them into partners and ask them to discuss what they notice, then share ideas as a class. Work with students to cooperatively write a cinquain on chart paper.
Closure:	Have students volunteer to read their poems & hand out and use peer rubric for feedback

### Lesson 7 - Allyson

Name & Time (Minutes Allotted):	Learning Centres 60 minutes
Learning Standards: Curricular Competencies	Science CC18 LA CC10 AE CC2
Learning Standards: Content	Science C1 LA 1.4 AE C2
Instructional Objectives	TSWBAT accurately sequence and describe the 4 stages of metamorphosis using correct vocabulary and graphical representations TSWBAT visually create the stages of metamorphosis through various vehicles of artistic expression (colouring, painting, drawing, collaging etc)
Assessment:	Formative for learning through observation & discussion Summative of learning At the end of the lesson, collect the student center projects depicting and describing the correct sequence of the stages of metamorphosis
Teaching Strategies:	Stations, option for individual or pairs,
Materials:	Photographs of butterflies, markers, crayons, pencils, paper, glue, scissors, computers, life cycle maps, template with 4 squares
Lesson Activities:	
Introduction/Hook:	Set up 4 learning centers in classroom, to provide opportunities for students to describe each stage of the butterfly life cycle. Provide students choice to work alone or in pairs.
Body:	Students will visit either Center 1 or Center 2 and they will visit Center 3 or Center 4. Each student will have a card with a corresponding picture/label for each center and they will check off the two centers they visit.  <b>Center 1:</b> Make A Book Center <b>Center 2:</b> Writing Center: <b>Center 3:</b> Art Center <b>Center 4:</b> Graphic Organizer Center
Closure:	Students choose to share their new understandings about the stages of the life cycle of butterflies, with a partner and then they may volunteer to present their center project to the class. They are expected to use correct vocabulary, correctly sequence the stages, and use appropriate language that describes the butterfly in each of the stages.

### Lesson 8 - Melissa



Name & Time (Minutes Allotted):	Collaborative Butterfly Alphabet Book (45 min)
Learning Standards: Curricular Competencies	English Language Arts - CC2, CC13 Science - CC18
Learning Standards: Content	English Language Arts - C3.4 Science - C1
Instructional Objectives	TSWBAT complete their page of the collaborative classroom alphabet book using prior knowledge about butterflies from the unit and proper sentence structure.
Assessment:	Formative <i>for</i> assessment <b>What:</b> Classroom work on descriptive sentence examples. <b>How:</b> Teacher will listen to student contribution and from there plan for future expansive teaching on descriptive sentences.  Summative <i>of</i> learning <b>What:</b> Completed ABC Collaborative Book pages <b>How:</b> Teacher will review each student's work to assess for understanding.
Teaching Strategies:	Story, brainstorm, sentence examples/whole class work, collaborative book
Materials:	Book, copies of ABC book pages
Lesson Activities:	
Introduction/Hook:	<b>Read:</b> The Butterfly Alphabet by Kjell B. Sandved
Body:	<b>Brainstorm</b> words that connect to butterflies and/or the butterfly life cycle as a class. Type these in alphabetical order using the smartboard. (Teacher can use the pre-written list as a support if needed.) <b>Review</b> examples of descriptive sentences as a class and work together to make a few "simple" sentences more descriptive. <b>Students complete</b> a page of the ABC collaborative butterfly book with a picture and two sentences connected to the word for their letter page.
Closure:	<b>Read</b> the ABC collaborative butterfly book to the class.

### Lesson 9 - Anika

Name & Time (Minutes Allotted):	Sequencing sheet
45 minutes	
Learning Standards: Curricular Competencies	Science - CC18 ELA - CC2 Arts Education - CC1
Learning Standards: Content	Science - C1 ELA - C2.3 Arts Education - C1.4, C2
Instructional Objectives	TSWBAT correctly identify the order of events in the life cycle of a butterfly
Assessment:	Formative <i>for</i> learning - Post-it notes, comprehension check prior to final activity. Summative <i>of</i> learning - collect sequencing sheets to assess students understanding
Teaching Strategies:	Worksheet
Materials:	Sequencing sheet photocopied for the whole class, post-it notes, pencil crayons, glue, scissors.
Lesson Activities:	
Introduction/Hook:	Whole class activity: Hand out 4 post-it notes per student. Students draw/write each stage of the life cycle on each individual post-it note. Ask the students to come and place their post-it notes in the corresponding

	sections on the board. (Draw a circle on the white board sectioned into 4 pieces. Add arrows around the outside to indicate a clockwise direction).
Body:	Students complete cut, color, and paste sequencing worksheet (25 copies): <a href="https://www.teacherspayteachers.com/Product/Freebie-Butterfly-Life-Cycle-cut-paste-1190447?st=92a830ba8f9e3404b1eb452edb8b0d1b">https://www.teacherspayteachers.com/Product/Freebie-Butterfly-Life-Cycle-cut-paste-1190447?st=92a830ba8f9e3404b1eb452edb8b0d1b</a>
Closure:	Whole class unit recap. Throw a mini ball to students sitting on top of their desks. Once they catch they share one with thing they learned or enjoyed about the study of metamorphosis.

### Lesson 10 - Melissa

Name & Time (Minutes Allotted):	Butterfly Release! (whole afternoon - butterfly celebration day!)
Learning Standards: Curricular Competencies	Science: CC5, CC18 Arts Education: CC1, CC2
Learning Standards: Content	Science: C1 Arts Education: C1.4, C2
Instructional Objectives	TSWBAT share what they have learned as part of the classroom KWL chart review and brainstorm. TSWBAT complete a journal entry. TSWBAT share one wonder they still have as this unit ends. TSWBAT complete a watercolour butterfly painting and experiment with different visual textures.
Assessment:	Formative <i>as/for</i> learning. <b>What:</b> KWL chart & “wonders” <b>How:</b> Students will learn from one another’s contribution to the classroom KWL chart and from hearing each other’s “wonders”. The teacher will observe the engagement and communication from students. The sharing may inform future lessons and units that are taught based on student interest and inquiry.  Summative <i>of</i> learning. <b>What:</b> Journal <b>How:</b> Teacher will review each student's journal entry and the complete journal from the unit. The journal will be a representation of the students learning through this unit.  Summative <i>of</i> learning. <b>What:</b> Watercolour butterfly <b>How:</b> Teacher will engage with students as they paint a watercolour butterfly and experiment with different materials to add visual texture. Teacher will look at the final paintings that each student has created.
Teaching Strategies:	Interactive game, KWL chart, journal, butterfly release, “wonderings”
Materials:	SmartBoard queued up, journals and drawing/writing supplies, butterfly cutouts
Lesson Activities:	
Introduction/Hook:	<b>Butterfly Matching Game:</b> Play on the Smartboard, pull student names with popsicle sticks. <a href="https://www.memozor.com/memory-games/for-kids/butterflies">https://www.memozor.com/memory-games/for-kids/butterflies</a>
Body:	<b>KWL chart review:</b> Bring up the classroom KWL chart that was created at the beginning of the unit. Brainstorm and record what has been learned during

	<p>the unit and review the questions in column 2, checking off questions that have been answered.</p> <p><b>Watercolour Butterflies:</b> Students paint butterflies on watercolour paper, while the paint is still wet they sprinkle coarse salt, fine salt, or rice on the paint and make note of the texture that is created as a result of the material that is incorporated. Students are encouraged to engage in painting multiple butterflies and exploring with the different materials that are available in order to see the different visual textures that are created.</p> <p><b>Release of Butterflies:</b> Go outside and release the butterflies!</p> <p><b>Journal Entry:</b> While outside, students add a final journal entry with a drawing of the release of the butterflies and a few sentences about the experience of releasing the butterflies and two things that they learned during this unit, and one thing that surprised them.</p>
Closure:	<p><b>"I still wonder"</b> - Students consider what they still wonder about and write down one of their "wonders" on the border of one of their butterfly paintings. This "wonder" may be connected to the life cycle of the butterfly or connected to metamorphosis in general, or even to one of the art or language art expressions they engaged in. Students share their wonder with the class while pinning it on the board.</p>

#### Resources:

##### Books:

The Hungry Caterpillar by Eric Carle

<https://www.goodreads.com/book/show/23288377-caterpillar-dreams>

The Butterfly Alphabet by Kjell B. Sandved

[https://www.goodreads.com/book/show/441512.The\\_Butterfly\\_Alphabet](https://www.goodreads.com/book/show/441512.The_Butterfly_Alphabet)

##### Videos:

Austins butterfly - <https://youtu.be/hqh1MRWZjms>

Symmetry in butterflies: <https://www.youtube.com/watch?v=XX0XQH8J5Jo>

Life Cycle of a Butterfly Pasta Craft: <https://www.youtube.com/watch?v=wAhrxrz4EDc>

Amazing Life Cycle of the Monarch Butterfly:

<https://www.youtube.com/watch?v=7AUeM8Mbalk&list=PL7C51597323D76DC8&index=2>

##### Worksheets and Resources:

[The-Very-Hungry-Caterpillar-Drawing-and-Writing-Activities-2968155](https://www.teacherspayteachers.com/Product/Freebie-Butterfly-Life-Cycle-cut-paste-1190447?st=92a830ba8f9e3404b1eb452edb8b0d1b)

<https://www.teacherspayteachers.com/Product/Freebie-Butterfly-Life-Cycle-cut-paste-1190447?st=92a830ba8f9e3404b1eb452edb8b0d1b>

Butterfly Nature Craft: <https://www.craftsonsea.co.uk/butterfly-nature-craft/>

Butterfly Matching Game: <https://www.memozor.com/memory-games/for-kids/butterflies>

Cinquain Template: <https://betterlesson.com/lesson/574996/poetry-cinquain>

#### Extensions to Unit:

1. Migration
2. Study of other life cycles

#### Reflections and Revisions:

To be done at the end of the unit.