



Lesson Plan EXEMPLAR

Small Group - In Person Workshop Session EXEMPLAR

SUBJECT: Math	GRADE 4
UNIFYING TOPIC Dandelions - osawapikones	
THE 4 FOUNDATIONS Oral Tradition - Storytelling, Knowledge Keepers, Elders, Language Subsistence - Land Based Learning, Hunting & Gathering, Food Sovereignty Traditional Practice - Ceremony, Kinship, Healing Arts - Visual, Performance, Production	
LESSON OUTCOMES: UNDERSTANDINGS; SKILLS & PROCEDURES	
4M1.1 Students interpret and express area . Tiling is the process of measuring an area with many copies of a unit , without gaps or overlaps. The unit can be chosen based on the area to be measured. Area is a measurable attribute that describes the amount of two-dimensional space contained within a region. Model area by dragging a length using hands-on materials or digital applications. Recognize the rearrangement of area in First Nations, Métis, or Inuit design.	
RESOURCES Include links to relevant sources such as Infusing Indigenous Culture Based Curriculum in Alberta; Empowering the Spirit; KTCEA Elders Speak (Google Play, Apple); Online Cree Dictionary & app (Google Play, Apple)	
ORAL TRADITION <ul style="list-style-type: none"> ● Story Telling Protocols ● Legend of Dandelion <ul style="list-style-type: none"> - Personal stories about dandelions, storytelling - Book on dandelions. (The Dandelion Seed, Dear Dandelion) 	TRADITIONAL PRACTICE <ul style="list-style-type: none"> ● Invite an Elder or Knowledge Keeper to talk about plant protocols and/or Video on dandelion picking (building respect) ● Dandelion song Healing: thriving and perseverance (like a “weed”) <ul style="list-style-type: none"> - Kinship/connection between human and plants (living things) - Health benefits and connection to the dandelion Legend. - Historic places and timelines with dandelions. - Celebrating other languages - French word for dandelion is “pissenlit” (en lit meaning in the bed) which also speaks to the medicinal properties of the plant

ARTS

- Draw the area with the dandelions in it, make it into squares/tiles, draw where they are within the areas; when we shift, have them do it again, draw out the rearrangement; graphing paper
- Mirroring of space between beading a dandelion earring or vamp or dot art (relating to space and design)
- different representations of dandelions across nations (visually or artistically)
 - Act out the legend
 - Draw part of the story.
 - Working with the dandelions for an art project.
 - Create your own play.
 - Beading or weaving
 - Depict the sequence of the steps of harvesting the dandelion

SUBSISTENCE

- protocol
- dangers of dandelion spraying
- rearrangement of areas that have been sprayed or have a higher footprint; looking at a different area in the schoolyard that has a different footprint and drawing comparison
 - Create your own dandelion honey.
 - Gathering protocol
 - Learning about cycles/seasons, gathering only what is needed (respectful/sustainable)
 - Creating own dandelion tea or mustard
 - Plant identification
 - Pollinators, bees?
 - North wind spreading dandelion seeds
 - Weed or medicine exploration
 - Dangers to dandelion-spraying
 - Other ways to use the dandelion- flower

ASSESSMENT PLAN (What is your evidence that students understand?)

- Journal reflections, using key terminology (unit, overlaps/gaps)
- Discussion/reflection about reciprocity (pollinators, spraying)
- Stem vs head, which unit? Estimation as well
- Dot art for dandelion
- Drawing the area then the rearranged area.
- Discussion notes/anecdotal by the teacher - what are the students discussing? Terminology, evidence of understanding.

INSTRUCTION CONSIDERATIONS

Meeting needs of diverse learners, considering learning styles & multiple intelligences
Relevant background knowledge

- Seasonal
- Ensure there are hands-on activities
- Dyscalculia LD - anything with numbers (supports needed)
- Oral discussion of learning
- Kinesthetic experiences

CREE LANGUAGE

Cree terms and phrases to be introduced and reinforced in the lesson

tānisi - hello

Wāpastim - White Horse

nisĪkāson - is my name

osawapikones - dandelion (osaw - yellow or golden)

cistēmaw - tobacco

ANTICIPATORY SET

Storytelling

Legend of Dandelion - (Jason's video)

*Tell the story outside amongst the dandelions if possible.

ACTIVITIES/ EXPERIENCES

Mini Lesson:

- Share the outcomes with students.
- What is "area?" What is a "unit?"
- Revision of perimeter vs area, how to calculate
- Determine what students already know
- What are some ways we can measure area?
- Reinforce the Indigenous Way of knowing
- Protocol - appreciation of the dandelion and that it is alive

Experience:

- Art: Students create a shape. Students use their creativity to build whatever shape they want.
- Take children outside with their 'shape' and ask students to fill the shape with Dandelions.
- What do they notice? What part of the dandelion are they using? What are they noticing by using that part of the dandelion?
- Have students rearrange their shape - now they fill in that shape. What are students noticing? Are they understanding the outcome? Listen to the discussion among the students. Has anything changed? Or not?

CLOSURE

- One possibility is to have a sharing circle.
 - Have students come and sit in a circle on the grass.
 - Discuss: What they noticed about 'area', and the use of their units

Following the discussion, go on a walk around the playground or the park and discuss concepts of environment. Where are we noticing more dandelions? Where are we noticing fewer? Why do you think that is?

OTHER CURRICULAR CONNECTIONS

Science:

First Nations, Métis, and Inuit hold understandings of Earth systems that sustain life, including that all things are interconnected.

Many First Nations, Métis, and Inuit practice traditional methods of conservation, including taking only what is needed.

ELAL:

Oral Language: Speaking and listening with Respect, songs about dandelions

Writing: Journal writing

Reading: Dandelion books

FLAL:

Le cercle de la parole des Premières Nations, des Métis et des Inuits inclut des consignes qui font partie d'un protocole.

Faire ressortir et discuter des messages véhiculés dans des traditions orales provenant des communautés des Premières Nations, des Métis ou des Inuits et de la francophonie.

Art:

Drawing Shapes