About the Art / Indigenous Elements
Line; Shape; Colour; Texture; Value;

Principles:
Contrast; Repetition and Rhythm Variety

Encourage the students to examine this stained-glass artwork and notice that it is a picture of a window and that inside the window there are 4 pictures, or views. Ask them what a view is. Have them give an example.

Ask them to:
1. Point out the sections that are part of the square frame?
2. Point out the four different sections in the center of the square frame.
3. Start in the bottom right (the one which looks a bit like a ladder). This is the South East direction. Describe that illustration.
4. Describe the illustration in the bottom left section (South West) then do the top left (North West) and the top right section (North East). These 4 sections have a resemblance to the Indigenous Medicine Wheel and its four directions.
Inform them that the artist actually drew 36 scenes of this bridge. Ask them, “Why do you think the artist put four views in one window?” Inform them that

5. When you ‘read’ and interpret this art piece, and all the ones to follow in this unit, you are doing the same as Indigenous people. They ‘read’ their wampum belts.

6. The Indigenous, when reading the belt and retelling its history, are using the same actions you are doing by retelling the story of this art.

Explore the elements and principles of design by asking the students

1. Are most of the lines geometric or organic?
2. Find as many examples as you can of the following types of lines: horizontal, vertical, diagonal, short, long, thin, thick, organic, geometric.
3. How does an artist choose the colours? Give at least one example of a warm tint, a cool tint.
4. What part of the stained-glass picture looks closest to you? Which part looks farthest away? How did the artist make that happen?
5. Is the texture real or illusionary? How can you tell?
6. What part of the art looks really dark? Really light? Which one is your eye drawn to most?
7. Do you think that the trees are really tall or really short? What makes you think that?
8. There is a lot of repetition happening in the square frame parts. Is it repetition of colour or shape or both? Give an example of random repetition and an example of regular repetition.
9. Use a piece of paper to cover part of the art so that you only see what is happening in the foreground. What details do you notice that you did not notice before?
10. Use two pieces of paper so that you only see the middle ground. What details do you notice that you did not notice before?
Encourage students to understand that sometimes people see things differently.

1. Do you and your family ever go for walks, or drives, where there are bridges? Is that a daily activity?
2. Do you think this is a modern-day bridge or a bridge from long ago? What helps you make that decision?
3. The oldest covered bridge is the West Montrose Covered Bridge in the region of Waterloo. The horse and buggy were the way people travelled at that time. In the winter, instead of changing tires on a car, they would exchange the wheels for sleigh runners. Why would people have to be hired to shovel snow onto the bridge during the winter?
4. The first covered bridge was built in 1835 but is no longer around. Since it was made of wood what do you think might have happened to it?
5. Which do you think would more likely require lighting on the inside: bridges of long ago or today’s bridges? Why? What kind of lighting would have been used then? Now?
6. Blackfriars is also one of the oldest bridges constructed. It was built of wrought iron in 1875. Compare Blackfriars Bridge with the West Montrose Bridge.
7. Since all three of those bridges were built in the 1800s how did people cross those bodies of water before that?
8. Why do people use bridges?
9. How would building a bridge change the settlements of the time?
10. Why did settlements build near bodies of water?
11. When settlements were built by Europeans near those water how would this affect the First Nation people originally living there?
12. How did building a bridge affect the environment in the area?
13. How did building a bridge affect the animals in the area?
14. What major challenges would the people encounter when trying to build a bridge over a large span of water?
15. What major physical features would they encounter?
16. How would climate affect the building of a bridge?
17. Who builds bridges? What animals can build bridges?
18. What is the season and climate shown in this stained-glass art? How do you know?
19. What kind of trees are these? Are there the same kind of trees all over the world? Why not?
20. What is the nearest bridge to where you are now and what body of water does it span?
21. Research and discover the largest bridge in Canada; the narrowest bridge; the widest bridge.

<table>
<thead>
<tr>
<th>Literacy</th>
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</thead>
<tbody>
<tr>
<td><strong>Oral</strong>: 1.6 connect to experience; 1.8 identify point of view; Reading: 1.1 read variety of text; 1.8 express personal opinions; <strong>Writing</strong>: 1.1 identify purpose and audience; 1.2 generate ideas; 1.3 gather information; 1.4 sort information; 1.5 order main ideas; 2.1 write short text; 2.5 identify point of view and support; 2.7 make revisions; 3.8 produce published pieces</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How to fold a paper into quarter sections:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use a regular piece of blank paper and fold it in half. Open it. Fold it in half the other way. Open it. When the paper is open there should be four blocks.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How to create a mini map:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Place the letters SE at the bottom of the South East block; Place the letters SW at the bottom of the South West block; Place the letters NW at the bottom of the North West block; Place the letters NE at the bottom of the North East block</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How to use quarter sections to define characteristics of their home:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. In the SE block write at least 4 words that would describe your bedroom at home. Don’t forget to include how many people share that bedroom.</td>
</tr>
<tr>
<td>4. In the SW block write 4 or more words that would describe another room in your home.</td>
</tr>
<tr>
<td>5. Now think of the year 1795. Do numbers 3 and 4 again only picture yourself living in that year.</td>
</tr>
<tr>
<td>6. In the NW block write 4 or more words that would describe your bedroom in 1795. Don’t forget to mention who’s sharing the room with you.</td>
</tr>
<tr>
<td>7. In the NE block write 4 or more words that would describe another room in your home.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Check with three people in your group. For your today house:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did everyone in your group choose the same words to describe your room? Can everyone in your group connect to the same experiences? Why or why not?</td>
</tr>
<tr>
<td>2. Does everyone always live in the same kind of house? What if you lived in a house in another country? Would the kinds of rooms be the same? How would they be different?</td>
</tr>
</tbody>
</table>
3. What if you were describing your house during a holiday would the rooms look the same? Why not?
For your 1795 house:
4. What major differences did you notice with the homes of 1795?
5. How would where you were living at that time make a difference?
6. How would the time of year make a difference?
8. Each person in your group of 4 should choose one of the people mentioned in question 7 and write answers based on that character’s life.
9. What if you were describing either of the houses during a holiday would the rooms look the same? Why not?

Write a poem using the 4 things that you saw in each room. Each verse starts with the room you are describing. Write 4 words of things you saw in that room and describe what they are for. The poem should have 4 verses: one verse for today bedroom and one verse for the today other room; one verse for 1795 bedroom and one verse for the 1795 other room.

Here is an example of one verse.

My Bedroom
My bed - something to sleep on all by myself
My books - something to read quietly under the glowing electric lamp
My clothes - something to model though all 7 rooms in my house
My computer - something to use for my research project

Explain to the students that when they wrote this poem, they connected it to their personal experiences. When the Indigenous created their wampum belts they connected them to their personal and community experiences.

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**Science**

**Energy:**
- 1.1 natural forces affect structures;
- 3.2 force is push or pull

**Earth**
- 1. impact of different soils; 3.3

Encourage a discussion about bridges.

1. Have you ever walked through a bridge? Which part is the strongest part of a bridge? Why do you think so?
2. Describe the structure framework of Blackfriars Bridge.
3. Describe the structure framework of the following bridges: wooden logs, stone and dirt bridge, stone arch bridge, and wood suspension bridges.
interdependence between living and non-living things; 3.4 soil as home

**Structures:**
1.1 stability; 1.2 structures affect environment; 3.1 define structure framework

**Systems:**
1.1 plants importance to humans; 1.2 impact of humans on plants; 3.5 use of plants; 3.6 plants and animals depend on each other;

| 4. How does the type of soil affect the building of a bridge? |
| 5. To make a bridge you have to clear away part of the environment. Which animals, including those found within the soil itself, would lose their homes? How are those animals helpful to humans? Where would those animals go? |
| 6. Which plants would be affected? What might be the result if those plants were the kind used by Indigenous people for medicines? |
| 7. How would the loss of plants affect the lives of animals? |
| 8. Bridges usually span over bodies of water. If there was no bridge how could you travel over that body of water in the different seasons? |

**Math Numeracy**

- Estimate; count whole numbers; counts by 2s; use base 10 blocks

**Geometry**

- Identify geometric shapes; identify right angles; identify angles greater than or less than right angles; describe pictures with 2 dimensional shapes; explain use of 3 dimensional figures; use relative locations; use of symmetry

Help the students discover that math is found in everyday items by guiding them through the following suggestions.

1. Find several examples of right angles in Ted Goodden’s art piece.
2. Find examples of angles that are larger than a right angle.
3. Find examples of angles that are less than a right angle.
4. What shape is the painting? How many right angles are there in a square? In a rectangle?
5. Try to find an example of vertical, horizontal, and diagonal symmetry lines.
6. What two-dimensional shapes are used are in the painting? What three-dimensional shapes are used to build bridges?
7. There are lots of mini rectangles. Estimate: do you think there are more or less than 100 mini rectangles in this stained-glass art? Estimate how many rectangles there are on one side of the square. Count them by twos. How many in total?
8. Use some base 10 blocks to show the total number of mini rectangles.
9. Look at the paper where you wrote at least four things you saw in each room. Describe the location of each object. Use directions like beside; 2 steps to the right; over by the window etc.
10. What two-dimensional shapes are used are in the painting? What three-dimensional shapes are used to build bridges?
# Art
1.1 create 2 dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 express personal feelings; 3.1 identify variety of visual art form; 3.2 identify art from diverse communities

### Repeat the teaching process of folding a paper in quarters.
1. Use a regular piece of blank paper and fold it in half. Open it. Fold it in half the other way. Open it. When the paper is open there should be four blocks.

### Repeat the teaching process of making a mini map.
2. Place the letters SE at the bottom of the South East block; Place the letters SW at the bottom of the South West block; Place the letters NW at the bottom of the North West block; Place the letters NE at the bottom of the North East block

3. In the SE block draw a picture of you in your today bedroom. Remember to apply the use of foreground, middleground, and background to give depth to your work.

4. In the SW block draw a picture of you in your other today room.

5. In the NW block draw a picture of you in your 1795 bedroom.

6. In the NE block draw a picture of you in your other 1795 room.

7. Colour your pictures using wax crayons, pencil crayons, markers, gel pens, or chalk pastels. Think about which medium would work the best.

8. What are things that are the same and things that are different between your work and Ted Goodden's stained glass artwork? How could you make your frame look more like stained glass?
**YARD SCENE # 1** Cross-Curriculum Lesson Plan Grade 3

<table>
<thead>
<tr>
<th><strong>About the Art</strong></th>
<th>At first Brian Jones liked to make his paintings look like real people and real things. Then he changed his painting style.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elements</strong></td>
<td>Guide the students through observation of this painting by directing them through the following.</td>
</tr>
<tr>
<td>Line.</td>
<td>1. Look at the people in this painting. Look at their shapes and sizes of their bodies, arms, legs, and heads. What makes them look real? What makes them look not real?</td>
</tr>
<tr>
<td>Shape; Colour;</td>
<td>2. Where are the horizontal lines, vertical lines, thick lines, thin lines, short lines, and long lines?</td>
</tr>
<tr>
<td>Texture; Value;</td>
<td>3. Which are more popular: organic lines or geometric lines?</td>
</tr>
<tr>
<td><strong>Principles:</strong></td>
<td>4. Do any of the shapes overlap other shapes? How does this help you to discover distance?</td>
</tr>
<tr>
<td>Contrast;</td>
<td>5. What about the size of the people? How does this help you to determine distance?</td>
</tr>
<tr>
<td>Repetition and</td>
<td>6. Use a piece of paper to cover part of the art so that you only see what is happening in the foreground. What details do you notice that you did not notice before?</td>
</tr>
<tr>
<td>Rhythm Variety</td>
<td>7. Use two pieces of paper so that you only see the middleground. What details do you notice that you did not notice before?</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Before teaching ask students what type of gardens there are today and where are they most often established. Ask if money plays a role and does weather/climate play a role?</td>
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<td>----------------------------------------------------------------------------------</td>
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<tr>
<td></td>
<td>1. Look at the brick building in this art. What do you think is the purpose of this building?</td>
</tr>
<tr>
<td></td>
<td>2. When do you think that this building was built 1750, 1800, 1850, 1900, 1950, 2000, 2020? What makes you think that.</td>
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<td></td>
<td>3. They did have brick buildings in 1850 but were the bricks made the same way as they are today? Which ones would be stronger? Why?</td>
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<tr>
<td></td>
<td>5. Is it more likely that stores or homes were made with bricks back then? How about now?</td>
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<td></td>
<td>6. What would be the challenges of getting bricks in 1850? Who would make the brick? Who would build the houses?</td>
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<td>7. Do you think this building has one floor level or multiple floor levels? Compare that to the homes of 1850.</td>
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<td>8. Would there be more brick buildings in the cities or in the country farmlands? What about today?</td>
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<td></td>
<td>9. Why is brick a good substance to use for buildings?</td>
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<td></td>
<td>10. Who works in gardens? What tools might this person use in 1830 compared to tools used in 2020?</td>
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<tr>
<td><strong>Science</strong></td>
<td>Establish which animals are local animals and which animals would not be found in the area where you live. Establish which kind of animals would have been local in 1810. It would be beneficial to have the three different kinds of soil visible to the students and actually do experiments to see how they act when wet and when dry. A discussion on herbs would be beneficial. It would be worthwhile for the students to pantomime working in a garden so they could experience the benefits for the mind, body, spirit, and emotions.</td>
</tr>
</tbody>
</table>
| **Earth** 1.1 impact of different soils; 1.2 impact of human action on soils; 2.4 composting; 3.4 soil as home; 3.2 additives in soil; **Systems** 1.1 plants importance to humans; 3.2 identify major parts of plants; 3.5 use of plants; 3.7 grow plants for food **Structures** 1.1 stable structures; | 1. If a gardener was walking in the plants what animals to you think that he might encounter in 1810 compared to 2020?  
2. How does a garden help people mentally, spiritually, physically, and emotionally?  
3. Do all families today have gardens? Why or why not? What about in 1810?  
4. Who do you think have more food gardens, people in the city or people in the country? Why do you think that? What about in 1810?  
5. What parts of the plant do you think are the most important? Why? Does it depend on the kind of plant?  
6. Why do you think if was important that the First Nation people understood a lot about plants? Why do you think it was important to the settlers that the Indigenous people shared this knowledge?  
7. Why is it important to know about different kinds of soil when you are planning to farm and grow food? Which of the following three do you think would make the best farmland: |

11. In 1830 who would have flower gardens and who would have food gardens? Compare the size of the gardens then and the size of the gardens now.  
12. Why would people be dependant on food gardens? Why are people not so dependant on food gardens in the year 2020? How did the coronavirus encourage people to think differently?  
13. In the past a lot of settlers depended on the First Nation people to teach them about good plants to use for medicine and for food? What plants do you think would be in a settler’s garden? Where would First Nation people gather their plants? What could they teach the settler’s about storing plants? How come First Nation people knew this information?  
14. Compare the style of clothing in 1830 to that in the painting.  
15. How did building brick buildings affect the plants and the animals in the area
<table>
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<th>Math Numeracy</th>
<th>Geometry</th>
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<td>Estimate; count whole numbers; use base 10 blocks</td>
<td>Identify geometric shapes; identify right angles; identify angles greater than or less than right angles; describe pictures with 2 dimensional shapes; explain use of 3 dimensional figures; use relative locations;</td>
</tr>
<tr>
<td>It would be beneficial to have a collection of different types of houses, triangles, and mathematical shapes on a visible screen.</td>
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</tr>
<tr>
<td>1. Find several examples of right angles in Ted Goodden’s artwork.</td>
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<tr>
<td>2. Find examples of angles that are larger than a right angle.</td>
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<tr>
<td>3. Find examples of angles that are less than a right angle.</td>
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</tr>
<tr>
<td>4. What shape is the painting? How many right angles are there in a square? In a rectangle?</td>
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<tr>
<td>5. What two-dimensional shapes are used are in the painting? What three-dimensional shapes are used to build buildings like the one in the painting?</td>
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<tr>
<td>6. There are lots of bricks painted. Do you think that there are more than 100? 200? 500? 1000?</td>
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<tr>
<td>7. Assume that there are 479 bricks visible in the painting. Use some base 10 blocks to show that number</td>
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<tr>
<td>8. Describe the location of each person, the plants, the windows, and the trees. Use directions like beside; 2 steps to the right; near the edge, in the foreground etc.</td>
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<tr>
<td>9. Think of three other buildings that you could live in today that are different from the one in the painting. Add three more types of houses from the 1800s.</td>
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<tr>
<td>10. Make a chart using each of the buildings as a heading.</td>
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<tr>
<td>11. Ask several of your friends which ONE house they would choose to live in.</td>
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</table>

a) sandy soil which doesn't stick together, and drains easily and quickly; b) loam soil which sticks together, drains well, and holds water and nutrients; or c) clay which has poor drainage, feels almost like plastic when wet, and dries very hard?
8. What kind of soil do you think was used to grow the plants in the painting?
9. How did farming affect the environment (positively and negatively)?
10. Why was composting very important back then? Now?
11. Why is good farming land also good for some animals?
12. What do we know about the importance of soil protection (pesticides, salt) that the people of 1810 did not know?
13. What season is it in the painting? Those plants look very healthy. What made them that way?
14. What would be needed to make the building in this painting a stable building?
15. Who build buildings today?
16. Who built buildings in 1810?
| 1. Which house is the most popular? Least popular?  
2. If you could design your own modern house which shape would you use for the main design: triangle, quadrilateral, pentagon, hexagon, heptagon, or octagon? Why?  

| Before teaching try to have various scenes from everyday living in the early 1800s.  
1. There seems to be three people in this family. They seem to live in a city, much like London, Ontario even though some parts of London look different.  
2. What would London have looked like in 1810? The roads? The houses? The stores?  
3. The weather seems pleasant based on the clothing they are wearing.  
4. What season is your favourite season?  
5. Write down how many people in your family and who they are. Typically, what would be the number of people in a family in 1810? (Don’t forget that grandparents typically lived in the same house.)  
6. What kind of house do you live in right now? What kind of house would you have lived in in 1810?  
7. Write down an activity you like to do today. Write down an activity you could have done in 1810.  
8. The year is 1810 and you are dreaming about the future of 2020.  
9. Write down words to help you decide what to put in your painting (or drawing if you do not have paints).  
10. Are you going to make everything look real or are you going to over exaggerate some parts just like Brian Jones did?  
11. Think about how you use line and shape and space (is anything overlapping or far away or close to you?).  
12. Illustrate your scene and have just one imagination bubble to show ONE idea of the future.  
13. Will you have anything that repeats the shape or the colour?  
14. When you paint your scene think about where your colours are dark and where there is light.  
15. What emotion is your painting trying to show? (Choice of colours.) |
| Literacy | Try to find scenes of people living everyday life in the early 1800s. Look at the chores that had to be done. Look at the food they ate and where they ate it and how many people were sharing the food. Look at the sports played back then. This is called research. |
| Oral: 1.6 connect to experience; 1.8 identify point of view; | Write a short story with lots of information about the activity you chose to compare between 1810 and 2020. Describe the activity. Describe the clothing everyone is wearing, including the footwear. Use the six senses and lots of descriptive words. Include how you were able to fit that activity into your daily schedule. Include a paragraph about the 2020 activity. |
| Reading: 1.1 read variety of text; 1.8 express personal opinions; | When you have finished writing. Have someone else read your writing to you. Close your eyes to see if you wrote what you want someone to see in their mind. If you didn't make corrections and then try it again. When you are satisfied with your writing, copy it in good and share it with someone. |
| Writing: 1.1 identify purpose and audience; 1.2 generate ideas; 1.3 gather information; 1.4 sort information; 1.5 order main ideas; 2.1 write short text; 2.4 vary sentences; 2.5 identify point of view and support; 2.7 make revisions; 3.8 produce published pieces | |
**TEA CEREMONY** Cross-Curricular Lesson Plan Grade 3

<table>
<thead>
<tr>
<th>About the Art Elements</th>
<th>Bernice Vincent liked to make her painting look real but in a different way and from a different point of view. Sometimes she would even add tiny, dried flowers, thistles, stems, and seeds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line;</td>
<td>Encourage the students to discover the use of the elements and principles of design.</td>
</tr>
<tr>
<td>Shape;</td>
<td>1. Look at her painting. Find a horizontal line; vertical, diagonal, organic, geometric, long, short, thin, and thick line.</td>
</tr>
<tr>
<td>Colour;</td>
<td>2. If you removed the kettle, teapot, spoon, and teabags from the stove where would you put the following lines of symmetry: vertical, horizontal, and diagonal? Examine the floor the same way.</td>
</tr>
<tr>
<td>Texture;</td>
<td>3. Find something that is overlapping (in front of, on top of) and explain which item is further away from you. If you look straight down at the painting can you see the depth more clearly?</td>
</tr>
<tr>
<td>Value;</td>
<td>4. Are the cups empty or full?</td>
</tr>
<tr>
<td>Principles:</td>
<td>5. What is the lightest part of the painting? the darkest part of the painting?</td>
</tr>
<tr>
<td>Contrast;</td>
<td>6. How does Bernice Vincent make use of space in her painting? Are there huge gaps, lots of crowding? Is it a tidy space or a messy space?</td>
</tr>
<tr>
<td>Repetition and Rhythm</td>
<td></td>
</tr>
<tr>
<td>Variety</td>
<td></td>
</tr>
</tbody>
</table>
7. How does covering part of the painting help you see the foreground more clearly? What details did you notice that you didn’t notice when you viewed the full painting? Use your hands and arms so that you only see the middle ground, then do the same for only viewing the background. Which section has the most to see?

8. How does the artist give texture to the tea bags? The floor? The objects?

9. For texture if you touch something you can feel the consistency of a surface. How do you think these objects feel in real life? Is the painting real texture or implied texture?

10. Explain how pattern is used in the flooring.

11. How does the variety of items painted provide a sense of interest for the viewer?

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Social Studies
/ Indigenous

A1.1 activities in everyday life; 1.2 compare roles and challenges from then and now; 1.3 key components of Canadian identity; 2.1 major challenges in the past; 2.2 dependence on First Nation knowledge; 2.4 European effect on Indigenous peoples; 2.5 different groups faced different hardships; 2.6 use appropriate vocabulary; 3.3 major factors shaping settlements; 3.4 major challenges facing communities

The Boston Tea Party happened just before the era the grade 3s are studying. You may want to include a bit about that historical event before asking the following questions:

1. Is it more Canadian to have a cup of tea or to have a cup of coffee? Why do you think that?


3. Based on that same group of people who do you think actually made the tea?

4. In the 1800s Indigenous people made their own tea. What kind of plants do you think they used? How would they protect those plants? Why did the Europeans not drink the same tea?

5. How long would it take people to heat the water a long time ago? How did the groups listed in question #2 heat the water? To protect the forest what would some groups have to check after heating the water?

6. Who drinks tea today and how long does it take to make tea? How is it made?

7. Today at ceremonies, like PowWows, birthday parties for a 7-year-old, or church celebrations, would you serve tea? something else? tea and something else? Why?
### Science

**Earth** 1.1 impact of different soils; 1.2 impact of human action on soils; 2.4 composting; 3.1 identify different soils; 3.2 additives in soil; 3.3 interdependence between living and non-living; 3.2 additives in soil; 3.3 interdependence between living and non-living things; 3.4 soil as home;

**Systems** 1.1 plants importance to humans; 1.2 impact of humans on environment; 2.3 compare parts of plants; 3.1 needs of plants; 3.2 identify major parts of plants; 3.5 use of plants; 3.6 interdependence of plants and animals

It would be beneficial to have a pitcher of water, a tray, a cup, a kettle, and a box of teabags on display.

Ask the students:

1. How do you make a cup of tea?
2. Should tea be hot, or should it be cold?
3. What happens if people leave the teabags brew in the water too long before taking the teabags out?
4. Today what things do you put in tea to make it taste different? What do you think they might have added to their tea in the early 1800s? Where do we get sugar and cream or milk? In the 1800s where did they get their sugar and cream or milk and who would prepare all the things needed to have tea?
5. When boiling water to make tea, either then or now, what safety steps do you need to follow?
6. Tea leaves grow on shrubs and those shrubs can grow up to 9 feet. Why do you think people like to trim the shrubs down to 1 to 2 metres?
7. Tea shrubs don’t like their roots to be too wet, but they still want nutrients. What kind of soil, or combination of soils, do you think they prefer? (sandy, loamy, clay)
8. Canada’s average elevation is about 500m. If the tea plant prefers shaded areas with elevations between 2100 and 2700 metres why can tea grow in China and not in Canada?
9. Why do you think tea shrubs like to grow on the edges of forests? What protection can a forest provide?
10. Why do you suppose scientists recommend eating the leaves instead of using them to make tea? Though the oil from a tea seed is edible it must be refined first. Why do you think that is so?
11. Although tea flowers are edible why should people not just automatically go ahead and eat them before finding out about the qualities of the tea flowers?
12. Do you think teabags should be composted? Why or why not?
13. Why is it good for insects when plants are composted? How are the insects helping the plants?

### Math

**Numeracy**

Estimate; count whole numbers; use base 10 blocks; $ to $10; multiples of 25; count by 1s, 2s, 5s, 10s and

Before teaching recall geometric vs non-geometric shapes.

Ask the students:

1. In the painting which shapes are geometric shapes and which shapes are non-geometric shapes?
2. Where are there right angles? Angles greater than and less than right angles?
3. Describe the relative locations (beside, near, under, over
<table>
<thead>
<tr>
<th>100s; addition two-digit numbers; estimate;</th>
<th>etc.) of the teapot, teabags, cups, spoons etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geometry</td>
<td>4. Where is there symmetry in this painting?</td>
</tr>
<tr>
<td>Identify geometric shapes; identify right angles; identify angles greater than or less than right angles; describe pictures with 2 dimensional shapes; explain use of 3 dimensional figures; use relative locations;</td>
<td>5. The urn for making tea holds 24 cups of tea. How many different ways could you have different numbers of people share equal amounts of tea?</td>
</tr>
<tr>
<td></td>
<td>6. Today we have used 29 teabags. Yesterday we used 42 teabags. There were only 100 teabags altogether. How many teabags do we have left for tomorrow?</td>
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<td></td>
<td>7. Each of your own family members want 2 cups of tea. How many cups of tea need to be brewed? Now they want 5 cups of tea each. How many cups of tea need to be brewed?</td>
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<td></td>
<td>8. A box of tea has 72 tea bags. You just bought 4 boxes. What’s the total number of teabags? Use your base 10 blocks to show that number.</td>
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<tr>
<td></td>
<td>9. If a cup of tea cost $2.75 how many different ways could you use coins to pay for that cup of tea</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art</th>
<th>Recall what it means to have tea and how it is different in different families and/or different countries or in different eras.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 create 3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 express personal feelings; 2.2 explain how to use elements and principles to communicate 3.1 identify variety of visual art form; 3.2 identify art from diverse communities</td>
<td>Ask the students:</td>
</tr>
<tr>
<td></td>
<td>1. Where would be the best place to have 'tea'? Does this mean drink real tea or 'have a picnic”?</td>
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<td></td>
<td>2. This can be something real or something imaginary. It can be as fancy, or as plain, as you like.</td>
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<tr>
<td></td>
<td>3. Who would be at the 'tea'? Today? In 1840 (think of which community group you are considering?)</td>
</tr>
<tr>
<td></td>
<td>4. What activities would happen at the tea? Today? In 1840?</td>
</tr>
<tr>
<td></td>
<td>5. What is there to eat? Is it a fancy picnic tea with lots of fancy pastries? Is it tea with sandwiches? Is it tea with a full course meal? What is the tea? What is there to drink? Today? In 1840?</td>
</tr>
<tr>
<td></td>
<td>6. If the tea is a picnic would people sit on a blanket, on a picnic table, on a tree house floor, in a car, or somewhere else? Today? In 1840?</td>
</tr>
<tr>
<td></td>
<td>7. Would people be sitting down, standing up, or laying down?</td>
</tr>
<tr>
<td></td>
<td>8. Are there any bugs or animals near the picnic? What part of your picnic can you share with them? What things would not be good for the animals? Today? In 1840?</td>
</tr>
</tbody>
</table>
If it is nice outside use pebbles, stones, twigs to create a picnic scene. Consider carefully if it is today or in 1870.

Maybe the little stones can be people, maybe they can be food. Maybe the grass can be the blanket. Think how that picnic would look like if you were a bird.

If you are inside maybe use Lego blocks, or buttons, or pencils, or torn pieces of paper to create a picnic scene. Think how that picnic would look like if you were standing up and looking down on it.

Explain your picnic to others.

<table>
<thead>
<tr>
<th><strong>Literacy</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Oral:</strong> 1.6 connect to experience; 1.8 identify point of view;</td>
</tr>
<tr>
<td><strong>Reading:</strong> 1.1 read variety of text; 1.8 express personal opinions;</td>
</tr>
<tr>
<td><strong>Writing:</strong> 1.1 identify purpose and audience; 1.2 generate ideas; 1.3 gather information; 1.4 sort information; 1.5 order main ideas; 2.1 write short text; 2.5 identify point of view and support; 2.7 make revisions; 3.8 produce published pieces</td>
</tr>
</tbody>
</table>

Have samples of simple acrostic poems and discuss them with the students. Brainstorm words that could be part of a tea/picnic/outside event.

Encourage the students to think of one food or drink that would be at the picnic and to put the letters of the word one above the other in preparation for creating an acrostic poem.

Ask them to:
1. Think of a word to describe the taste of that food.
2. Look at the example of an acrostic poem and use that for guidance.
3. Repeat the exercise but this time make it about teatime in 1870.
4. When your poem is finished read it out loud. Change whatever you need to change and then read it out loud to someone else.
5. When you are happy with it make a good copy.

**EXAMPLE:**

I like Tea Time  
S almon is tasty  
A pples are crunchy  
L ettuce is crispy  
A vocados are creamy  
D anishes are sweet  
Yummy, yummy for my tummy  
Tea Time
Eric Atkinson liked paying attention to the water, weather, and the light around Lake Huron. Sometimes he liked to use sandpaper and sand in his paintings.

1. Look at his painting. Find a horizontal line then the following lines: vertical, diagonal, organic, geometric, long, short, thin, thick. Is there a line that is somewhat diagonal? What kind of line is the most popular?
2. Find something that is overlapping (in front of, on top of) and explain which item is further away from you. Why do you think that?
3. What is the lightest part of the painting? the darkest part of the painting?
4. Are there more geometric lines or more organic lines or the other way around?
5. Are the objects close together or is there lots of space between them? Does this make it a tidy painting?
6. Look really closely at this painting. Are there any trees or buildings? Are they close up or far away? How can you tell?
7. Use your whole arm to follow the path of the ‘ribbon’ across the bottom of the page. How does this make you feel? Is this an organic line or a geometric line?
8. Where does the ‘ribbon’ start?
9. Where does it end? How can you tell?
10. Are the colours bright and bold or more muted, dark, and natural? How do these colours make you feel?
11. Where are the light spots and where are the dark spots? Why does he use them that way?
12. Give an example of implied texture.
13. Give examples of strong contrasts (Opposites... maybe space use? Colour? Size? Type of line?)

**Social Studies**

**A1.1 activities in everyday life; 1.2 compare roles and challenges from then and now; 1.3 key components of Canadian identity; 2.1 major challenges in the past; 2.4 European effect on Indigenous peoples; 2.5 different groups faced different hardships; 2.6 use appropriate vocabulary; 3.3 major factors shaping settlements; 3.4 major challenges facing communities**

1. Have you ever been to the beach? Who travels with you? Is it a family event? Why do people go to a beach? Is it always for swimming?
2. In the middle 1700s the seashore was considered a very dangerous place because of all the shipwrecks. Around the 1840s it started to be a place of escape from the hard city life. Who do you think would be most likely to take advantage of this escape, the European Upper Class, the settler, the farmer, the First Nation, The Métis, and/or the factory workers? Support your decisions with facts.
3. What kind of items do you bring to the beach? In 1840 what do you think people brought to the beach? Who carried the items and then cleaned up at the end of the event?
4. Often you either walk, bike, or travel by car to the beach, stay for a couple of hours or most of the day and then return home. How long do you think a trip to the beach lasted in 1840? Where did people stay?
5. Describe your bathing suit. In 1840 women wore bathing gowns in the water. They were ankle length and had full sleeves. The material was either wool or flannel. The men wanted to make sure that the woman’s decency was never threatened. The material used could not be transparent when wet. Why do you think the gowns had weights sewn into their hems?
6. The men didn’t have it so easy either. They wore form-fitting suits made of wool. The suits had long sleeves as well as full legs (like the long johns of today).
7. Describe how it would feel to go into Lake Huron with this type of clothing.
8. Do you think that there were a lot of good swimmers at that time? Why or why not?
9. What do you think happened to the land use around beaches once people started going to the beach for ‘vacations’?
10. What happens when too many people go to the beach?
11. When the Coronavirus was here the beaches were closed. If they are open again how can we treat beaches with more respect and also keep ourselves safe?
12. Where are the beaches that are closest to London, Ontario or closest to your place?
13. Which countries have the most beaches? Which state in the United States is the most popular for people to go on vacations? Why? What financial problems will those beaches have now that fewer people go to them?

**Art**

**Science**

1.1 create 3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 express personal feelings; 2.2 explain how to use elements and principles to communicate 3.1 identify variety of visual art form; 3.2 identify art from diverse communities

Materials needed are 3 pieces of coloured paper (all the same size works well); some glue, various colours of other types of coloured paper (magazines, construction, printing, newspaper etc.) and a drawing crayon. Choose any colour of 3 papers that you like but they should each be a different colour.

1. Choose one of the papers. That will be the colour farthest away. Lay the paper on the table. This is the sky. It doesn’t have to be the real colour of a sky.
2. Choose a second paper. It should be a different colour. Tear a strip off along the top. (Don’t throw these strips out as you may want to trade colours with someone else.) There should be more land showing then what is in Eric Atkinson’s painting as your main focus will be on the sand (beach part). The last piece of coloured paper will be the water so you can add bathers in that part as well.
3. Layer the coloured paper one on top the other to give some depth to your artwork. Glue the pieces together but don’t use too much glue and make sure that the bottom edges are somewhat even. Let it dry.
4. Assume that the season is summer, and the year is 1840. Find extra papers: magazine papers, construction paper, newspaper, anything that you can use to create the characters on the beach.
5. With the extra papers create people in their new 1840s swimsuits, umbrellas to protect their fair skin, picnic baskets, people on the sand, people in the water.
6. Your scene might even have the 1840s vessels on the water.
7. Don’t forget that Ontario trees, and other plants as well as Lake Huron sea creatures could be part of your scenery.
8. Glue your items to create a joyful and interesting new way to vacation at the seashore.
| **Science** | 1. What’s the best kind of beach sand? Why? What creatures would you find if you dug in the beach sand?  
2. How do Lake Huron waves washing upon the shore alter the shoreline?  
3. How did all those 1840s people suddenly going to Lake Huron’s shores change the landscape?  
4. How were the plants and animals from that area affected? |
| --- | --- |
| **Earth** 1.1 impact of different soils; 1.2 impact of human action on soils; 3.3 interdependence between living and non-living things 3.4 soil as home;  
**Systems** 1.1 plants importance to humans; 1.2 impact of humans on environment; 3.6 interdependence between plants and animals;  
**Energy** 1.1 natural forces affect structures; | 1. Four is a good Indigenous Number.  
2. It means the four directions: East, South, West, North.  
3. Your artwork is like a mini map of a place. Put E for east on your map, S for south, W for west, and N for North.  
4. It is always great to have the four directions on a map.  
5. The Indigenous people are really connected to the land. Water is very, very important to them. What do they tell us about taking care of water?  
6. Do you know about Water Walkers? If not, do some research! |
DAFFODILS Cross-Curricular Lesson Plan Grade 3

| About the Art | Jack Chambers liked to take photos. He would draw grid squares over the photograph. He would copy the picture by looking at one little square on the photograph and draw it in the same bigger square on his big painting.
| Elements | Jack Chambers liked to paint everyday things like flowers, plants, and toys. When he was older, he wanted to have his paintings look very real.
| Principles: | 1. What are used more in this picture, organic lines, or geometric lines? Vertical lines or horizontal lines? Thick lines or thin lines? Long lines or short lines? Give proof.
| Contrast; Repetition and Rhythm Variety | 2. Which colours are used and how do those colours make you feel?
| | 3. How can you tell which picture is in the front and which flower is in the back?
| | 4. How does Jack Chambers make use of space to put the emphasis on the flowers?
| | 5. How can you use the paint to help you show shadows?
<p>| | 6. How do you know these flowers are on a table of some sort? |</p>
<table>
<thead>
<tr>
<th>Social Studies</th>
<th>Science Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1.1 activities in everyday life; 1.2 compare roles and challenges from then and now; 2.2 dependence on First Nation medicines; 2.4 European effect on Indigenous peoples; 2.5 different groups faced different hardships; B1.1 connection between physical features and land use; 1.2 connection between physical features and employment; 2.5 different groups faced different problems; 3.4 main types of employment</td>
<td>Earth 1.1 impact of different soils; 1.2 impact of human action on soils; 2.4 composting; 3.1 identify different soils; 3.2 additives in soil; 3.3</td>
</tr>
<tr>
<td>1. Does anyone in your family like to pick flowers? Why do you think some families bring cut flowers into the house?</td>
<td>1. How would you recognize a daffodil? Where do flowers usually grow?</td>
</tr>
<tr>
<td>2. Are there special times of the year when this happens? What season can you go outside and pick flowers? Do you live in an area where that can happen? Will you get in trouble if you go outside and pick the flowers that you can see?</td>
<td>2. What kinds of little bugs live on and around flowers? Why do the bugs live there?</td>
</tr>
<tr>
<td>3. If it is the wintertime can you still get cut flowers? From where?</td>
<td>3. What do the bugs need in order to grow big and healthy?</td>
</tr>
<tr>
<td>4. If there were cut flowers in different houses in 1840s where would the flowers have come from (think of the different roles of people at that time)? Who would have picked them then taken care of them when those flowers were brought into the house?</td>
<td>4. What happens if people try to pick a flower that has bugs on it?</td>
</tr>
<tr>
<td>5. Which houses had people that were too tired or too poor to have cut flowers in their house?</td>
<td>5. How do bugs help daffodils (Think about bees.)?</td>
</tr>
<tr>
<td>6. Are there easier places and harder places to grow flowers?</td>
<td></td>
</tr>
</tbody>
</table>
| Interdependence between living and non-living; 3.2 additives in soil; 3.4 soil as home; **Systems** 1.1 plants importance to humans; 1.2 impact of humans on environment; 3.5 use of plants; 3.6 interdependence between plants and animals; 3.7 grow plants for food; | 6. How do some bugs hurt daffodils and other flowers?  
7. Why should we take care of bugs? How can we do this?  
8. If people put insecticide on the ground to get rid of bugs that eat their plants what will happen to the soil?  
9. What is the best kind of soil for growing daffodils?  
10. Are there good and bad additives that people add to the soils? What are the reasons for that?  
11. What happens if we pick too many flowers? What happens to the little insects and other creatures that depend on those flowers?  
12. In 1840 why did most people not worry about the aftereffects of picking too many flowers?  
13. What would happen to people if everyone picked all the flowers that they could see?  
14. What would happen to animals if everyone picked all the flowers that they could see?  
15. Would your rather grow flowers or food?  
16. Where should the daffodils go once, they are no longer healthy looking? |
| --- | --- |
| **Indigenous / Science**  
1.1 plants importance to humans; 1.2 impact of humans on environment; | Many Indigenous people love plants, and animals, just like Jack Chambers did. One of the plants they like the most is the strawberry. One of the creatures they admire is the bumblebee.  
1. What do bumblebees need to be healthy?  
2. How do bumblebees help plants? How do they help people?  
3. How can people help bumblebees?  
4. How can bumblebees be harmful to humans?  
5. How can humans be harmful to bumblebees?  
6. What do bumblebees have on their legs that help them carry the pollen from one flower to the next? How does that help the flower? |
| **Math / Art**  
1.1 create 2-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 express personal feelings; 2.2 | Grid paper is paper with little squares that are even. They can help to draw pictures.  
1. A piece of paper with the biggest squares are needed. 1cm grid paper is okay to use or you can use a ruler and make your own grid paper. It needs to be at least 7 blocks high and 9 blocks across. Notice how some squares have numbers and some squares have letters. It makes it easier to find your block.  
2. Look at the bee drawing before starting. Make sure you know which block you are going to start in.  
3. Notice where there are full blocks and where the lines use only part of the block. |
explain how to use elements and principles to communicate 3.1 identify variety of visual art form;

1. The easiest way to draw the bumblebee is to start on an outside square. Make sure you know what letter and what number. Find the matching block on your grid paper. Draw the same way that line goes onto a grid square on the paper.
2. Look at the grid drawing square underneath and copy that line onto the paper.
3. Keep going until you make it all around the bumblebee.
4. Add the inside details.
5. What makes the bumblebee look more real in the coloured picture? After the colouring is finished add the little line strokes so it gives the bee the little hairs. What are those hairs used for?

Use the picture to help you colour the drawing to look like a real bumblebee, just like Jack Chambers did.

<table>
<thead>
<tr>
<th>Math Numeracy</th>
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<tbody>
<tr>
<td>Estimate; count whole numbers; $ to $10; multiples of 25; count by 1s, 2s, 5s, 10s and 100s; addition two-digit numbers; estimate;</td>
<td></td>
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</tbody>
</table>

1. How many daffodils are in the vase?
2. You want to get 68 daffodils for your grandma’s birthday. If you bought 29 daffodils and your younger brother bought 16 daffodils, how many more daffodils does your mom have to buy?
3. Each daffodil cost ten cents. How much did all the daffodils cost? Is this more or less than ten dollars?
4. Count by 2 cents, until you reach how much you paid for the daffodils.
5. How many nickels would need to get the same amount?
6. How many quarters would you need to get the same amount?
7. In 1860 the following is the cost for 1/2K (so you need to double each cost to get to 1K). Estimate then calculate how many Kilograms could you get for each item if you had the cost of your daffodils?

A) Rice: 6 cents for ½ Kilogram
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<tbody>
<tr>
<td><strong>Literacy</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 identify purpose and audience; 1.2 generate ideas; 2.1 write short text; 2.7 make revisions; 3.1 attention to spelling; 3.2 use punctuation correctly;</td>
<td></td>
</tr>
<tr>
<td>1. How many words can you find that rhyme with Jack?</td>
<td></td>
</tr>
<tr>
<td>2. How many words can you find that rhyme with daffodil?</td>
<td></td>
</tr>
<tr>
<td>3. How many words can you find that rhyme with bumble?</td>
<td></td>
</tr>
<tr>
<td>4. How many words can you find that rhyme with bee?</td>
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<tr>
<td>5. Use some of the words to create either a crossword puzzle or a search-a-word puzzle. Challenge a friend to get all the answers.</td>
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</table>
|   | B) Beans: 6 cents for ½ Kilogram  
C) Sugar: 8 cents for ½ Kilogram  
D) Beef: 9 cents for ½ Kilogram  
E) Cheese: 10 cents for ½ Kilogram  
F) Bacon: 12 cents for ½ Kilogram  
G) Butter: 16 cents for ½ Kilogram  
H) Eggs: 20 cents for ½ Kilogram  
I) Potatoes: 40 cents for ½ Kilogram  
J) Coffee: $1.20 for ½ Kilogram |
|   |   |
| 7. If you only had your total amount what combination of items would you buy at the general store? |   |
**ST. JAMES CHURCH** Cross-Curricular Lesson Plan Grade 3

| About the Art Elements | Like Jack Chambers, Clark McDougall liked to take photographs. He loved to take pictures of things he saw around St. Thomas.  
Line;  
Shape;  
Colour;  
Texture;  
Value;   |
|---|---|
| Principles: | Discuss elements and principles of design by discussing the following ideas.  
Contrast;  
Repetition and Rhythm  
Variety |
| 1. What are used more in this picture, organic lines, or geometric lines? Vertical lines or horizontal lines? Thick lines or thin lines? Short lines or long lines? Provide proof.  
2. Which colours are used? Are they pure blocks of colour or is there a large range of colours because of adding white to the original colour? Give examples.  
3. In this painting how does Clark McDougall make use of the foreground, middle ground, and background to create a sense of depth? Is size also used to show distance?  
4. Why did he choose to not show shadows?  
5. How does he choose to use value (light and dark)? |
6. What effect does out-lining in black create? Draw a simple flower shape. Draw the same flower shape and then outline it in black. Which effect do you prefer?
7. What makes the building look like a church? What makes the building not look like a church?
8. How does he show if this is a city church or a country church?
9. Does this scene look like something you would see today, or does it resemble a scene from 1775 or both?
10. How does the artist create implied texture on the ground by the railroad?
11. How do you know what season it is?
12. How does he show the weather conditions?
13. What feelings does the painting instill in the viewer? Is there a sense of calm or a sense of franticness?

<table>
<thead>
<tr>
<th>Social Studies</th>
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<tbody>
<tr>
<td>A1.1 activities in everyday life; 1.2 compare roles and challenges from then and now; 1.3 key components of Canadian identity; 2.1 major challenges in the past; 2.4 European effect on Indigenous peoples; 2.5 different groups faced different hardships; 2.6 use appropriate vocabulary; 3.3 major factors shaping settlements; 3.4 major challenges facing communities</td>
</tr>
</tbody>
</table>

1. Who do you think goes to that church? Why are churches built? What is the closest church to you? Who takes care of churches? Who is the leader in a church?
2. St Peter’s parish in London, Ontario was established in 1834. The first church was built of logs. It was located at the southwest corner of Richmond Street and Dufferin Avenue. Why do you think it was constructed from logs instead of with brick?
3. At that time people often had one 'Sunday best' set of clothes. What do you think that meant? Do you think everybody at that time could afford a 'Sunday best'? Who could and who couldn’t?
4. Are church services the same everywhere? How do you think the Indigenous people felt when they were first introduced to church services? How do you think the slaves felt?
5. What is the most interesting thing about church services, celebrations, or events that you know?
6. Have you ever attended a church event? How many people were there? How would things be different now as a result of the Coronavirus?
7. What size of families do you think live near the church in the painting? What makes you think that?
8. How would these families travel to church in each of the four seasons?
9. What is the most interesting thing about church buildings that you know?
10. Why are churches important? How can they help to keep people healthy? What challenges did the leaders of the
30
different churches encounter during the 2020 coronavirus event?
9. Why do you think that the church was often the community center for gatherings in 1834?
3. What role did religion play in the lives of the European settler? The First Nation people? The Métis? The farmer?

<table>
<thead>
<tr>
<th>Science</th>
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</table>
| **Energy** | 1.1 natural forces affect structures; 3.2 force is push or pull; 3.2 different kinds of power; 3.5 forces in everyday life **Structures** 1.2 environmental effect on structures 3.2 identify structure in natural environment; 3.7 improve structural strength; 3.9 forces can affect shape;  
| **Earth** | 1.1 impact of different soils; 1.2 impact of human action on soils; 3.1 identify different soils; 3.2 additives in soil; 3.3 interdependence between living and non-living things 3.4 soil as home; **Systems** 1.1 plants importance to humans; 1.2 impact of humans on environment; 3.5 use of plants; 3.8 environmental threats to plants and animals  
| Have the students look at the painting and list different things that would be found in nature. Ask them what kind of animals, and plants, would live in the area. Ask them what kind of animals, and plants, would not be expected to be found there. Then work through the following suggestions.  
| 1. What kind of natural forces would affect the shoreline of Lake Huron? What would happen if the wind were really forceful every day?  
| 2. What is the best kind of soil to have for beaches? Sandy, loamy, or clay? Why?  
| 3. What is the best kind of soil for growing flowers? Why?  
| 4. What is the best kind of soil for laying down a railroad? Why?  
| 5. When trees grow near the shoreline but on a higher piece of land, what causes that land to erode? Lots of people want beautiful long lawns down to the beach so they can see the water. What happens to that long beach when the waves crash onto the shore? What should people plant to prevent this erosion and why does that help?  
| 6. What will happen if people keep scraping away the topsoil and putting fresh sand to make the beaches 'pretty'? What would happen to the plant life and to the soil animals? (think of baby turtles)  
| 7. In 1834 factories did not worry about dumping their waste products into Lake Huron. Why was that not right? What would happen if a factory tried to do that today?  
| 8. In 1834 most boats on the great lakes were canoes and schooners. If schooners were shipwrecked why did that not cause as much environmental damage as a boat of today getting shipwrecked?  
| 9. Sometimes, when people are anxious, a walk along the shoreline will calm their inner turmoil. Why does this happen? Do you think that would work for you?  
| 10. There are 8 species of turtles in Ontario. Most of these turtles can be found on Lake Huron. Did you know that seven of these turtle species are considered to be a species at risk? Why do you think they are at risk?  
|
11. Since turtles eat dead fish and eat a lot of the plants that can clog up channels, they are an important part of Lake Huron’s ecosystem along the coast. Sadly, but importantly, their eggs help to feed shoreline animals like raccoons, skunks, foxes, opossums, and coyotes. So many baby turtles, and eggs, don’t make it to adulthood. Those that do sometimes live for over 100 years.

**Indigenous**

Some Indigenous people love to paint nature. Some Odawa, Ojibwe, and Cree paint nature, animals, and people in the Woodland Cree Style.

Which of the following are the same as Clark McDougall’s painting?
1. Woodland Cree paint scenes of nature.
2. Woodland Cree like to outline in black.
3. Woodland Cree like to use bright, bold colours.
4. Woodland Cree use solid chunks of colour with no shading or details.

**Math Numeracy**

*Estimate; count whole numbers; use base 10 blocks; use concrete materials to show decades and centuries; multiples of 25; count by 1s, 2s, 5s, 10s and 100s; addition two-digit numbers; estimate;*

1. Some turtles live for over 100 years. If a turtle were born in 1834 how old would it be today?
2. Sometimes it takes 1000 turtle eggs to create one adult turtle. How many groups of 10 in 1000? How many groups of 100 in 1000?
   1. How many days does a turtle carry on its back? There are 13 of the large blocks (they represent the 13 moons). There are 28 little blocks around its shell (they represent the number of days in the cycle of a moon). Find the total of days on a turtle’s shell.
   2. Use your base 10 blocks to show that number.
   3. When you count by 25s how close can you get to that number?
   4. When you count by 5s how close can you get to that number?
   5. When you count by 2s how close can you get to that number?
   6. When you count by 10s how close can you get to that number?
   7. Use concrete materials to show decades and centuries for 1834 and 2020.
| **Art** | Have animal tracers that just show the contour shape of Canadian animals. Clark McDougall liked to paint things that he could see around London. Each tracer should be at least the size of an adult hand with fingers not spread out. Have the students choose, and trace, the animal tracer. Have them divide the background into either 4 or 7 divisions. Colour each division a bright bold colour. The animal should be coloured a separate colour. Encourage them not to blend colours so that second coats can be given when the paint is dry.

When finished have them outline the animal as well as the separating lines in black (Like Clark McDougall) Ask them to compare their painting with Clark McDougall’s painting by pointing out the similarities and differences.

1. Ask the students which style of art they prefer and why? |
| **Literacy** | Write a colour story/poem.
1. Choose a colour.
2. Think of 5 things that are that colour.
3. Think of one characteristic about each of your 5 items.
4. Write the colour then write “is as…” and then finish the phrase. |
| **Example:** | **BLUE**
Blue is as cuddly as the blanket I snuggle into at night.
Blue is as tasty as blueberries on my hot oatmeal.
Blue is as fast as my toy car that zooms down my hallway.
Blue is as smelly as the ocean on a hot, humid day.
Blue is as bright as the sky on a perfect day. **BLUE** |

**TIM HORTON AND DONUT** Cross-Curricular Lesson Plan Grade 3

<table>
<thead>
<tr>
<th>About the Art</th>
<th>In this painting Bob Bozak painted two things: a man and a donut. Which one did you see first?</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the Art</td>
<td>1. Does Bob Bozak prefer organic or geometric lines?</td>
</tr>
<tr>
<td>Elements</td>
<td>2. Does he prefer lots of details or not too many details? Is that easier, or harder, to draw?</td>
</tr>
<tr>
<td></td>
<td>3. Which is in front, the donut or the man? How do you know?</td>
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<td></td>
<td>4. Why do you think the artist, Bob Bozak, painted the top of the donut brown?</td>
</tr>
<tr>
<td></td>
<td>5. What colour did the artist use for the hair and part of the neck? Why not use real colours? Why is the colour so dark?</td>
</tr>
<tr>
<td>Principles:</td>
<td>6. What is the dark grey that surrounds the man and the donut? What do you need to make a shadow?</td>
</tr>
<tr>
<td>Contrast;</td>
<td>7. Why is the background empty? Is that a good use of space or should he have filled in the space with something?</td>
</tr>
<tr>
<td>Repetition and</td>
<td>8. Divide the painting into foreground, middle ground, and background. How would this help you if you were trying to draw the same picture?</td>
</tr>
<tr>
<td>Rhythm</td>
<td>9. Is the donut texture real or implied? How did he use his paint to show you texture?</td>
</tr>
<tr>
<td>Variety</td>
<td></td>
</tr>
</tbody>
</table>
10. Are the colours pure or are they blended colours? If you only have the three primary colours how can you get the colours he used?

**Social Studies**
A1.1 activities in everyday life; 1.2 compare roles and challenges from then and now; 1.3 key components of Canadian identity; 2.1 major challenges in the past; 2.4 European effect on Indigenous peoples; 2.5 different groups faced different hardships;

Research Tim Horton the hockey player. He helped the Toronto Maple Leafs win the Stanley Cup four times. Tim Horton is also the man that the restaurant is named after. There are Tim Horton coffee shops all over Canada. Ask the students:

1. Who do you want to know about: Tim Horton the hockey player or Tim Horton the donut guy? Why?
2. Where is the closest Tim Horton’s to your place?
3. Does anyone in your family ever go to Tim Hortons for coffee, donuts, drinks, or snacks? If someone drinks coffee in your family who makes it?
4. Did you know that coffee does not grow in Canada? How is coffee ‘grown’? What country grows coffee beans?
   1. What made it possible for people to drink coffee in Canada in 1668? Think of the different groups of people living in London in 1843. Who would be drinking that expensive coffee? Why? Why was coffee expensive?
   2. Why is coffee considered such a part the Canadian identity?
   3. List all the different kinds of coffees that you can think of.
   4. Many people think that hockey started in Canada in 1875 but other people think that it started in England just before that. Either way hockey is very important to a lot of Canadians. At one time it was even featured on the back of the five-dollar bill.
   5. Hockey is basically a ball and stick game. The Indigenous also have a very popular ball and stick game and played it years and years before hockey started. What is that game called?
   6. Do you play hockey? Do you have anyone in your family that also plays, or played, hockey? Is it a family tradition?
   7. What is the best season to play hockey outside?
   8. Can you play hockey in the summer season today? Could you play it in the summer of 1843? Why not? What about in 1890?
   9. During the Coronavirus Time Hortons was able to stay open. How come? How did the worker’s responsibilities change?
   10. During the Coronavirus were people able to still go watch live hockey games? Why not? Were arenas open to practise skating? How did the coronavirus change regular hockey games?
### Science

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth</td>
<td>1.1 impact of different soils; 3.3 interdependence between living and non-living; 3.3 interdependence between living and non-living things</td>
</tr>
<tr>
<td>Systems</td>
<td>1.1 plants importance to humans; 1.2 impact of humans on environment; 3.3 life cycle changes; 3.5 use of plants; 3.6 interdependence between plants and animals; 3.7 grow plants for food; 3.8 environmental threats to plants and animals</td>
</tr>
</tbody>
</table>

1. Why can coffee not be grown in Canada? (Think of soil and climate.)
2. Some of the ingredients for making donuts are flour, sugar, eggs, baker’s yeast, and butter. Where do those ingredients come from? Would they have come from the same places in 1843?
3. Who is responsible for making donuts? Do you think people made donuts in 1843? If they did who would have had the privilege of eating donuts in 1843? The first Tim Hortons was in 1964.
4. How important are donuts and coffee to humans? To animals? To plants?
5. What might happen if you are eating a honey glazed donut while you are walking through a park on a hot, summer day? What insects would you have to be aware of and why? What if it was a warm, winter day? Why does the season make a difference?
6. If you dropped your donut on the sidewalk, and swept what you couldn’t pick up to the edge of the sidewalk and onto the grass, what might benefit from that act?
7. Bees are said to be now on the endangered list. How would the loss of bees affect the making of coffee and donuts?

### Math

2. If you bought three dozen donuts and each DONUT cost 25 cents how much money do you need? (Use counters and count by 25.)
3. If you can put 6 donuts in each box how many boxes do you need?
4. With that 36 donuts there are 15 jelly, 9 chocolate chip, and 4 sprinkles. How many plain donuts can I get?
5. If you are going to have a party how many friends can you invite if you and each of your friends can have 2 donuts each? (Use counters to help you.)
6. Use base 10 blocks to illustrate how much money you needed to buy the 36 donuts.
7. Can you count by 1s and land on 36? Count by 2s? count by 5s? count by 10s?
8. If you cut each donut in half and give everybody each one piece how many people could you feed? Here’s a hint: when you cut each donut in ½ you end up with two pieces so you can count each donut as 2 instead of 1.
9. Make a chart with 4 columns.
10. At the top of the columns put these titles:
a) Chocolate chip  

b) Sprinkles  

c) Plain  

d) Jelly  

11. Put your name in the column of the donut you like the best.  

12. Ask 6 other people to put their names under the donut they like best.  

13. Which donut is the most popular?  

14. Which donut is the least popular?  

**Art**  

1.1 create 2-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 express personal feelings; 2.2 explain how to use elements and principles to communicate 3.1 identify variety of visual art form; 3.2 identify art from diverse communities  

Before teaching have a box of Cheerios, Fruit Loops or other similar items that are round like donuts. Glue, pastel chalk, and manilla construction paper will also be needed.  

Provide each student with 7 cheerios (mention that Indigenous teachings show that 7 is the number of directions that there are (east, west, south, north, everything above, everything below, and your inside spirit). Instruct them to use space wisely and plant (glue) 7 donut seeds at the bottom of the page. Leave space so they can add the roots.  

Encourage them to create a stem climb up from each donut seed and then add some leaves to each stem.  

Direct them that at the top of each stem they should draw something that is a piece of food that different insects or worms might like.  

Have them add some little insects and worms that might enjoy eating your new type of donut flower. (For instance, one cheerio could grow an apple with worms peeking out of it.)  

When completed encourage them to find someone with whom you can discuss your funny ideas.  

**Literacy**  

**Oral**  

1.4 understanding by retelling  

**Writing**  

1.1 identify purpose; 1.2 generate ideas; 1.3 gather information; 1.5 identify and order main idea; 2.1 write short poem  

It would be beneficial to have pictures of a wide variety of decorated donuts. Ask students how donuts are made.  

Discuss the steps needed to make donuts so that ideas are ready when the start to write their own steps for making donuts.  

Remind them to include the ingredients, and the flavour, in their texts. Encourage them to how they would decorate their donuts once they were cooked?
| 2.3 use familiar words 2.7 make simple revisions | Ask them, “Where is the best place to eat donuts? |