About the Art

Blackfriars Bridge is located in London, Ontario and spans the River Thames. Although cars could travel across it, the bridge was created during the era of horse and cart (1875). It is a bowstring bridge and was constructed with wrought iron. It is 64.6 meters long. It was designated as a heritage site in April of 1992.

Blackfriars Bridge could not withstand the weight of the modern-day car and therefore had to be restored. The renovation cost $8.6-million and took 13 months to strengthen the bridge.” It was reopened to traffic on Dec. 1st, 2018.

Stained glass art often refers to the small pieces of coloured glass arranged into patterns or pictures and often held together by strips of lead. These designs are then crafted into windows and secured in a strong frame. Churches frequently have stained glass windows installed in their buildings.

### Who is the Artist?

This artist is Ted Goodden. He lived in London Ontario, Montreal, and London, England. He moved to British Columbia. Ted Goodden is a stained-glass artist. He loved to restore and preserve local history and did so through 36 snapshots captured in 12 stained glass window depictions of Blackfriars Bridge.

### About the Art

**Elements**
- Line;
- Shape;
- Colour;
- Texture;
- Value;

**Principles:**
- Contrast;
- Repetition and Rhythm
- Variety
- Emphasis
- Proportion

**Art**

- This is a picture of a window. Inside the window there are 4 pictures, or views.
- Consider all the sections that are part of the square frame, and the four interior views. Which sections have borders that are easily determined? Why does an artist use clearly defined borders or blended boarders?
- Of the four centre illustrations which would be considered in the South East direction? In the Ojibwe, Cree, and Odawa cultures rotating is in a clockwise direction and almost always started in the East where the sun rises. Starting in this South East illustration, then rotating clockwise, describe each of the four interior panels.
- From which viewpoint would the artist had to have been standing to view the scene depicted? How would one of those views change if you were standing right in the middle of the bridge? How would each of those views change if you were a three-year-old looking at it?
- Ted Goodden actually drew 36 scenes involving Blackfriars bridge. Why do you think he would choose to put multiple views one window?
- 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.
- The Indigenous, when reading the belt and retelling its history, are using the same actions that you are doing by retelling the story of this art.
- When an artist works with stained glass which, do you think, would be easier to manipulate: geometric lines and shapes or organic lines and shapes? Why?
- How does the weight of his lines imply depth and implied strength of his materials?
- How does an artist choose the colours? Give at least one example of: warm and cool tints; primary and secondary colours; intensity.
- Is there one focal point or more than one point of emphasis?
- Is the texture real or illusionary? How can you tell?
- How does he use value (light and dark) to express ideas?
- How is proportion used to convey importance? Depth? A path for your eye to follow?
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.

Concentrate on just the foreground. What details do you notice that you did not notice before? Repeat for the middle ground. Repeat for the background.

### Social Studies

**A**

1.1 positive / negative impact of First Nation & European before 1713;
1.2 benefits of contact 1.3 connect today issues;
2.1 perspectives of groups 3.1 major Fist Nation groups;
3.2 significant interactions;
3.3 main Eu motives;
3.5 btw First Nations and explorers / settlers;
3.6 different First Nation groups react to Europeans;

**B**

1.1 levels of gov addressing issues;
1.2 plan of actions for social issues;
1.3 plan of actions for enviro issues;
3.2 jurisdictions of gov levels;
3.3 gov shared responsibilities;
3.4 gov processes to solicit public input;
3.6 groups different perspectives;
3.7 citizens actions towards soc & environmental issues

- List at least five types of materials used to create Blackfriars Bridge.
- In the 1600s this land used to be forest and belonged to the Indigenous peoples. The materials to create this bridge did not exist at that time. How to you think these Indigenous people travelled across the Thames River? What reasons would they have for crossing the river?
- Would they have built bridges? Which type of bridge would they have built to cross smaller rivers?
- When Europeans came over to the area of Montreal and Ottawa a lot of settlements were established and much of the forest was cut down. Consequently, more Indigenous people were forced to move into this area. How would that have affected the people already living here?
- Many French fur traders were travelling into this area and asking for help to obtain more furs and hides of animals. List two positive ways, and two negative ways, that would have affected the First Nation groups in this area now called London, Ontario?
- How would the increased population have altered the Indigenous way of life? How would their lives again have been impacted when a settlement and Blackfriars bridge was built?
- There were many conflicts between the two groups. There were also some peaceful times. How would the fact that the Indigenous people knew which plants to eat (like berries and dandelions), which plants to avoid (like poison oak and poison ivy), and which plants to use as medicine (like clovers to get rid of bee stings) have benefitted the missionaries, fur traders, and colonial agents?
- In today's Canadian society which level of government makes the decision of where a bridge should be built? State two facts that they would consider. Which level of government is responsible for the environment in the area? State two facts that they would consider.
- In the Indigenous government who is responsible for making those same decisions? State two facts that they would
consider. Are the concerns the same or different from the Canadian government?

- How would each group go about soliciting public input and how would they allow it to affect their final decision about building a bridge in a specific location?
- How can there be a balance between stewardship and human needs when people have to get from one area to the next?
- Which would have provided the greater benefit? A bridge built in the 2020s or a bridge built in the same location in the 1600s?

Blackfriars Bridge has two end abutments that bear the weight of the bridge. The live thrust of traffic bears down on the bridge itself. Blackfriars bridge was originally built for a much slower and lighter horse and wagon era. Why would today’s traffic make a difference on the structure of the bridge?

- Would the daily increase of traffic have any impact on the bridge’s structural strength?
- For four years (2013-2017) this bridge was closed to vehicular traffic and only open to pedestrians. What reason do you think was given for this closure?
- For 13 months (Oct 2017 to Dec 2018) the bridge was closed for a complete restoration. What natural phenomena might have had an effect on causing some deterioration of the bridge?
- Though it was originally considered a double lane (horse and wagon travelling in both directions) when the bridge reopened to traffic the bridge was designated as a single lane for vehicles. Pedestrians and bicycles also have use of the bridge. List several reasons why Blackfriars was changed from a double lane to a single lane bridge.
- Explain how the Thames River impacted the wooden deck surface and the wrought iron structure of the Bridge. Are the impacts due to physical change or chemical change?
- What indicators of chemical change would have been visible on the bridge’s structure before the restoration took place? Are those changes reversible?
- Now that the restoration has taken place what steps might have been taken to prevent those chemical changes from happening again?
- What are the properties of the water in the River Thames? What natural elements cause those changes in the water?
- Are those changes chemical or physical? Are they reversible?
Literacy

Oral:
1.4 summarize ideas;
1.5 stated versus implied; 1.6 connect to experience; 1.8 point of view; 2.6 non-verbal cues; 2.7 visual aids

Reading:
1.1 variety of text; 1.2 purpose; 1.5 inferences from stated and implied; 1.6 connect to personal knowledge and experience

Writing:
purpose and audience; 1.2 ideas; 1.3 gather information; 1.4 sort information; 1.5 order main ideas; 2.1 more complex text; 2.3 vivid language; 2.4 vary sentences; 2.5 support point of view; 2.7 revisions; 3.1 spelling; 3.4 punctuation; 3.5 parts of speech; 3.6 proofread; 3.8 published

➢ Create a storyboard with captions. The concept is that you transport into the stained-glass window, walk across the bridge and end up in another year. The world you transport into is North America (Ontario) in the 1600s.

➢ Your storyboard will have 7 large blocks for illustrations and 7 smaller blocks for writing. It would be good to place the word block under each drawing block. Use the ‘five Ws and How’.

➢ Block one shows you transporting into the stained-glass window. A written description of what is happening would be the opening paragraph of your story.

➢ Block two answer ‘when’ by illustrating the century, season (use plants to help show the season), and the time of day. In the word block continue the story touching on your confusion and wonderment for landing in that century. Use vivid language.

➢ Block three involves where you landed. Provide clues to the 1600s (housing? Plant life? Animal?) In your written part draw on your knowledge of the symbols that your readers may also recognize.

➢ Block four answers what the people are wearing. Make sure they are dressed appropriately. In this word block use lots of descriptive words to describe their clothing.

➢ Block five describes who the people are. Clearly show their role in society. Are they an elder, a child, a leader, a privileged person or a labourer or someone else? Add details to make their role in life very clear. Vary your sentences to make your story interesting.

➢ Block six shows why people are busy. Show one or two activities that happen in the 1600s. Think of the tools required and the end result of their labour. Perhaps have the three sisters growing in a garden, animal hides being tanned, cooking in a long house, foods being dried, children playing an Indigenous game, etc.

➢ The last block, block seven depicts how people travel from the 1600s era back to your window so that you can come back to the present year. Make it as authentic as possible.

➢ When you have completed everything read your story aloud to see if it reads smoothly. Do you need to add some transition words?

Math

Numeracy
Estimate; #s to 100 000; place value to hundredths; compare and order

➢ Identify the following triangles if possible: acute, right, obtuse, and straight angles?

➢ Look at the four triangles (one in each corner of the stained-glass art). What kind of triangles are they?
| fractions with like denominators; add and subtract decimals to hundredths; relate simple fractions to decimals | Cut out 10 of the same kind of triangles that Ted Goodden created. Make sure that all 10 triangles are the same size. Arrange, and rearrange, any number of the triangles to create different polygons. What shapes can be created? Name your shapes and state their angles, number of sides, and number of vertices. |
| Geometry | What fraction of the art piece is triangles? Write it in decimal form. |
| distinguish polygons and prisms; identify acute, right, obtuse, and straight angles; construct triangles; construct prisms, pyramids; use cardinal directions; create translations | What fraction of the art piece is mini rectangles? Write it in decimal form. |
| | What fraction of the art piece is the outside square? Write it in decimal form. |
| | What fraction of the art piece are the four interior views? Write it in decimal form. |
| | What fraction of the art piece is one interior view? Write it in decimal form. |
| | Add all the decimal forms. |
| | Place the fractions in order where you can. |
| | Try to find an example of vertical, horizontal, and diagonal symmetry lines. |
| | Are prisms or pyramids used to build bridges? If so, how are they used? |
| | Estimate the total number of mini triangles found in this stained-glass art. Estimate the total number of pieces of glass used to create the completed art piece then use the base 10 blocks to show that number. |

| Art | Choose one of your scenes depicted in your storyboard. Turn it into stained glass art. |
| 1.1 create 2-and-3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 interpret art works; 2.2 analyse use elements and principles 3.1 representation of messages and contexts; 3.2 identify how art reflects diverse communities | At this point you may want to research stained glass windows found in churches as you will be asked to create a stained glass look with a black marker. |
|  | Expand the size of your scene and make revisions where you see needed. Keep the scene simple and without details. Think of how you will show depth by using light and dark, and size of objects. |
|  | Plan by sketching out a rough copy. Draw your foreground, your middle ground, and your background. Keep your objects or people big and clear of detail. You only want to use the contour lines. |
|  | Think of what will be your focal point. What is the first thing you want people to notice? |
➢ From this point on you can choose the option you like:

➢ Get a piece of plexiglass and use markers to colour your scene; create a stained glass look with a black marker; hang it in a window. OR

➢ Get a piece of cling wrap (like Saran Wrap) and glue on cut pieces of tissue paper; create a stained glass look with a black marker; hang in window. OR

➢ Get a piece of foil paper and use markers to colour your scene, create a stained glass look with a black marker. OR

➢ Draw your scene on a large piece of paper. Once you have drawn your scene and are pleased with the result create a stained glass look with a black marker. As a last step spill a little vegetable oil on your paper and it will soak through to give a transparent look. (Don't use too much oil!)

➢ Sit back and admire your work.


**About the Art**

Brian Jones began his career as a photorealist. Photorealism is a very realistic style of painting and drawing that began in the 1960s. An artist takes a photo of what he wants to paint. The artist then studies the painting until the subject is so well known that it can
be reproduced as realistically as possible using pastels, paints, charcoal, pencils, or pen and ink. Sometimes a photorealist painting can actually be mistaken for an actual photograph.

Gradually Brian Jones changed his style of art. He would make his people (or other subjects) with longer, wider, more rounded bodies. He would give them a more abstract shape. Brian Jones began to use sharper, brighter colours. Although he gave some subjects in the paintings a simple, magnified shape he maintained a photorealist effect in other parts of his paintings.

The scene depicted in ‘Yard Scene #1’ could be located almost any suburb in Southwestern Ontario.

<table>
<thead>
<tr>
<th><strong>Who is the Artist?</strong></th>
<th>This artist is Brian Jones. He lived in Chatham and London, Ontario.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About the Art Elements</strong></td>
<td>At first Brian Jones liked to make his paintings look like real people and real things. Then he changed his painting style.</td>
</tr>
<tr>
<td>Line; Shape; Colour; Texture; Value;</td>
<td>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? How does Brian Jones use proportion to guide your eye and convey the order of importance?</td>
</tr>
<tr>
<td><strong>Principles:</strong> Contrast; Repetition and Rhythm Variety Emphasis Proportion Art</td>
<td>Find a variety of line weights (thick, thin). What is the purpose of varying the weights of line in a painting?</td>
</tr>
<tr>
<td></td>
<td>Why do you think that Brian Jones decided to paint the people with organic lines and mostly everything else with geometric lines?</td>
</tr>
<tr>
<td></td>
<td>How does overlapping shapes and forms express distance? Give four examples found in the artwork.</td>
</tr>
<tr>
<td></td>
<td>How does the use of proportion help the viewer to determine distance?</td>
</tr>
<tr>
<td></td>
<td>Cover the painting so that only the foreground is visible. What details do you notice that you did not notice before?</td>
</tr>
<tr>
<td></td>
<td>Repeat the covering process to examine only the middle ground and background. Why does this process help you see the painting in a more focussed format?</td>
</tr>
<tr>
<td></td>
<td>Describe the texture of real trees. How does the artist imply the text of his trees?</td>
</tr>
<tr>
<td></td>
<td>How does the artist play with shadows? What makes shadows in real life? If you can either check out your shadow outside or use an inside light force. Notice the differences between your shadow and the shadow in the painting. Why do the shadows in this painting look not quite real?</td>
</tr>
</tbody>
</table>
➢ Look at the use of blocks of solid colours. How would a different style of art make them more realistic looking using both texture and mixed colour?
➢ Do you think the artist chose to paint people and plants this way because he was unable to paint them more realistic looking?
➢ Read the description under the painting. Explain why the artist chose this specific style of painting.
➢ Explain why it is beneficial to use realism and non realistic concepts in the same picture? What was Brian Jones saying with his painting?

➢ Sometimes people find artifacts when they excavate their properties as they are putting in a garden. Geologists are sometimes called in to do a grid search at important excavation sites. Suppose you were to find some artifacts from various groups of the 1600s.
➢ What two items would you expect to find concerning the Indigenous people of the 1600s?
➢ What two items would you be excited to find that belonged to a French fur trader? A missionary? A settler? A fisherman? And a Colonial Agent? How would these items differ from those of the Indigenous people?
➢ The Indigenous people of the 1600s were very knowledgeable about the land. They knew good plants to eat, plants to be aware of, and plants good for medicines. For sure they would include the 4 smudging medicines (tobacco, sage, cedar, and sweetgrass). How did this knowledge help the various European groups survive the long, cold winters of the land?
➢ Exchange an entire backyard of a city property for a garden. This garden must sustain you for most of the year. On a piece of paper use symbols to explain why you chose to plant the plants you did and explain some of the plants you would definitely not include in your yard-garden. Don’t forget to allow a part of your garden to grow the three sisters (corn, beans, and squash as these three plants were grown together to support each other).
➢ You might consider the 4 seasons as different plants grow at different times of the year.
➢ Create a legend so that your viewer knows the meanings of your symbols.
➢ If this was in real life and you were excavating a backyard to install a full garden which level of government would you have to notify? Would it make a difference if it was a front yard?
➢ How does the new garden alter the daily interaction with the neighbours in a positive way? What kinds of conflicts, about land use, might arise and how would they be settled?
groups different perspectives;

➢ Assume now a new group of people come and take control of your entire yard-garden and insist that you vacate the premises and they don’t really worry about where you go just so long as you go. You cannot take any of your belongings except what each family member can carry on their back. What would be the main motives of this new group of people?

➢ How does this affect you and your family? What ages are your family members? Which feelings do you have? How will you survive? How will this affect each role in the family? How will each family member react to this new group?

➢ Is this just happening to your family or are other families also affected? Are certain families being singled out?

➢ Which level of government can you appeal to, to get help to reverse this decision? What major facts will you present? What happens if the government won’t help you?

➢ Is the government soliciting public input? How?

➢ Are your neighbours involved?

➢ How does what happened to the Indigenous peoples in the past reflect the issues of today?

Science

| Structures | 1.1 effects of forces of natural phenomena; 1.2 impact of social & environment on structures; 3.1 internal forces; 3.2 external forces; 3.4 consequences from severe natural phenomena; |
| Energy     | 1. environment impacts on changing matter; 3.3 changes of state of matter; 3.4 physical changes in matter are reversible; |
| Earth      | 1.1 long term effects of using energy and resources; 1.2 effects of tech on energy; |

➢ Suppose the people in this painting are on their way to a community sports gathering and then they are going to a big family celebration.

➢ Remember how you felt during the coronavirus where you couldn't visit family, you couldn't do sport, and so many things were taken away from you through no fault of your own? That loss and isolation was hard on your body, all 4 aspects of your body: emotional, spiritual, mental, and physical. When your body is out of sorts your body, systems don't work well.

➢ How did not playing sports for a couple of months change your physical abilities and your skills?

➢ How did online learning affect the physical, mental, and emotional parts of you? How might have it affected your muscular or nervous system? How were your energy levels affected?

➢ Your eating habits were probably different because it wasn't as easy to get foods or you ate more home cooked meals instead of so many fast foods. How did that affect your digestive system? Your renal and urinary systems?

➢ Imagine now that you are used to eating lots of meat like deer, rabbit, birds, and fish as well as foods like corn, beans, and squash. Suddenly all that is taken away and you are only allowed oatmeal twice a day and you have to walk for 9 or 10
hours every day. That is what happened to the First Nation families in the past.

➢ How do you think this change affected their physical strength if they had to walk for 10 hours every single day for three months? What would have happened to those too weak to trudge along the path?

➢ How would their digestive systems and their nervous systems have been affected if they couldn't eat the foods they were used to eating, and lived in constant fear of being punished if they spoke their own language?

➢ Would the drastic change in food alter their skeletal and muscular systems? How would those changes have been passed on to today’s generations?

➢ How would those emotions have affected the way their heart beats?

➢ How would the changes in their body systems affect their ability to fight off common diseases?

➢ Food provides you with energy. If you could no longer get enough food how does that affect your energy?

➢ What happens to the body’s energy if that food becomes a non-renewable resource and there is no more food?

➢ The food has mass and occupies space. Describe what changes of state occurs to this matter to create it into a kind of energy that you can use.

➢ When there is enough food how can that food be stored, in the body, to be used when needed at a later time?

➢ The building in this painting looks very strong. What external forces would be strong enough to cause damage to this building?

➢ What natural phenomena would have enough force to impact this building in a negative way?

➢ What difference does the quality of materials used in the construction of this building make in the building’s ability to withstand the different forces of nature?

Math Numeracy
Estimate; #s to 100 000; money to $1 000; place

➢ Spring has arrived and it is time to plant your garden. Following are the prices for various plants:

<table>
<thead>
<tr>
<th>Plant</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lily</td>
<td>$8.99</td>
</tr>
<tr>
<td>Butterfly bush</td>
<td>$3.99</td>
</tr>
</tbody>
</table>
You think about buying four of EACH of the plants, including the mulch, between $2 and $6. Describe two ways you can calculate the total cost.

In your cart you put three mosquito plants, two butterfly bushes and five lilies. ESTIMATE the total of your cart. Explain how you do your estimation. What is the actual cost? You have $600. Put the total cost (just the dollars) over 600 to create a fraction. Put that fraction aside.

What is the balance of money that you have left?

Calculate the cost of purchasing five of EACH of the plants not chosen. The easiest way to do that is to round off to the nearest half dollar. Explain how that is done. Explain two different ways to estimate the total. What is the estimated total? What is the actual cost just for this separate bunch? Put the total cost (just the dollars) over 600 to create a fraction. Put that fraction aside.

What is your balance of money at this point?

You enquire about the hanging plants in the front of the store. They are 2 pots for $25 for the smaller ones and 2 pots for $35 for the larger ones. You need a lot of hanging plants. You ask for 9 small and 11 large. What will be the total cost of the small hanging plants? Put the total cost (just the dollars) over 600 to create a fraction. Put that fraction aside.

What will be the total cost of the large hanging plants? Put the total cost (just the dollars) over 600 to create a fraction. Put that fraction aside.

Place your fractions in order.

Add the actual totals from numbers 3, 5, 7, and 8.

Keep in mind that today is part of the TAX-FREE WEEKEND campaign, so no tax must be calculated. How much money do you have left from your $600? You are happy with your total so you put one of each of the plants in your cart.

Place the actual total cost in a place value chart.

With the leftover money what other plants can you put in your cart? (You have to decide how many you want and which additional plants you want. You cannot go over $600.)
- Yeah you are finished shopping so you can now go home and plant your garden.
- On a grid paper create a rectangular garden. You need to use one of each of the following polygons: quadrilateral, pentagon, hexagon, heptagon, octagon, nonagon, and decagon.
- Name the angles in each polygon.
- Your hanging plants will be hung on hooks around your garden. Place the rest of your plants, evenly, in your polygon garden. This is hard work and it is hot out don’t forget to drink lots of water.

**Literacy**

**Oral:** 1.4 summarize ideas; 1.5 stated versus implied; 1.6 connect to experience; 1.8 point of view; 2.6 non-verbal cues; 2.7 visual aids

**Reading:** 1.1 variety of text; 1.2 purpose; 1.5 inferences from stated and implied; 1.6 connect to pers know & exp

**Writing:** purpose and audience; 1.2 ideas; 1.3 gather info; 1.4 sort info; 1.5 order main ideas; 2.1 more complex text; 2.3 vivid language; 2.4 vary sentences; 2.5 support point of view 2.7 revisions; 3.1 spelling; 3.4 punctuation; 3.5 parts of speech; 3.6 proofread; 3.8 published

- Like the people in the painting, you too want to go for a walk. Picture yourself, as a child, in the past in the middle of the Indigenous village. You will design a poster showing the many activities happening in your village.
- Brainstorm ideas. Create a web with 7 to 10 activities that you want to accentuate. What is your cousin doing? Is your cousin male or female and what is there age? Will that change the activity? What is your auntie doing? Your uncle? An elder? Think of the longhouse and the evidence of all the work created in the last week. Think of the clothing each is wearing.
- Write a short dialogue between yourself, as a child, and your auntie discussing one of the activities and the steps to complete that activity.
- On a large piece of Bristol board (to give yourself lots of space) design an Indigenous village in the past. Include as many of your brainstorming ideas as possible.
- Write 2 or 3 paragraphs describing your village in words. Use descriptive words wherever possible. Vary your communication sentences so that the reader stays interested. Do research to make sure your facts are accurate. Order your main ideas and keep on topic.
- Have someone observe your village while listening to your read your paragraphs. Can they find the items/activities that you are describing?
- Share, and discuss, your poster with your family, stressing the main ideas you want to get across.
- Have fun and be creative.

**Art**

- 1.1 create 2- and 3-

- Like the people in this scene you are excited to be off to visit a travel agency. You have been given the opportunity to travel back in time to either be with the European settlers of the 1600s
dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 interpret art works; 2.2 analyse use elements and principles 3.1 representation of messages and contexts; 3.2 identify how art reflects diverse communities or with the Indigenous community of the 1600s. You were promised that the travel agency had some beautiful, and very informative, travel brochures showing natural and human developments of the times. There are two brochures to look at; one for each of the two groups.

➢ If possible, join with a partner on this project. (If not just imagine a partner and you choose the community you prefer.)
➢ Design the travel brochure. There will seven sections for this brochure. They will show one of each of the following features: a skill, a natural feature, a human feature, an outdoor activity, an indoor activity, a garden, and a feature of your choice. Label each feature.
➢ Keep your drawings as large as possible. Be aware of space and your foreground, middle ground, and background in each of the seven sections. Decide on the advantages and disadvantages of using primary and secondary colours versus monochromatic colours for a travel brochure. Use intensity of colour and the illusion of texture wherever possible.
➢ Compare the features in each brochure and decide which civilization captures your heart.

About the Art

Bernice Vincent liked to create her paintings while looking at real objects or landscapes. Since she did not take photographs to help her study the object or scene, she had to spend a long time looking. She would look at ordinary, everyday, domestic objects and turn them into realist paintings. Because she saw them from different points of view, and painted them in that usual format, they had a surrealist tone.

Surrealism art uses symbols and a sort of dream-like visual. It’s a little bit unusual and unexpected. Often everyday objects, or characters, like cats, pears, bedsheets, and ironing boards, are assembled in a bizarre kind of way or from a very unexpected viewpoint. The artist helps the viewer to see life and motion in ordinary items and that gives those objects a more powerful existence.

In Surrealism art organic lines are more prominent than geometric lines. Surrealism encourages spontaneity and creativity in the viewer.

The tea plant is an evergreen of the Camellia family that is native to China, Tibet and northern India. Tea is harvested by hand and only select leaves are chosen. The leaves are taken to a factory to be processed. They are sorted into black, green, or white tea. They are also graded for quality.

Ireland has three official tea times and plenty of choices of kinds of milk and various flavoring (chocolate, nuts, cinnamon) to add to the tea. The first serving is around 11 a.m. with scones and cookies (which they call biscuits). The second tea time is mid afternoon with a bit of cake or something sweet to eat. The third tea time is served with the evening meal around 6 p.m. It is served with a full meal and often includes servings of cheese.

Ojibwa tea is made from leaves and roots that can be harvested and made into tea immediately. Spruce needles ferns, raspberry, peppermint; burdock (not the nettle), and beebalm could all be used to make tea. The linden tree produced spring flowers which could be brewed into tea as well as licorice root. In the olden times tea was smoked, not brewed.

<table>
<thead>
<tr>
<th>Who is the Artist?</th>
<th>The artist is Bernice Vincent. She lived in Woodstock and in London.</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the Art Elements</td>
<td>She liked to make her paintings 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.</td>
</tr>
<tr>
<td>Texture; Value;</td>
<td>How does the artist use weight of line to display the delicacy or strength of each object painted?</td>
</tr>
<tr>
<td>Principles: Contrast; Repetition and Rhythm Variety Emphasis Proportion Art</td>
<td>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></td>
<td>How does Bernice Vincent show that the spoon is on the plate and not the other way around?</td>
</tr>
<tr>
<td></td>
<td>If you look straight down at the painting can you see the depth more clearly? Why? What is unique about painting a bird's eye view?</td>
</tr>
<tr>
<td></td>
<td>How are the placement and composition of images used in this art piece a possible reflection of Bernice Vincent herself? A reflection of the owner of the house?</td>
</tr>
<tr>
<td></td>
<td>Which area has the most detail to paint: foreground, middle ground, background? Which area has the most items?</td>
</tr>
<tr>
<td></td>
<td>Are these real or implied textures? Which textures would be the most pleasant to touch in real life? Why? The ickiest? The smoothest? The bumpiest? Look carefully at each item and observe how she expresses the different textures. Which implied texture would be the easiest for you to paint? The hardest?</td>
</tr>
<tr>
<td></td>
<td>How did Bernice Vincent soften the edges of both the table and the stove? Why do you think she didn't just draw sharp, geometric shapes?</td>
</tr>
</tbody>
</table>

| Social Studies | How do you think this kitchen has changed since the year 1700? |
| - 1.1 positive / negative impact of First Nation & Europeans before 1713; 1.2 benefits of contact 1.3 connect today issues; 2.1 perspectives of groups 3.1 major First nation groups; 3.2 significant interactions; | Think of two perspectives, an Indigenous person of 1700, and a French fur trader of 1700, and decide if this kitchen is better, the same, or different for social, environmental, for daily use, and for cleaning. |
| | In 1700 what role did French women have in regards to things happening in the kitchen? Where did they get the food and beverages of the times? |
| | In 1700 what role did Indigenous women have in regards to things happening in the kitchen? Where did they get the food and beverages of the times? |
| | In the 2020s what role do people have in regards to things happening in the kitchen? Is it only women who now preside in the kitchen? Where do people get the food and beverages in the different time periods? |
| | The Indigenous people were very experienced in gathering meat, fish, berries, and various plants to sustain them through the seasons. They often exchanged this gathering of food for French items of beads, mirrors, needles, knives, and |
kettles. How did this help both sides? Who do you think benefited the most and why?

- Sainte Marie Among the Hurons was established in 1657. If you have the chance take a virtual tour of their site. Notice how different their ‘kitchens’ are compared to the one in this painting. Notice the location of the garden outside the fort, the stacks of firewood, the foods drying on the outside poles and hanging from the rafters, and the size of the fireplace.
- There is also a church inside the fort. Consider how this would have affected all groups at the time.
- The size of a longhouse was considered by the number of regular, ground firepits (not the brick ones but rather the campfire style ones). If there were 5 firepits it was said, “The longhouse is five fires long.” Each firepit was assigned one family grouping (young and old alike).
- Imagine how today’s houses would alter if you had an extended family using the one kitchen.

| Science Energy | 1. environmental impacts on changing matter; 1.2 processes rely on chemical changes to produce products; 3.1 matter as everything that has mass and occupies space; 3.2 properties of solids, liquids, and gases 3.3 changes of state of matter; 3.4 physical changes in matter are reversible; 3.5 chemical changes are irreversible; 3.6 changes involve release of heat; 3.7 indicators of chemical change; 3.8 distinguish between physical and chemical change

| Earth | 1.1 long term effects of using energy and resources; 3.2

In the 1600s Indigenous people lived in longhouses. They cooked over open fires, dried many foods by hanging them from rafters and from poles above the fire pits. Often their gardens were located outside the palisades. When they ate and drank ‘tea’ it was a communal affair with a sharing of bowls and containers and extended families. Explain how this is very different from what is occurring in the painting.

- Observe the stove. What type of energy does it use? Does it involve a chemical or a physical property?
- Is the gas usage reversible or irreversible?
- How does gas change the air around it?
- What type of energy was used to create the fires in the longhouses? Is the wood burning a chemical or a physical change? Is the change reversible or irreversible?
- What is released when wood changes to fire?
- What changes of state occur when the wood is burnt or the gas stove is lit?
- What is the long-term effect of using gas as an energy? Of using wood as an energy?
- Are these renewable or non-renewable resources?
- Can the energy created by the wood, and/or the gas, be stored and used at a later date?
- Is the energy actually created or destroyed or is matter just being changed?

- List three different body systems that would be affected by drinking a beverage and having something to eat.
renewable and non-renewable sources; 3.3 store and transform energy; 3.4 energy can’t be created or destroyed: just changed;

**Life Systems** 1.1 effects of social & environmental factors 3.2 structure and function of major systems; 3.3 interrelationships between systems;

- Are the effects different if you are drinking and eating by yourself as opposed to eating and drinking within a community gathering? Which body systems might be affected differently?

**Math Numeracy**
Estimate; #s to 100 000; place value to hundredths; compare and order fractions with like denominators; add and subtract decimals to hundredths; relate simple fractions to decimals

- Describe the relative locations (beside, near, under, over etc.) of the teapot, teabags, cups, spoons etc.
- The urn for making tea holds 36 cups of tea. How many different ways could you have different numbers of people share equal amounts of tea?
- Today we have used 59 teabags. Yesterday we used 92 teabags. There were only 339 teabags altogether. How many teabags do we have left for tomorrow?
- A box of Red Rose tea has 72 tea bags for $4.77 or a box of Red Rose tea bags package of 216 for $9.27. What is the best deal?
- In order to have had at least 339 bags left how many boxes of tea bags did you buy and what was the total cost?
- If a cup of tea cost $2.90 how many different ways could you use coins to pay for that cup of tea?
- For the tea ceremony you will have later this afternoon you had to purchase some extra items.

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cupcakes</td>
<td>$2.25</td>
<td>Cucumbers</td>
<td>$1.27</td>
</tr>
<tr>
<td>Carrot cake</td>
<td>$8.58</td>
<td>Strawberries</td>
<td>$3.94</td>
</tr>
<tr>
<td>Box of tea bags</td>
<td>$5.79</td>
<td>Raspberries</td>
<td>$6.97</td>
</tr>
<tr>
<td>Mayonnaise</td>
<td>$3.87</td>
<td>Bread</td>
<td>$2.47</td>
</tr>
</tbody>
</table>

- Put your items in order of prices.
- You purchased two of everything except the cupcakes. You bought one for each guest PLUS yourself. Eight guests were expected. What was the total for just the cupcakes? How many quarters is that?
- How much was your total receipt?
- How much change did you have from $170?
- If only 7 of the guests had tea and they each had 3 cups of tea how many cups of tea are left in the urn that originally held 36 cups.
This is an opportunity for two people to work together or you can write both parts. Imagine that, over tea, you will partake in an interview. One of you is from the present year. The other person is a member a First Nation Community in the 1600s. Before you begin writing you need to decide if you are the interviewer or the interviewee so that you know who is asking the question and who is answering the question.

Seven questions will be asked but asked in such a way that the interviewer is also giving us a glimpse into their own century. Here is an example, " In my century one of the games our boys play is to catch fish with spears. It will make them good hunting warriors and gatherers of food. We use maple, ash, elm, or oak to create the spear. Those trees are very plentiful in this century. What is a game that you play in your century and why do you play it?"

Here is a list with a topic for each question.

- **Question 1:** a game or sport
- **Question 2:** a food specific to your century
- **Question 3:** a rule or law
- **Question 4:** a tool
- **Question 5:** a way of travelling
- **Question 6:** animals and/or plants specific to your area
- **Question 7:** a question and answer of your choice

Make sure to summarize your ideas clearly before you actually start your interview. Connect to your knowledge to life experiences.

You might also interject your interview with a comment or two about the 'tea' you are serving or being served and as well you can pantomime how you are eating it and the type of food. (example chewing a cob of corn from the three sisters or getting a brain freeze from eating ice cream) Don't have too many run-on sentences in your interview or you may lose your audience.

If you are doing this lesson online because of Covid 19, or homeschooling, and you have a sibling in another grade, have them replace one of the roles with a character from the century they are studying.

Once your proofreading and corrections are completed "perform" your interview.
| Art 1.1 create 2-and-3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 interpret art works; 2.2 analyse use elements and principles 3.1 representation of messages and contexts; 3.2 identify how art reflects diverse communities | ➢ On a large sheet of paper try to replicate the Tea Party scene by using closed polygon shapes. ➢ Keep your polygons reasonably large and closed. ➢ Fill the entire sheet of drawing paper with various polygons to resemble the painted picture. ➢ To complete the drawing use two different colours of pencils, or pens. ➢ One colour is used to choose one closed shape and fill it with its own set of a single repetitive style and weight of organic lines. ➢ The other colour is for creating a single repetitive style and weight of geometric lines within a different closed figure. ➢ Repeat #s 4 and 5 until the page is filled with lines. ➢ Each closed figure should have its own set and style of repetitive lines. Try to vary the line style and weight to create interest in your art. Choose whether the majority will have organic lines with a few shapes having geometric lines or will you have the reverse. |

**About the Art**

Eric Atkinson was considered a Canadian Abstract Landscape Painter.

Abstract artists do not paint from photographs nor do they try to make realistic work. They freely use line, colour, shape, texture, and form to leave concepts and ideas to the viewer’s interpretation. Although abstract artists may have studied a scene, such as a lake or farm, until they know it well, they self-interpret how that scene should be portrayed.

The abstract artist still needs to use their personal skills, and the elements and principals of design, to create sound compositions. Although the finished painting is not an accurate depiction of realistic landscape it is a depiction of what the artist had in their mind. The viewer is left to self-interpret what they see.

<table>
<thead>
<tr>
<th>Who is the Artist?</th>
<th>This artist is Eric Atkinson. He lived in London, England and in London, Ontario. He liked to do paintings about scenery.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About the Art</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
| **Elements**        |➢ Does the artist show a preference for organic lines and shapes or geometric lines and shapes?  
➢ Give examples of different line weights? What is the importance of changing the weights of lines?  
➢ What is the object in the furthest distance? Why do you think that?  
➢ If proportion is used what size do you think that those objects in the distance actually are?  
➢ What is Eric Atkinson saying when he applies the use of space the way he does? Any there overlapping objects?  
➢ Are the lines and shapes closer or further apart in the background compared to the foreground? What is the effect?  
➢ Use your whole arm to follow the path of the ‘ribbon’ across the bottom of the page. How does this make you feel? How does it indicate emotion? Where does the ‘ribbon’ start? Where does it end? How can you tell?  
➢ Are the colours bright and bold or more muted, dark, and natural? How do these colours make you feel? How would the picture feel differently if the artist had only used bright, bold, primary colours?  
➢ How does his use of value (light and dark) help him create distance in his painting? |
| **Principles:**     | Contrast; Repetition and Rhythm; Variety; Emphasis; Proportion; Art |

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➢ Give an example of implied texture.
➢ What would you say is the point of emphasis in this painting?
➢ Where would you say the person was positioned to see this view?
➢ How would this painting differ if the artist was looking at the shoreline of Toronto?
➢ Do you consider this a realistic painting or a more abstract sort of painting? Why?
➢ How do you feel an Indigenous person would have painted this picture in 1695? What medium would they have used and would the painting have been meant to keep for a long time?

Social Studies

The Huron-Wendat people were located on the shores of Lake Huron during the time that Sainte Marie Among the Hurons was first built from about 1639 to 1649 along the shores of Georgian Bay. After 10 years they were dispersed by the Haudenosaunee people and presently live in Quebec. (After 300 years Sainte Marie Among the Hurons was reconstructed to what it is today.)

If you have the opportunity to take a virtual tour of the Sainte Marie Among the Hurons site do so as it is very informative.

The French Europeans were fascinated with the shores of Lake Huron and 350 years later so was the London, England born artist, Eric Atkinson.

The artist was intrigued by the Aurora Borealis. What is the Aurora Borealis? Think about how the city lights affect the visibility of the sky around you. Who would have had the best views of the Aurora Borealis: Eric Atkinson? French Missionaries living at the fort Sainte Marie Among the Hurons? The Huron-Wendat before the French arrived in North America?

If you look carefully at the painting you could almost identify the shape of a longhouse. How would the influx of more people alter the living arrangements for the longhouse?

How would the lives of French missionaries, arriving from the cities of France, drastically change after landing on the shores of Lake Huron? How would they benefit from the knowledge of the local Indigenous people? How would their lives be made more difficult if they immediately encountered conflicts with the Indigenous people?

How would the fact that the Indigenous people knew about the best fishing spots on Lake Huron, and knew about spearing fish, help the European fishermen?
➢ Would knowing how to make pemmican, use animal organs for water storage containers, and make clothing from animal hides be a good trade off for beads and knives and kettles?
➢ List 2 major motives of the French Missionaries? Of the French fur traders? Of the Colonial agents?
➢ The Huron-Wendat were major suppliers of the furs and helped the other First Nations in their encounters with the French. How did the lives of the Wendat people change positively following their encounters with the various European fishermen? Missionaries? Fur traders? Colonial agents?
➢ How did the lives of the Wendat people change negatively following their encounters with the various European fishermen? Missionaries? Fur traders? Colonial agents?
➢ How do you think the Huron-Wendat people feel about the fact that they no longer occupy the land around Georgian Bay or fish along the shores of Lake Huron? What are they missing in their lives?
➢ Why was along the Great Lakes shoreline a good place to create European settlements?
➢ Give two positive outcomes for building a cottage on the shores of Lake Huron. Give two negative outcomes.
➢ Which level of government would you have to ask to get permission to build a cottage there? Would you require public input? What two sides of public input would you encounter?
➢ Would it make a difference if you wanted to build a resort instead of a cottage? Would it make a difference on who said they owned the land and who disagreed and said that they owned the land?
➢ Why would you have to get permission from the environmental groups?
➢ What would be your right as a new landowner on the shores of Lake Huron?
➢ What would be your responsibilities as a new landowner on the shores of Lake Huron?

**Science Structures**

1.1 effects of forces of natural phenomena; 1.2 impact of social & environment on structures; 3.1 internal forces; 3.2 external forces; 3.4 consequences from

➢ Lake Huron water levels are the highest they have been in over 20 years. In the winter of 2020, there was very little ice on the lakes and lots of rain so the grounds around Lake Huron are very wet.
➢ How have the high winds and large waves impacted the shoreline?
➢ Why should property owners be aware of the slopes and bluffs close to their cottages this summer?
severe natural phenomena; 3.5 sports equipment protects body

**Energy** 1.1 environment impacts on changing matter; 3.2 properties of solids, liquids, and gases 3.3 changes of state of matter; 3.4 physical changes in matter are reversible; 3.5 chemical changes are irreversible; 3.6 changes involve release of heat; 3.8 distinguish between physical and chemical change

**Earth** 1.1 long term effects of using energy and resources; 3.1 forms of energy; 3.2 renewable and non-renewable sources; 3.3 store and transform energy;

**Life Systems** 1.1 effects of social & environmental factors 1.2 effects of tech; 3.1 body systems 3.2 structure and function of major systems; 3.3 interrelationships btw systems; 3.4 common diseases

- How does groundwater levels and saturation affect the land and crops?
- If floods occur what might be the result on nearby farmland? In nearby city structures?
- How might wind and storm events affect the structures you see on the shoreline in this painting?
- List four positive reasons and 4 negative reasons for building structures on shorelines.
- How is today’s shoreline different from the same shoreline in the late 1600s?

- What are the properties of water in Lake Huron? How can those properties affect visibility for driving near and around the lake? While fishing?
- Are the changes that occur to Lake Huron reversible or irreversible? Are they chemical or physical changes?
- How do the changes of temperature occur in Lake Huron?

- Is Lake Huron a renewable or a non-renewable resource?
- How is Lake Huron used as a resource?
- Can Lake Huron be used as an energy source? Support your answer.
- Can any of Lake Huron’s energy be transformed and/or stored?

- Which body systems can make use of Lake Huron and how do they do that?
- How is it possible to catch a disease from swimming in Lake Huron or associating with people on the shores of Lake Huron? What might those diseases be? How can you prevent catching the disease?
- How do the different seasons impact how your body reacts to Lake Huron?
- How has environmental factors impacted Lake Huron as a food source? As a tourist resource?
- How have social factors impacted Lake Huron as a food source? As a tourist resource?

**Math**

**Numeracy**
Estimate; #s to 100 000; money to $1 000; place value to hundredths; compare and order fractions with like denominators; add and subtract

- You are on your way to go camping for the weekend, by Lake Huron. Generally, the country roads have traffic signs for 80km/h. It is 378km before you reach the camp site. You leave at 10:30 in the morning. When will you arrive at camp? Support your answer.
- In the car you play a fractions game. Your older brother says that 9/4 is less than 3 and ¼. Is he correct or not? Support your answer.
decimals to hundredths; multiply 2 digit by 2 digit whole numbers; divide 3 digit by 1 digit; relate simple fractions to decimals

- You challenge him to see who can figure out how many quarters are in $4.50. What was your answer?
- He thinks of a pattern challenge: 5, 12, 19, 26. What is the next number?
- Your pattern challenge is: 2, 3, 5, 8, 12... What is his answer?
- Yesterday your parent had gone shopping for camping snacks and drinks. She bought two cases of 24 cans of apple juice. Why did she choose cans instead of juice boxes or plastic jugs of juice? Each case cost $8.
- Write as many number facts from the single (24) array of juice cans as possible. Repeat for the 48 cans of juice. If there are 4 people in your family how many juice cans can each person drink over the weekend?
- The Marshmallows came in a package of 64. How many number facts can be created from 64? With a family of 4 how many marshmallows can each person claim? The bag cost $2.
- You bought four bars of milk chocolate bars. Each bar has 10 pieces. How many pieces in total? How many pieces can each person claim? One bar cost $1.50. How much was the total cost?
- You also had to buy a box of graham wafers. There are 30 wafers in each box BUT each wafer has two pieces. How many wafers all together? How many wafers can each family member claim? The box cost $3.
- How much in total did you spend?
- Write down how many marshmallows you claimed, how many chocolate pieces you claimed, and how many wafer pieces you claimed.
- Each smore needs 2 pieces of graham wafers, 2 marshmallows, and 1 piece of milk chocolate. Which of these three items will you run out of first?
- Describe the taste of a smores to an Indigenous child living in 1675.

**Literacy**

**Oral:** 1.4 summarize ideas; 1.5 stated versus implied; 1.6 connect to experience; 1.8 point of view; 2.6 non-verbal cues; 2.7 visual aids

**Reading:** 1.1 variety of text; 1.2 purpose; 1.5 inferences from stated and implied;

- Design a monopoly board. There will be 7 squares on each side, for a total of 24 squares (4 corners and 5 in between each corner).
- In one corner print the word **DIGESTIVE**. In the second corner print the word **RESPIRATORY**. In the third corner print the word **CARDIOVASCULAR**. In the fourth corner print the word **START**.
- In the 20 spaces that are left print words that have to do with the grade 5 life systems unit. They may include words, or word phrases, having to do with the various body systems; various organs; various roles the systems play (like: control growth, equalize body temperature, process involuntary
<table>
<thead>
<tr>
<th>Writing</th>
<th>Art</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6 connect to pers know &amp; exp&lt;br&gt;Writing: purpose, audience; 1.2 ideas; 1.3 gather info; 1.4 sort info; 1.5 order main ideas; 2.1 more complex text; 2.3 vivid language; 2.4 vary sentences; 2.5 support point of view 2.7 Revisions; 3.1 spelling; 3.4 punctuation; 3.5 parts of speech; 3.6 proofread; 3.8 published</td>
<td>1.1 create 2-and-3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 interpret art works; 2.2 analyse use elements and principles 3.1 representation of messages and contexts; 3.2 identify how art reflects diverse communities</td>
</tr>
</tbody>
</table>

- Find a token play piece (a coin, pebble, button etc.) for each player. You can play this game by yourself or with 2 or 3 partners. The game is played by rolling a die. Everyone begins the game by placing the playing piece on the corner marked "Start". Roll the die. Move that number of spaces. Whatever block you land on determines the word that you have to explain AND you must also provide additional information about the topic.
- As an example: *If you land on "teeth" you could explain that teeth are part of the skeletal system though teeth are not actually bones. They are stronger and like bones benefit from calcium.*
- The game ends when someone successfully makes it all the way around the board.

- Gather an assortment of whatever materials are available to you such as sticks, twigs, stones, cardboard, glue, newspaper, construction paper, buttons, cotton balls, paint, markers, colouring crayons, string, cling wrap, scissors, paintbrushes, clay, felt, and/or whatever other items that you might use to help you build a diorama habitat.
- Think of a regional animal that you could be found near or around Lake Huron.
- Use the items you found to create that animal. Create the animal large enough that it is easy to design one major organ system found inside that animal. Label the parts that can be labelled.
- Be as creative as you like but don't stress over a super realistic look if it is difficult to achieve. Just understand the facts behind the design and try to use foreground, middle ground, and background to give your design an artistic, and as accurate as possible, look.
About the Art

Though Clark McDougall started out painting in watercolour he eventually changed to Fauvism. Fauvism is the use of intensely vivid and non-naturalistic colours. It was started by French artists and lasted from 1903 to 1908. After his coronary in 1957, Clark was forced to use photographs to help him create his art. At that time, he decided that the outline of the form was to play a major role in his art work. He painted in his own style of Fauvism.

Fauvism uses unnatural colours. The brilliant colours create emotional reactions to the paintings. The paint is applied, often right from the tube of paint, to create massive explosions of colour and feelings. Spontaneity and the sometimes clashing of colours play with value and intensity. The heavy black enamel outlines create a strong, unified work that appears flat on the canvas.

<table>
<thead>
<tr>
<th>Who is the Artist?</th>
<th>This artist is Clark McDougall. He lived in St Thomas, Ontario but for a little while he lived in Toronto and Buffalo, New York.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About the Art Elements</strong></td>
<td>Like Jack Chambers, Clark McDougall liked to take photographs. He loved to take pictures of things he saw around St. Thomas.</td>
</tr>
<tr>
<td>Line; Shape; Colour; Texture; Value;</td>
<td>After he printed the photos, he would study them over and over again. He would draw little pictures of the photos over and over again. Sometimes he would draw things a little bit differently each time. When he felt that he was ready he would paint the big picture.</td>
</tr>
</tbody>
</table>
**Principles:**
Contrast; Repetition and Rhythm. Variety Emphasis. Proportion. Art

- Why does the use of organic lines or geometric lines work well together in this painting? Consider man versus nature. Which lines are used to represent mankind? Which lines represent the natural environment?
- Examine the range of colours used. Locate solid blocks of colour. Locate mixed tinted colours. Do they fit into a specific colour theme? What emotions does the viewer experience while looking at the colours?
- How did he use white to give him a wider range of colours?
- In this painting, how does Clark McDougall make use of the foreground, middle ground, and background to create a sense of depth? Which section has the most detail?
- How does he choose to use value (light and dark)? Did he apply shadows? Why? or Why not? What affect does this have on the overall painting?
- What effect does outlining in black create? Draw three simple flower shapes. Leave one flower as is. Outline one flower lightly with black. Outline the last flower with a thick black line. Which effect do you prefer? Why?
- Is this an urban church or a rural church? Support your answer.
- How does the artist create implied texture on the ground by the railroad? Would the railroad have existed a very, very long time ago?
- How do you know what season it is?
- How does the artist use proportion? How does it help to dictate what you notice first or does it?
- Today we go to a store and purchase paint. In 1695, the Indigenous people could not do that. Choose any three colours and determine how the Indigenous painters could have achieved those colours to paint on animal hides or on the tipis of important people?

**Social Studies**
A 1.1 positive / negative impact of First Nations & Europeans before 1713; 1.2 benefits of contact 1.3 connect today issues; 2.1 perspectives of groups 3.1 major First Nation groups; 3.2 significant interactions; 3.3 main European motives; 3.4

- What physical features can you observe in this painting? What landmarks are visible?
- What role does religion play in your own life? What role do you think religion plays in the lives of some other people you know?
- What role do you think religion played in the lives of the French Catholic missionaries? The French fur traders? The French settlers of 1650s? The French Colonial agents?
- In the 1600s, the French (and then later the English and the Spanish) felt that they had the right to claim any land not possessed by any other CHRISTIAN prince through either voluntary giving by the people living there or by conquest.
significant offices and institutions; 3.5 btw First Nations and explorers / settlers; 3.6 different First Nation groups react Europeans;

**B** 1.1 levels of gov addressing issues; 1.2 plan of actions for social issues; 1.3 plan of actions for environmental issues; 2.5 evaluate soc & enviro issues; 3.1 describe rights and responsibilities; 3.3 gov shared responsibilities; 3.4 gov processes to solicit public input; 3.6 groups different perspectives; 3.7 citizens actions towards social & environmental issues

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<table>
<thead>
<tr>
<th>Science Structures</th>
<th>St James Church is in the middle of a field. How might a tornado have an affect on the building and on the land surrounding the church?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 effects of forces of natural phenomena; 1.2 impact of soc &amp; environment on structures; 3.1 internal forces; 3.2 external forces; 3.4 consequences from</td>
<td>Explain why you think a hurricane might or might not happen in this area?</td>
</tr>
<tr>
<td>1.2 impact of soc &amp; environment on structures; 3.1 internal forces; 3.2 external forces; 3.4 consequences from</td>
<td>Under which circumstances might flooding occur?</td>
</tr>
</tbody>
</table>

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How did this affect the Indigenous people already living on the land?

- How would Europeans settling on the land alter the landscape shown in this painting and change the actual environment? Why would that make a huge difference in the lives of the First Nation people?
- How would the Indigenous knowledge of the local plants, and animals, help those missionaries and fur traders?
- How did the missionaries help the Indigenous people? What major motives did these missionaries have?
- How would the French Catholic missionary motives of the 1650s affect the lives of the Indigenous people today?
- What conflicts would arise between the missionaries and the Indigenous people who lived close to the area of St James Church?
- In the 1650s what conflicts arose between the different government levels and the church authorities? How did they resolve those issues?
- How would it make a difference if an English protestant church was built near the French Catholic church?
- How does religion conflict with government in Canada today? How are some of those conflicts resolved?
- Compare how religion dictates how people live today and how they lived then.
- Does religion play a role in the way people take care of the environment? Does government play a role in the way people take care of the environment?
- What plan of action could you take to encourage the government to protect the land around St. James Church? Is it important to protect that land?
- Today there are still major conflicts between groups of people. What are some solutions to those conflicts?
- What is the governments role in resolving social conflicts? Environmental conflicts?
- What can you do? What safe actions can you take? How can you alter your thinking process?
severe natural phenomena; 3.5 sports equipment protects body

**Earth** 1.1 long term effects of using energy and resources; 1.2 effects of tech on energy; 3.1 forms of energy; 3.2 renewable and non-renewable sources; 3.3 store and transform energy;

**Life Systems** 1.1 effects of social & environment factors 3.1 body systems 3.2 structure and function of major systems; 3.3 interrelationships between systems; 3.4 common diseases

- What kind of heating system do you think that this church might use? Lighting system?
- What resource provides them with that heating system? Lighting system? Is it a renewable or a non-renewable resource?
- If it is a non-renewable resource what might happen to that resource over time? Are there ways to store that resource to be used in a future time?

- Attending church is a great comfort to many people while it might be a great source of discontent for some other people? How is the body’s nervous system affected by the outlook on religion?
- How can the nervous system affect the body’s ability to function properly in its other systems?
- How can the inability of the body to function properly affect the impact of common diseases?
- In the 1600s religion played a major role in the relocation of Indigenous people. Explain how this relocation affected EACH of the body’s major systems. (skeletal, circulatory, muscular, nervous, respiratory, digestive, renal and urinary, lymphatic and immune, endocrine, cardiovascular, and reproductive systems)
- How have those effects impacted the Indigenous people of today?

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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; #s to 100 000; money to $1

- The Blanding Turtles live for about 70 years. If a turtle was 9 times your age how old would it be today? Is it possible the turtle would still be alive?
Sometimes it takes 1000 turtle eggs to create one adult turtle. How many groups of 10 in 1000? 10 000? 100 000? How many groups of 100 in 1000? in 10 000? In 100 000? How many groups of 1000 in 1000? in 10 000? In 100 000? Do you have enough base ten blocks to help show any of the answers?

How many days does a turtle carry on it’s 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 number of days on a turtle’s shell.

When you count by 25s how close can you get to the number of days in a year? How many groups of 25 to reach 475?

To travel to St. James Church, for the baptismal celebration, it took us 2 hours by car. It took my aunt only 3/4 that time. How many minutes was she in the car?

My other cousins took 1/3 of that time. How long were they in the car?

Relate each coin up to $1 into a decimal and then into a fraction.

Relate these fractions to decimals: ½, 1/3, ¼, 1/5, and 3/4.

Create a creature that would live in the habitats surrounding St. James Church. Use at least 5 polygons to create your creature.

Identify each angle in your polygon creature.

Just like we needed a map and directions, with good landmarks to get to St. James Church, other civilizations also needed adequate directions.

Create a village and surrounding map of an Indigenous village of 1675.

Think of multiple locations in your village. Choose two that would be a good distance apart.

Draw a map that shows the two different location in your village (spread them a good distance away from each other). Label those locations. Put paths, vegetation, rivers, other buildings, and include symbols, to represent services found in that civilization. Add labels where you can. Would a compass rose help?

Write a letter to your auntie who is on her way to meet you. Write clear directions explaining how to travel from her location to the place where you are waiting for her.

Show your map to someone. Read your directions out loud WITHOUT pointing to the locations. See if they can find your starting and stopping points just by listening.
<table>
<thead>
<tr>
<th>Art</th>
<th></th>
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<tbody>
<tr>
<td>1.1 create 2-and-3-dimensional works of art; 1.2 understand composition; 1.3 use elements to communicate ideas; 1.4 use variety of materials; 2.1 interpret art works; 2.2 analyse use elements and principles 3.1 representation of messages and contexts; 3.2 identify how art reflects diverse communities</td>
<td>➢ Keep your sentences clear and not too wordy. Short sentences work best. Think of how they are travelling. Give them approximate times to get from one icon to the next.</td>
</tr>
<tr>
<td>➢ Fold a large piece of paper to have three large blocks all equal in size. In each block you will draw a contour shaped human as large as the space allows.</td>
<td>➢ Choose one of the body systems studied this year. In block one, use the name of the system as a heading and write it in neat, not too large, capital letters. Repeat in blocks two and three using different body systems as titles or headings. Keep your titles in a smaller font so you have room for drawing.</td>
</tr>
<tr>
<td>➢ Before you start drawing think of your use of space: overlapping items; positive and negative space; foreground, middle ground, and background.</td>
<td>➢ Think of how you will employ weight of line and contour shapes to make your work more easily recognizable.</td>
</tr>
<tr>
<td>➢ Think of size so viewers do not have to squint to make out the various features.</td>
<td>➢ You will need to depend on the use of pencil lead, to show depth, as these will remain black and white and not have colour.</td>
</tr>
<tr>
<td>➢ You will need to depend on the use of pencil lead, to show depth, as these will remain black and white and not have colour.</td>
<td>➢ When your systems are drawn for each of the three body systems you chose, you may choose to return to the drawings and add smaller features to give greater realism to your illustrations.</td>
</tr>
<tr>
<td>➢ You may choose to add some pencil shading to give value to your drawings.</td>
<td></td>
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</tbody>
</table>
About the Art

Representational Imagery is also called Figurative Art. It is a work of art that the viewer easily recognizes. It is not photorealism as the details do not have to be realistic, the shape and form simply have to be recognizable to the viewer. It takes identifiable objects and gives them their physical appearance in general terms. Representational Imagery does not deal solely with figures or landscapes. It can represent objects as well. Colours do not have to be realistic.

Bob Bozak had two themes that he expressed, often, in his art: the idea of the popular hero, or the latest known personality, and the way they used that fame to achieve financial gain.

| Who is the Artist? | This artist is Bob Bozak. Some of the places he lived in are Alberta, British Columbia, Toronto, and London, Ontario. He liked to paint famous Canadians. He loved hockey and things having to do with hockey, like hockey sticks, skates, and the Montreal Canadian sweater. |

### About the Art Elements

- Line;
- Shape;
- Colour;
- Texture;
- Value;

#### Principles:
- Contrast;
- Repetition and Rhythm;
- Variety;
- Emphasis;
- Proportion;

**Art**

Bob Bozak painted two things: a man and a donut. Which one did you see first? What do you think the artist is trying to communicate to the viewer?

- Does he use proportion and scale to give the man or the donut more importance? Why or Why not?
- Does Bob Bozak prefer organic or geometric lines? Support your answer.

**Where is the use of detail greatest?**

- Look at the weight of his lines, particularly around the face. How does this use of line help to define the facial features?
- What is implied line? How did Bob Bozak achieve that look?
- If Bob Bozak only had the primary colours how could he create each of the colours he used in his painting?

**Why is the background empty? Is that a good use of space or should he have filled in the space with something? If so what?**

- Divide the painting into foreground, middle ground, and background. How would this help you if you were trying to draw the same picture?
- Is the donut texture real or implied? How did he use his paint to show you texture?
- How did value play a role in creating the shadow?
- Where is the focal point in this painting?

The artist is making a political statement. Explain how Tim Horton used his hockey fame to create Tim Hortons the restaurant. Give two examples of when it is wonderful for people to take advantage of their fame. Give two examples of where it was very wrong for famous people to use their fame for profit.

### Social Studies

**A**

1.1 positive / negative impact of First Nation and European before 1713; 1.2 benefits of contact;
1.3 connect today issues;

**B**

1.1 levels of gov addressing issues;
1.2 plan of actions for social issues;
1.3 plan of actions for environment issues; 3.1 describe rights and responsibilities; 3.2 jurisdictions of gov levels; 3.4

- Obviously, Tim Hortons did not exist in North America in the 1600s. They did, however, begin celebrating Thanksgiving on the Eastern shores of North America (Plymouth) starting in 1621.

- By the late 1600s Thanksgiving was celebrated once a year. The Indigenous people were great at catching deer, pheasants, bear, geese, and other wild animals. They introduced the French to the three sisters (corn, bean, and squash) and showed them how to make flour out of the corn. They were also good at fishing and knowing which herbs, chives, nuts, and berries (blueberries, raspberries, cranberries, gooseberries, chokeberries, etc.) were good for eating and ways to store them. Wild rice was also gathered by the Indigenous people. Lakes and rivers provided fish. The
<table>
<thead>
<tr>
<th>Indigenous people showed the newcomers how to harvest and store these products.</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ The Europeans introduced spices, fruits, wheat, coffee, dogs, cats, cattle, donkeys, sheep, pigs, goats, and chickens.</td>
</tr>
<tr>
<td>➢ How would any of the above facts have changed the lives of either groups in a positive format? Give support to your answers.</td>
</tr>
<tr>
<td>➢ Horses were brought to North America in 1665 (The Sable Island Horses). What positive affect did that have on the Indigenous people?</td>
</tr>
<tr>
<td>➢ The Europeans also brought over alcohol, smallpox, measles, and whooping cough. Explain how this ultimately changed the lives, in such a negative way, for the Indigenous people.</td>
</tr>
<tr>
<td>➢ How has it continued to affect the lives of Indigenous people today?</td>
</tr>
<tr>
<td>➢ Assume that a company wanted to build a new Tim Hortons’s in your neighbourhood. What government level would become involved?</td>
</tr>
<tr>
<td>➢ Is there a need for social input? How could that happen?</td>
</tr>
<tr>
<td>➢ How can the conflict between the business financial aspect and the environmental group be resolved?</td>
</tr>
<tr>
<td>➢ Think of your neighbourhood. Would you approve of a new Tim Hortons being established there or not? Support your opinion and make a plan of action. Have someone you know take the opposite point of view and have them make a plan of action. Compare your plans.</td>
</tr>
<tr>
<td>➢ As a member of your neighbourhood what are your rights and responsibilities?</td>
</tr>
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</table>

| Tim Hortons is a fast food restaurant. There are approximately 4 300 of them in Canada. |
| Compare the different natural phenomena that might impact the structures of three of these Tim Hortons: Tim Hortons in the middle of downtown London, Ontario, Tim Hortons in Hamilton along the waterfront of Lake Ontario (the location of the first Tim Hortons), and Tim Hortons in Moncton, New Brunswick (near the Atlantic Ocean and where there is one Tim Hortons’ for every 4000 citizens in Moncton). |
| Would it make any difference if the natural phenomena were listed in the severe category? |
| What type of matter are cooked donuts? |
- What are the processes used to produce donuts and coffee? Are those processes the same or different?
- What types of energy are used to create donuts and coffee?
- What are the properties of coffee? Give an example of each property.
- Is it a chemical change or a physical change when a solid coffee bean is changed to liquid coffee? Is this change reversible or non-reversible? What is release, or removed, when these changes occur?
- Is it a chemical change or a physical change when various ingredients are changed into a donut? Is this change reversible or non-reversible? What is release, or removed, when these changes occur?
- Explain the long-term effect Tim Hortons has on the use of the earth’s energy and resources. How do they use non-renewable resources?
- How is Tim Hortons trying to decrease their use on non-renewable resources?
- Suggest something else that could help Tim Hortons to further reduce their use on those resources.
- Are coffee beans renewable? What donut ingredients are difficult to obtain?

**Math**

<table>
<thead>
<tr>
<th>Numeracy</th>
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<tbody>
<tr>
<td>Estimate; #s to 100 000; money to $1 000; place value to hundredths; compare and order fractions with like</td>
</tr>
<tr>
<td>If you bought eight dozen donuts and each DONUT cost 17 cents how much money would you need?</td>
</tr>
<tr>
<td>If you buy 127 donuts and put 6 donuts in each box how many boxes do you need?</td>
</tr>
<tr>
<td>With that 127 donuts there are 45 jelly, 29 chocolate chip, and 14 sprinkles. How many plain donuts can you get?</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Denominators; add and subtract decimals to hundredths; multiply 2 digit by 2 digit whole numbers; divide 3 digit by 1 digit; relate simple fractions to decimals</td>
</tr>
<tr>
<td>You have an array of donuts: 6 columns and 5 rows. Write as many number facts from this array as possible.</td>
</tr>
<tr>
<td>If you cut each of the 127 donuts in half and give everybody each one piece how many people could you feed?</td>
</tr>
<tr>
<td>For a school party we ordered 123 chocolate chip donuts and 159 donuts with sprinkles. How many donuts did we get?</td>
</tr>
<tr>
<td>The other team ordered 132 plain donuts and 141 jelly donuts. How many donuts did they get?</td>
</tr>
<tr>
<td>Which team ordered more donuts and by how much?</td>
</tr>
<tr>
<td>There were 79 left over at the end of the celebration. Five people, from the clean up crew, got to take them home to their 5 different families. How many donuts did each family get?</td>
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**Literacy**

**Oral:** 1.4 summarize ideas; 1.5 stated versus implied; 1.6 connect to experience; 1.8 point of view; 2.6 non-verbal cues; 2.7 visual aids

**Reading:** 1.1 variety of text; 1.2 purpose; 1.5 inferences from stated and implied; 1.6 connect to pers know & exp

**Writing:** purpose and audience; 1.2 ideas; 1.3 gather info; 1.4 sort info; 1.5 order main ideas; 2.1 more complex text; 2.3 vivid language; 2.4 vary sentences; 2.5 support point of view 2.7 revisions; 3.1 spelling; 3.4 punctuation; 3.5 parts of speech; 3.6 proofread; 3.8 published
| Tim Hortons was not available so what was available for drinks and desserts? |
| Choose one item from your meal and describe, in more detail, how that item was prepared for consumption. |
| Research what the ingredients of a donut are and what the ingredients of bannock are. Create a Venn diagram to compare the two. |
| Has all this planning made you hungry yet? Go get yourself a snack. |

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</tr>
<tr>
<td>Draw an array of donuts 3 x 4.</td>
</tr>
<tr>
<td>Decorate them in various themes. Be sure that the colour themes are easily recognizable. Perhaps record the colour theme in the center of the donuts.</td>
</tr>
<tr>
<td>Include the following colour, line, and value elements in your decorations: Primary</td>
</tr>
<tr>
<td>Secondary</td>
</tr>
<tr>
<td>Monochromatic</td>
</tr>
<tr>
<td>Warm</td>
</tr>
<tr>
<td>Cool</td>
</tr>
<tr>
<td>Solid colour</td>
</tr>
<tr>
<td>Tints</td>
</tr>
<tr>
<td>Hatching</td>
</tr>
<tr>
<td>Cross-hatching</td>
</tr>
<tr>
<td>Implied lines</td>
</tr>
<tr>
<td>Gradation of value</td>
</tr>
<tr>
<td>Your choice</td>
</tr>
</tbody>
</table>