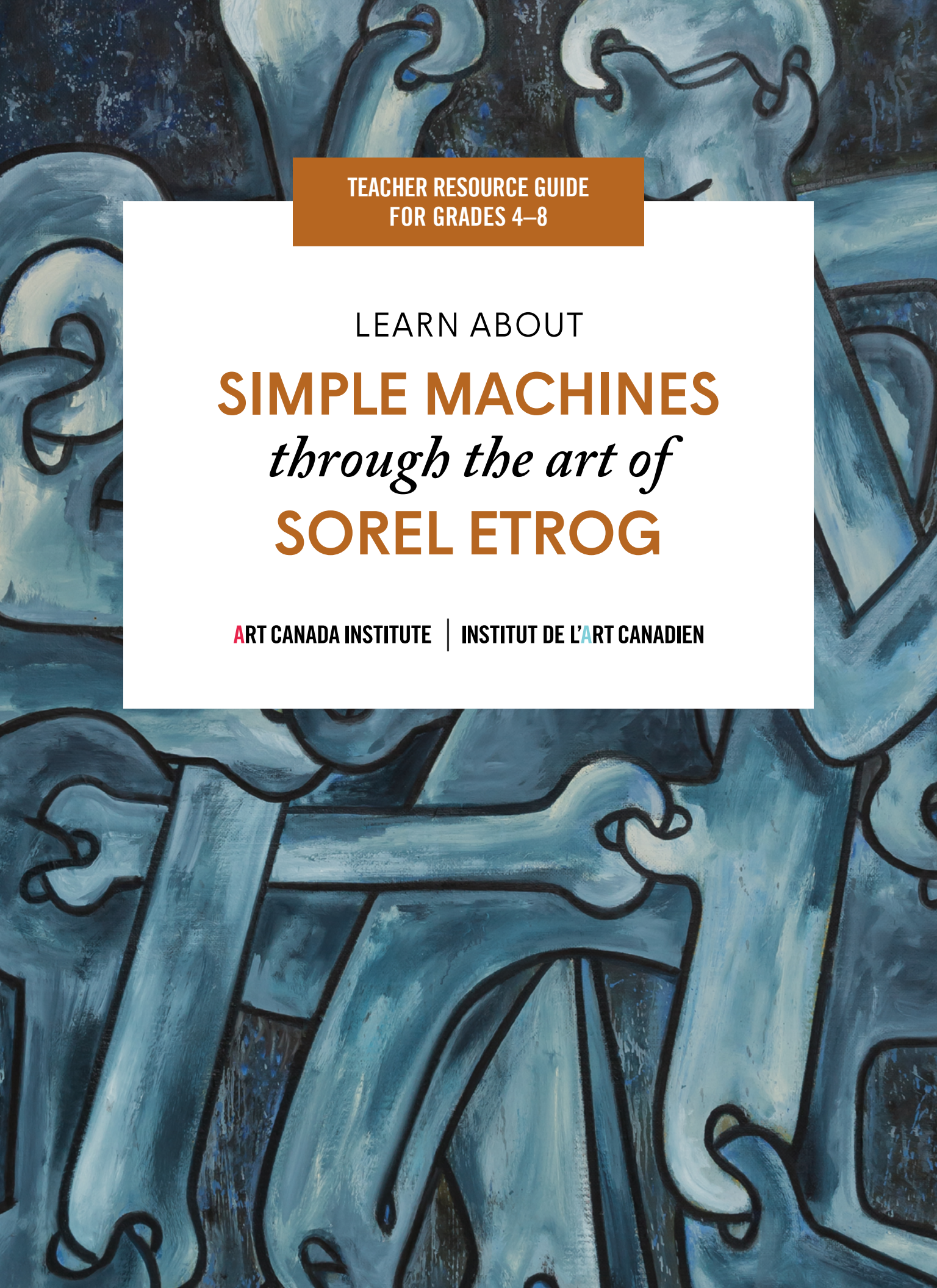

TEACHER RESOURCE GUIDE
FOR GRADES 4–8

LEARN ABOUT

SIMPLE MACHINES *through the art of* SOREL ETROG

ART CANADA INSTITUTE | INSTITUT DE L'ART CANADIEN

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RESOURCE OVERVIEW

This teacher resource guide has been designed to complement the Art Canada Institute online art book Sorel Etrog: Life & Work by Alma Mikulinsky. The artworks within this guide and images required for the learning activities and culminating task can be found in the Sorel Etrog Image File provided.

Sorel Etrog (1933–2014) was a leading artist in twentieth-century Canada, and although he worked in different media, he is most famous for his sculptures. Drawing on a wide array of forms, he created works with remarkable energy and tension; many of his works seem to defy gravity. He created several sculptures for public spaces, and he encouraged public engagement, advising that people should not be intimidated by sculpture. In this guide Etrog's works are used to examine mechanics in both the natural and the mechanical worlds and to inspire investigation of organic forms and the function of simple machines. Using this investigation as a jumping-off point students will design and analyze their own versions of simple machines, showing their understanding of function and design.

Curriculum Connections

- Grades 4–8 Science
- Grades 4–8 Technology

Themes

- Measurement and calculation
- Natural forms
- Simple machines

Fig 1. Sorel Etrog, *Complexes of a Young Lady*, 1962. A perfect example of one of Etrog's biomorphic sculptures, this work was inspired by organic forms.

Teaching Exercises

The activities in this guide will introduce students to the concept of simple machines and let them use their understanding of mechanisms to perform careful measurements and calculations.

- Learning Activity #1: Classify organic and mechanical systems (page 4)
- Learning Activity #2: Find and explain mechanisms (page 5)
- Culminating Task: Organic forms and simple machines (page 7)

A Note on Using This Guide

Some of the works included in *Sorel Etrog: Life & Work* show sculptures by Etrog that use screws and bolts to portray a representation of sexual acts. Other paintings and images are inspired by Etrog's experiences of war, death, and the Holocaust. While none of these specific works have been used as critical examples in this guide, they do appear in the book that inspired this guide. Please consider the age and stage of your students should you direct your students to *Sorel Etrog: Life & Work*.

WHO WAS SOREL ETROG?

Fig 2. Sorel Etrog at the Zacks' Southampton Wood Workshop, 1959.

Sorel Etrog was born Sorel Eserik in 1933 in Iaşi, Romania. His family was part of the city's large Jewish population. Romania became an ally of Nazi Germany in the Second World War, and Etrog witnessed violence against his community; his father barely escaped a pogrom in which over thirteen thousand Romanian Jews were murdered. Life under Soviet occupation, which began in 1944, continued to be hard. In 1946 Etrog's family was caught attempting to cross the border into Hungary and both of his parents were arrested, leaving Etrog and his five-year-old sister on their own for several weeks. In 1950 the family finally left Romania for Israel, changing their name to Etrog when they arrived.

Etrog studied painting and sculpture at Tel Aviv's Arts Institute for Painting and Sculpture (known today in English as the Avni Institute of Art and Design), and in 1958 he moved to the United States to continue his education at the Brooklyn Museum Art School. Struggling to gain recognition, he had a lucky break in 1959, when he met the Jewish-Canadian businessman and art patron Samuel J. Zacks. That summer, Etrog spent two and a half months at Zacks's summer house on Lake Huron, where he made his first sculptures. A few months later, in October 1959, he had his first Canadian exhibition in Toronto.

In the early 1960s Etrog began selling his biomorphic sculptures to important institutions in New York, and in 1963 he moved to Toronto. Selected in 1966 to represent Canada at the Venice Biennale, the internationally prestigious art fair, Etrog went on to spend several months in Florence, Italy, living and working. He returned to Canada in 1967. He became a household name in Canada—his 1968 design for the Canadian Film Awards was known simply as "the Etrog" until it was renamed "the Genie" in 1980. Like many artists in the 1970s, Etrog had a studio near Yonge and Dundas Streets in Toronto, putting him at the heart of the city's growing art scene. He began to diversify his approach to artmaking, exploring film and installation, and he collaborated with famed writers, including Samuel Beckett. At the same time, monumental versions of his abstract sculptures were installed as public art in cities around the world.

Although Etrog became less productive starting in the 1990s, he continued to work, making smaller, composite pieces that addressed the Holocaust and his childhood experiences. He also sought ways to ensure his legacy, and in 2010 began the process of organizing the Hennick Family Wellness Gallery to create a space for his work in Toronto's Mount Sinai Hospital, where he had been treated for a broken hip. Etrog died in Toronto in 2014.

Fig 3. Sorel Etrog, *The Golem,* 1959. This wood carving is one of Etrog's earliest sculptures.

Fig 4. Sorel Etrog, *Night Spirit,* 1969–70. Like several of Etrog's sculptures, this painting uses a link motif.

Fig 5. Sorel Etrog, *Survivors Are Not Heroes*, 1967. Here Etrog has created a visual metaphor for the emotions that stem from traumatic experiences of war.

Fig 6. Sorel Etrog, *Powersoul,* 1988. Etrog created this enormous steel sculpture for the 1988 summer Olympics in Seoul, South Korea.

NATIONAL & WORLD EVENTS

SOREL ETROG'S LIFE

Outbreak of the Second World War, the second global conflict using modern industrial weapons.	1933	Sorel Etrog is born Sorel Eserik in Iaşi, Romania.
	1939	
	1941	Etrog's father is injured in, but survives, the Iaşi pogrom.
First nuclear power plant to create electrical power for use by the public is turned on in the USSR. The same year the first commercial passenger plane using jet engines is tested by Boeing.	1946	Etrog's parents are arrested in the family's attempt to leave Soviet-occupied Romania.
	1950	The family leaves Romania, settling in Israel, where they change their name to Etrog.
	1953	
Sputnik I is launched by the USSR, marking the beginning of the space race, which accelerates the development of mechanical, aeronautic, computing, and material technologies.	1954	Etrog begins his studies in painting and sculpture in Tel Aviv.
	1957	
	1958	Etrog moves to New York City to study at the Brooklyn Museum Art School.
General Motors installs a set of Unimate industrial robots for car manufacturing.	1961	
	1963	Four years after a summer visit to Canada, Etrog moves to Toronto.
Marshall McLuhan, Canadian philosopher, media theorist, and friend of Etrog, publishes the book *Understanding Media: The Extensions of Man*, which examines the forces and effects of technology and media on society.	1964	Etrog represents Canada at the Venice Biennale, the famed international art fair.
	1966	Large-scale works by Etrog are included in the world's fair Expo 67 and Toronto's *Sculpture '67.*
	1967	
	1968	Etrog is commissioned to design the Canadian Film Awards statuette that was originally named "the Etrog" and later renamed "the Genie."
The United States successfully lands astronauts on the moon using advances in engineering, rocketry, and manufacturing.	1969	
WABOT, the first full-scale humanoid robot, is completed at Waseda University in Japan.	1972	Etrog returns to Romania for the first time since his family's departure.
Advances in semiconductor technology enable widespread use of personal computers.	1980s	
The World Wide Web is developed by Tim Berners-Lee, allowing easier access to the internet and ushering in the information age.	1989	
	1996	The Art Gallery of Ontario in Toronto features a retrospective of Etrog's work.
	2013	Etrog dies in Toronto.
	2014	

Fig 7. A Replica of the USSR's *Sputnik 1*.

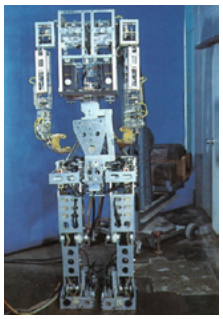

Fig 8. WABOT-1, a humanoid robot, had limbs and it could move objects with its "hands."

Fig 9. The Altair 8800, one of the earliest personal computers, was available as a kit that you could assemble yourself.

Fig 10. Sorel with parents Tony and Moriț, c.1936.

Fig 11. Canadian Pavilion in Venice with *Moses*, 1963–65 (foreground), and *Mother and Child*, 1960–62 (background), 1966.

Fig 12. The Canadian Film Award, renamed the "Genie" in 1980.

LEARNING ACTIVITY #1

CLASSIFY ORGANIC AND MECHANICAL SYSTEMS

In this activity students will build on and develop their understanding of nature and machines by exploring a selection of works by Sorel Etrog. Students will observe the works carefully and discuss what parts of each artwork appear to be mechanical (with sharp edges, smooth surfaces, interlocking parts, etc.) and what parts appear to be organic or natural (showing asymmetry, random curves, bulbous shapes, etc.). Students will assemble lists of characteristics that are held by organic systems and by mechanical systems.

Big Idea

Organic (natural) and mechanical objects

Learning Goals

1. I can identify the characteristics of natural and mechanical objects.
2. I can use identifying characteristics to classify objects.
3. I can use critical thinking to propose reasons for specific forms found in nature and in mechanical objects.

Materials

- Chart paper
- Markers or pens
- Sorel Etrog Image File
- "Who Was Sorel Etrog?" biographic information sheet (page 2)

Process

1. Begin the lesson by introducing Sorel Etrog using the "Who Was Sorel Etrog?" biographic information sheet (page 2). Project or print out copies of one of Etrog's large sculptures such as *War Remembrance II*, 1960–61, or *Moses*, 1963–65 (see Sorel Etrog Image File).

2. Break the class into small groups and task them with closely examining the works using the following guiding questions:
   - What parts or aspects of this sculpture appear mechanical (look like parts of machines)? What makes you say this?
   - What parts or aspects of this sculpture appear organic (look as if they were made by nature)? What makes you say this?

3. Together as a class discuss characteristics that the groups have generated (sharp edges, metallic, strong) and organize these characteristics into three columns: "Mechanical characteristics," "Organic characteristics," and "Both." You can expect there to be some disagreement and overlap in these categories, and students should be encouraged to use reasoning, provide examples, and make clear statements, approaching the problem knowing there is not a single "right" answer to this question.

4. Display the lists created during this activity for future reference and discussion through the next activities.

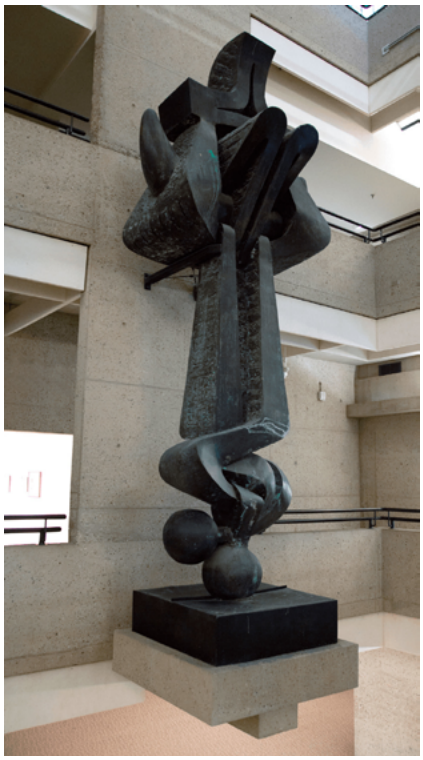

Fig 13. Sorel Etrog, *Moses*, 1963–65. This sculpture is abstract, but its title refers to the Jewish prophet.

Fig 14. Sorel Etrog, *War Remembrance II*, 1960–61. In this work, Etrog experimented with circular motifs and rounded spirals.

LEARNING ACTIVITY #2

FIND AND EXPLAIN MECHANISMS

Sorel Etrog's sculptures often contain surfaces that look like hinges, and wheels and axles that suggest motion and mechanisms (i.e., parts of a machine that move and work together). Using Etrog's later sculptural works, students will examine the shapes in these sculptures and relate them to simple machines they have learned about in class. (In order to complete this activity, students will require some background knowledge about five simple machines: wheels, levers, screws, pulleys, and wedges.)

Big Idea

Actions of machines

Learning Goals

1. I can identify the actions of a variety of simple machines.
2. I can use careful observation and reasoning to explain the action of a simple machine.

Materials

- Markers, pens, pencils
- Paper for sketching
- Sorel Etrog Image File

Process

1. Review the concepts and terminology of simple machines from prior learning. As a class, review five simple machines (wheels, levers, screws, pulleys, and wedges) and related terms (forces, axle, action distance, fulcrum, etc.). Build a vocabulary list together to use and refer to during the following activity and post this list where it is visible to students.

2. Assign each student to examine one of the following sculptures from Sorel Etrog's later career (see Sorel Etrog Image File).

    - *Rushman*, 1974–76
    - *Sun Life*, 1984
    - *Dream Chamber*, 1976

More than one student may examine the same sculpture, but they should work individually. If possible, provide each student with a small printed copy of the work.

Fig 15. Sorel Etrog, *Rushman*, 1974–76. The structure of this work gives the impression of a rushed walking pace.

Fig 16. Sorel Etrog, *Sun Life*, 1984. *Sun Life* is an enormous sculpture installed at the northeast corner of the busy Toronto intersection of King Street and University Avenue.

Fig 17. Sorel Etrog, *Dream Chamber*, 1976. This sculpture is a globe whose surface is composed of several hinged doors.

Learning Activity #2 Continued

3. Have students carefully observe the sculpture and use their imagination to consider the following questions:
    - If this figure moved, how would it move?
    - What parts of the figure might turn, pivot, or slide?

4. Ask students to use their learning about simple machines to annotate their images to show how parts of the sculptures could be used as one of these five simple machines: wheels, levers, screws, pulleys, or wedges.

5. Students should then explain through either sketches or written notes how the simple machine would function, identifying important parts (axle, fulcrum, action surface, etc.) using appropriate technical language.

6. At the conclusion of the activity, have students post their annotated sculptures or sketches around the room. The whole class can then participate in a gallery walk to observe the ideas of their peers. A class discussion may follow: students can compare the various simple machines they saw in the sculptures with other interesting ideas from their peers' imagination.

Fig 18. Sorel Etrog, *King and Queen*, 1990. This sculpture was displayed in Harbour Green Park, Coal Harbour, Vancouver, as part of the 2005 Biennale.

CULMINATING TASK
ORGANIC FORMS AND SIMPLE MACHINES

Taking Sorel Etrog's works as inspiration, students will create a simple machine that combines both organic (natural) and mechanical elements. Starting from a form found in nature, students will use their understanding of simple machines to create their own functional simple machine to better understand the science behind simple machines and the exciting combination of organic and mechanical forms found in the art of Etrog.

Big Idea
Form and function

Learning Goals
1. I can use my understanding to design a simple machine.
2. I can use measurement and calculation to determine mechanical advantage.
3. I can use an iterative approach to experiment and improve design ideas.
4. I can explain the action of a simple machine through sketching and writing.

Success Criteria
To be added to, reduced, or changed in collaboration with students.
1. Clear inspiration has been taken from natural forms.
2. Mechanism is explained using proper technical vocabulary.
3. Design shows an understanding of the action of the chosen simple machine.
4. Calculations and measurements are performed correctly.

Materials
- Construction tools and materials (for task extension)
- Interesting natural objects
- Large paper for sketching
- Pencils, pens, markers
- Rulers
- Sorel Etrog Image File

Fig 19. Sorel Etrog, *Macrowaves*, 1974–75. This seascape features meticulous depictions of hinges.

Process
1. Review the artworks explored in Learning Activities 1 and 2 and engage in a discussion of organic and mechanical forms and the characteristics of simple machines.

2. Provide students with a variety of physical samples of interestingly shaped objects found in nature (leaf, flower, bird's beak). Ask them to select an object whose form or shape they find particularly interesting. Alternatively, students may collect their own objects on a guided nature walk in your area, or by researching online and finding images of natural shapes.

Culminating Task Continued

3. Using their selected shape, have students either trace or sketch the outline of one half of their object, leaving the other half of the form unfinished. Then ask students to carefully examine the natural surfaces they have traced and, using their understanding of simple machines, to draw the other side of an object so that the complete shape could act as a simple machine. This may require some development and thinking, and students should be encouraged to experiment with different forms and machines before finding one they like.

4. Have students use their finished sketches of their simple machine outlines to analyze the actions of their machines. Students should label their machines using technical vocabulary. Using their knowledge from class, students should carefully measure the two-dimensional sketches of their machines and calculate the mechanical advantages that would be provided by the machines, showing their calculations and reasoning (teachers may wish to provide a demonstration of how to calculate mechanical advantage).

5. Ask students to present their finished machine drawings, along with explanations of how their machines would function, the original natural objects that inspired them, and the calculations they have performed to show the mechanical advantages provided by their machines.

Task Extension

As an extension, students may create working versions of their machines. As Etrog did in his own practice, it is advisable that students start by making small paper prototypes or maquettes to plan their construction. Using available tools and materials students will then construct a working example of their machine. Appropriate measures must be taken to ensure student safety in any construction project (see your school's policies and procedures for guidance). The finished mechanisms may be displayed with the report and planning work of the project as an interactive exhibition of learning.

Fig 20. Sorel Etrog, *Sun Life Study*, 1984. This study is only 38.1 cm high—the final sculpture is over twenty times taller.

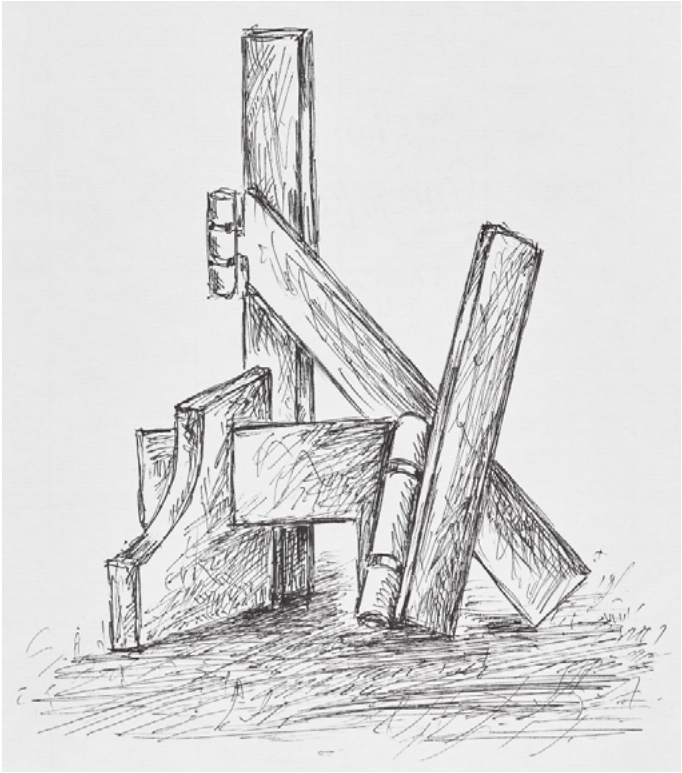

Fig 21. Sorel Etrog, sketch for *Powersoul*, c.1988. Through drawing, Etrog worked out his ideas for sculptures.

HOW SOREL ETROG MADE ART: STYLE & TECHNIQUE

Here are a few of the important artistic concepts that characterize the art of Sorel Etrog. For more information see the Style & Technique chapter of Sorel Etrog: Life & Work.

PAINTED CONSTRUCTIONS

Etrog started making three-dimensional works when he was an art student in Tel Aviv. He was frustrated with painting and with the traditional separation of painting and sculpture into two different categories of art, and he wanted to find a way to incorporate irregular shapes and multiple surfaces into his work. Each painted construction began with wood panels of different shapes and sizes, which Etrog glued together to make a single irregular shape. Then he added raised lines and smaller shapes, finally painting everything in deep, saturated colours.

Fig 22. Sorel Etrog, *Musical Impression*, 1956. Etrog's painted constructions are in between paintings and sculptures: they are largely flat, but they have three-dimensional elements.

Fig 23. Sorel Etrog, *White Scaffolding*, 1958. In this work Etrog assembled several geometric forms, including rectangles, triangles, and circles.

ORGANIC FORMS

When Etrog started to make sculptures, he was inspired by the way non-Western artists created forms that were based on human bodies, and he became very interested in the way things grew. His first sculptures were abstract, but they were also biomorphic—they borrowed their shapes from living things. This gave many of these works a sense of movement, since biomorphic or organic forms are often curved or flowing. He also was experimenting with different media, so while some of these early works are cast in bronze, others he carved out of wood or cast in plaster.

SCULPTURE AND MECHANICS

Etrog incorporated mechanical elements, as well as organic ones, into many of his sculptures. Links, screws, and hinges—ways of attaching one thing to another—appear in many of his works. Hinges were particularly important since they could suggest how something might move—think of an elbow or a knee. In Etrog's sculptures, mechanics create tension because they contain possibilities, like a link joining two things together or a hinge opening or closing a door.

Fig 24. Sorel Etrog, *Shelter*, 1976. This sculpture is a cube whose surfaces are connected by hinges.

Fig 25. Sorel Etrog working on plaster of *Embrace*, 1961–64.

FROM INITIAL DRAWING TO FINISHED SCULPTURE

Making a sculpture often involves many steps, with different tools, materials, and problems to solve associated with each. Sketching and drawing helped Etrog come up with the initial idea for a sculpture and think about the general form it would take. He would then start working in three dimensions, making small (30–40 centimetres high) models or maquettes out of soft wax. Once he was happy with the form, Etrog would build a full-size plaster version of the sculpture on a wire frame, adding details and texture. He would then create a mould and cast the sculpture in bronze using the lost-wax process. Finally, he would finish the sculpture by treating its surface using patination.

ADDITIONAL RESOURCES

Supplementary Materials Provided by the Art Canada Institute

- The online art book *Sorel Etrog: Life & Work* by Alma Mikulinsky: https://aci-iac.ca/art-books/sorel-etrog
- Sorel Etrog Image File with artworks and images related to this lesson.
- "Who Was Sorel Etrog?" biographic information sheet (page 2)
- Timelines of national and world events and Sorel Etrog's life (page 3)
- "How Sorel Etrog Made Art: Style & Technique" information sheet (page 9)

GLOSSARY

Here is a list of terms that appear in this resource guide and are relevant to the learning activities and culminating task. For a comprehensive list of art-related terms, visit the Art Canada Institute's ever-growing Glossary of Canadian Art History.

Biomorphic Abstraction
A form of abstraction that draws on rounded, natural forms, "biomorphic" appears as a descriptive term for abstract art around the 1930s, though it is not limited to this time period. It can be seen in the design elements of Art Nouveau and in the surrealist paintings and sculptures of Jean Arp and Joan Miró, as well as in the work of Henry Moore and Barbara Hepworth, and in American design from the 1940s through the 1960s.

lost-wax process (cire perdue)
A metal-casting technique in which a mould is formed around a wax model, which is then melted away to leave a space into which molten metal is poured. The process can either involve a solid wax model or a wax shell that is used to create a hollow metal sculpture. The lost-wax process has been used to cast metal for approximately six thousand years.

patination
The development of a patina, or film, on the surface of a material due to age and exposure. In copper, bronze, and similar metals, a green patina, or verdigris, gives historic buildings and monuments their distinctive colour. Depending on the conditions under which it occurs, patination can protect materials, especially metals, from other types of damage and corrosion.

Fig 26. Sorel Etrog, *Blossom*, 1960–61. This sculpture was created at a time when Etrog was especially interested in natural forms.

EXTERNAL RESOURCES

The following external resources can be used to augment the learning activities and materials provided by the Art Canada Institute. They are to be used at the teacher's own discretion.

Simple Machines Handbook
https://tinybop.com/assets/handbooks/simple-machines/Tinybop-EL4-Simple-Machines-Handbook-EN.pdf

Basic Machines
http://www.constructionknowledge.net/public_domain_documents/Div_1_General/Basic_Skills/Basic%20Machines%20NAVEDTRA%2014037%201994.pdf

Learning Labs: Simple Machines
https://www.msichicago.org/education/field-trips/learning-labs/simple-machines/activities/

FIGURE LIST

Every effort has been made to secure permissions for all copyrighted material. The Art Canada Institute will gladly correct any errors or omissions.

Fig 1. Sorel Etrog, *Complexes of a Young Lady*, 1962, bronze, edition of 2, 270 x 75 x 52 cm. Hart House Collection, University of Toronto, gift of Mr. & Mrs. Samuel Zacks, 1970 (HH1970.003). Photo credit: Craig Boyko. © The Estate of Sorel Etrog (2020).

Fig 2. Sorel Etrog at the Zacks' Southampton Wood Workshop, 1959. Courtesy of The Estate of Sorel Etrog. Photo credit: L. Brown. © The Estate of Sorel Etrog (2020).

Fig 3. Sorel Etrog, *The Golem*, 1959, wood, 40.6 x 33 x 15.2 cm. Art Gallery of Ontario, Toronto, gift of Sam and Ayala Zacks, 1970 (71/145). Photo credit: Art Gallery of Ontario. © The Estate of Sorel Etrog (2020).

Fig 4. Sorel Etrog, *Night Spirit*, 1969–70, oil on canvas, 78.7 x 177.8 cm. Courtesy of The Estate of Sorel Etrog. Photo credit: Toni Hafkenscheid. © The Estate of Sorel Etrog (2020).

Fig 5. Sorel Etrog, *Survivors Are Not Heroes*, 1967, bronze, edition of 3, 548.6 cm (h). Hart House Collection, University of Toronto, purchased by Hart House from the Varsity Fund, 1968 (HH1968.004). Photo credit: Craig Boyko. © The Estate of Sorel Etrog (2020).

Fig 6. Sorel Etrog, *Powersoul*, 1988, steel, 10.1 m (h). Government of South Korea Collection, Olympic Park, Seoul, South Korea. Sorel Etrog Fonds, Edward P. Taylor Library & Archives, Art Gallery of Ontario, Toronto, gift of The Estate of Sorel Etrog, 2014 (LA.161728). © The Estate of Sorel Etrog (2020).

Fig 7. A replica of *Sputnik 1*. Smithsonian National Air and Space Museum, Washington DC.

Fig 8. WABOT-1, 1973. Waseda University Humanoid. Waseda University, Shinjuku, Tokyo.

Fig 9. The Altair 8800, 1975. Old Computers. https://oldcomputers.net/altair-8800.html.

Fig 10. Sorel with parents Tony and Moriț, c.1936. Courtesy of Zipora Gendler. Photographer unknown.

Fig 11. Canadian Pavilion in Venice with *Moses*, 1963–65 (foreground), and *Mother and Child*, 1960–62 (background), 1966. Courtesy of The Estate of Sorel Etrog (2020). Photo credit: Giannina Frugoni. © The Estate of Sorel Etrog (2020).

Fig 12. Sorel Etrog, *Genie*, 1980, bronze, gold plated, 30.5 x 10.2 cm. Photo credit: courtesy of the Academy of Canadian Cinema & Television. © The Estate of Sorel Etrog (2020).

Fig 13. Sorel Etrog, *Moses*, 1963–65, bronze, edition of 3, 548.6 cm (h). University of Lethbridge Art Collection, Alberta, donated by the House of Seagram Limited, Montreal, 1968 (1968.1). Photo credit: courtesy of University of Lethbridge Art Collection. © The Estate of Sorel Etrog (2020).

Fig 14. Sorel Etrog, *War Remembrance II*, 1960–61, bronze, edition of 5, 88.9 x 49.5 x 102.9 cm. Collection of the Montreal Museum of Fine Art. Montreal Museum of Fine Arts, purchase, Saidye and Samuel Bronfman Collection of Canadian Art (1966.1516). Photo credit: MMFA, Christine Guest. © The Estate of Sorel Etrog (2020).

Fig 15. Sorel Etrog, *Rushman*, 1974–76, bronze, edition of 7, 157.5 cm. Courtesy of Miriam Shiell Fine Art. Photo credit: Michael Cullen. © The Estate of Sorel Etrog (2020).

Fig 16. Sorel Etrog, *Sun Life*, 1984, bronze sheet and steel, 848.6 cm (h). Sun Life Assurance Company of Canada. Photo credit: Craig Boyko. © The Estate of Sorel Etrog (2020).

Fig 17. Sorel Etrog, *Dream Chamber*, 1976, bronze, edition of 3, 157.5 cm (h). Courtesy of MacLaren Art Centre, Barrie, Ontario, gift of the artist, 1999. Photo credit: Toni Hafkenscheid. © The Estate of Sorel Etrog (2020).

Fig 18. Sorel Etrog, *King and Queen*, 1990, painted steel, edition of 2, 304.8 cm (h). Windsor Sculpture Garden. Courtesy of the City of Windsor. © The Estate of Sorel Etrog (2020).

Fig 19. Sorel Etrog, *Macrowaves*, 1974–75, oil on canvas, 35.6 x 45.7 cm. Courtesy of The Estate of Sorel Etrog. Photo credit: Jonathan Gendler. © The Estate of Sorel Etrog (2020).

Fig 20. Sorel Etrog, *Sun Life Study*, 1984, bronze, 38.1 cm (h). The Estate of Sorel Etrog. Courtesy of The Estate of Sorel Etrog. Photo credit: Jonathan Gendler. © The Estate of Sorel Etrog (2020).

Fig 21. Sorel Etrog, sketch for *Powersoul*, c.1988, pen and ink on paper, 21.6 cm x 27.9 cm. Sorel Etrog Fonds, Edward P. Taylor Library & Archives, Art Gallery of Ontario, gift of The Estate of Sorel Etrog, 2014 (LA.161721). © The Estate of Sorel Etrog (2020).

Fig 22. Sorel Etrog, *Musical Impression*, 1956, painted wood, 73 x 44 cm. Tel Aviv Museum of Art. Photo credit: Margarita Perlin. © The Estate of Sorel Etrog (2020).

Fig 23. Sorel Etrog, *White Scaffolding*, 1958, oil on wood, 77.5 x 40.6 cm. Art Gallery of Ontario, gift of Sam and Ayala Zacks, 1970 (71/156). Photo credit: Art Gallery of Ontario. © The Estate of Sorel Etrog (2020).

Fig 24. Sorel Etrog, *Shelter*, 1976, patinated bronze, edition of 5, 69 x 44 x 44 cm. McMichael Canadian Art Collection, Kleinburg, Ontario. © The Estate of Sorel Etrog (2020).

Fig 25. Sorel Etrog working on plaster of *Embrace*, 1961–64, early 1960s. Photograph by Paul Smith. Courtesy of The Estate of Sorel Etrog. © The Estate of Sorel Etrog (2020).

Fig 26. Sorel Etrog, *Blossom*, 1960–61, bronze, 111 cm (h). Courtesy of The Estate of Sorel Etrog. Photo credit: Craig Boyko. © The Estate of Sorel Etrog (2020).