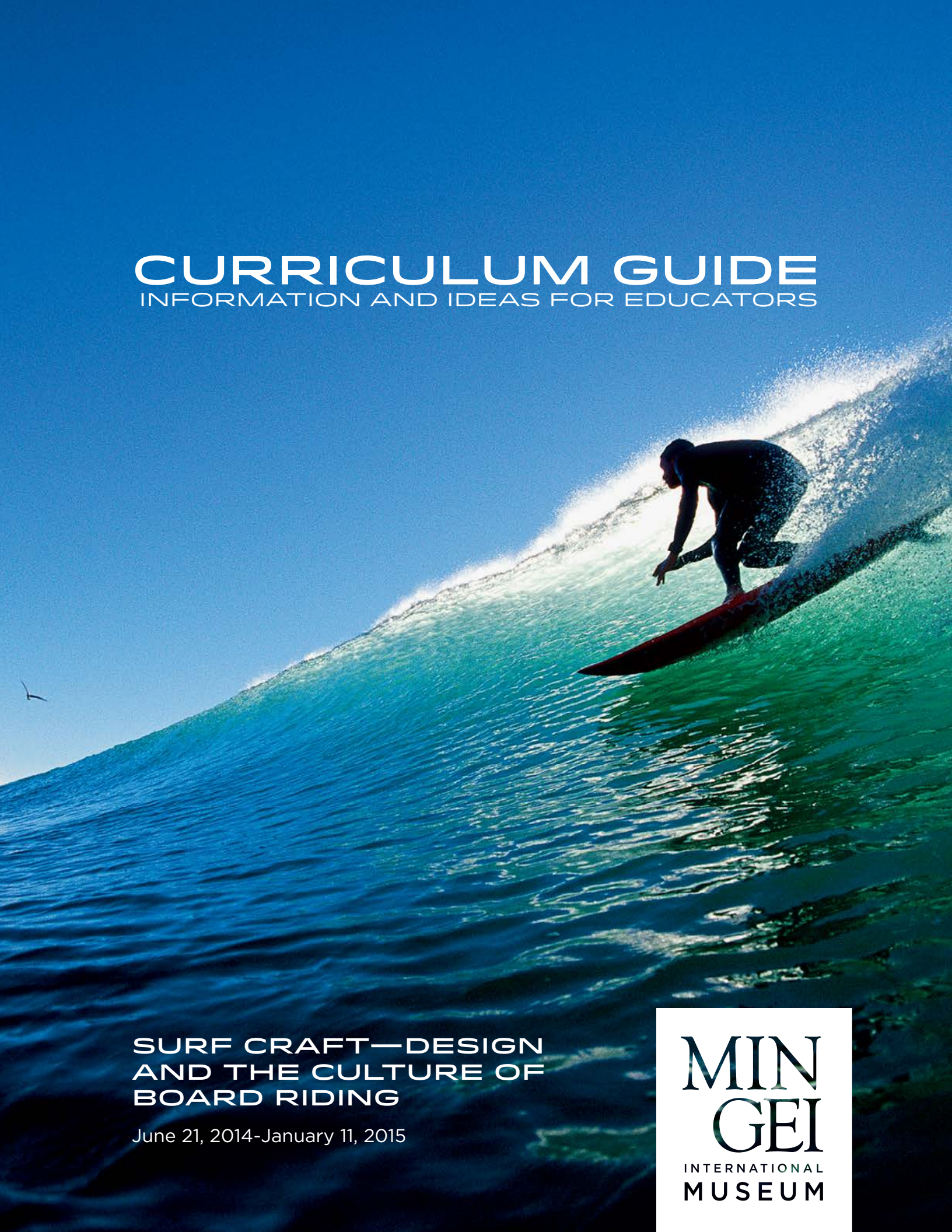
CURRICULUM GUIDE

INFORMATION AND IDEAS FOR EDUCATORS



SURF CRAFT—DESIGN AND THE CULTURE OF BOARD RIDING

June 21, 2014-January 11, 2015

MINGEI INTERNATIONAL MUSEUM

CONTENTS

IN PREPARATION FOR YOUR VISIT

Schedule a Museum visit and Docent-led tour through the Education Department. Mingei offers **free admission** for all K-12th grade student groups and college student groups and **free transportation for all Title 1 schools**.

Email: **sfoley@mingei.org**

Call: **619-704-7495**

Complete an online tour request form: **www.mingei.org/education/museum-tour-request**

- Review the information in this guide with your students; build their knowledge, excitement and confidence before they arrive.
- Discuss museum etiquette and review the Tour Guidelines document that will be sent to you when your tour is confirmed.
- Explain to students that a Museum Docent will guide them through the exhibition. Explain that a Docent is a knowledgeable Museum-trained volunteer who will share valuable information with them.

INTRODUCTION

People have made surfboards for centuries. Standing alone, these boards are often striking examples of functional design. Together, they tell a compelling story about the evolution of an important American art form, examined through the international lens of the mingei philosophy and its focus on handmade objects of functional use. Traditional craft, cutting-edge engineering and minimalist art converge in the Museum's exhibition devoted to surfboards built from the late 19th century to the present day.

EXHIBITION THEMES

MINGEI

Mingei is a Japanese word that means "art of the people" or, literally, "everybody's art"; it refers mainly to useful objects of everyday life, made by hand. The philosopher Soetsu Yanagi's 1972 publication *The Unknown Craftsman* describes the beauty in everyday objects created by unknown craftsmen. Through the lens of the mingei philosophy, surfboards are a prime example of beautiful, handcrafted pieces, often created anonymously and made for functional use.

Terry Hendricks, *"Pluto Platter" Kneeboard Flex-Tail with Single Fin*, California, 1969, polyurethane foam, fiberglass. Collection of Ty Ponder. Photograph by Ryan Field.

HISTORY

The surfboards shown in this exhibition represent centuries of design evolution and capture the influences behind American design. The boards presented span from the alaia of ancient Hawaii, to obscure surf-bathing boards of England, Japan and Africa, to postwar hydrodynamic planing hulls of Southern California.

INNOVATION

Riding and crafting a surfboard is an experimental and creative process, from learning to paddle and ride a board, to shaping a board for optimal performance. While many surfers are greatly influenced by one another and by their predecessors, innovations and original ideas continue to improve and expand the possibilities for riding waves.

EXHIBITION VOCABULARY

Mingei – a Japanese word meaning "art of the people," or, literally, "everybody's art," and referring mainly to useful objects of everyday life made by hand

TYPES OF SURFBOARDS

Alaia – thin and light surfboards, ridden by both royal and non-royal Hawaiians; they disappeared from use and significance after the fall of the Kingdom of Hawaii in 1898

Blank – a buoyant material such as balsa wood or polyurethane foam in rough form that is shaped by hand into a surfboard

Fish – short, twin-keeled kneeboard created by Steve Lis in 1967 as a revolutionary and influential surfboard design

Olo – Thick and buoyant surfboards once ridden only by members of the Hawaiian royal family, often over 16 feet long and weighing more than 100 pounds

Paipo – the modern name for the traditional paha, a short wide board usually ridden face down for bodysurfing, although some surfers can ride standing

Planing Hull – the foundational surfboard designed by Bob Simmons in the 1940s, designed to travel over the water at a high speed

PARTS OF A SURFBOARD

Deck – the top of a board where a surfer stands; wax can be applied to it to provide traction

Fin – directional stabilizers on the bottom of a board that provide forward momentum

Nose – the forward tip of a surfboard; either pointed or rounded, it has a profound impact on entering a wave, paddling out and turning

Rail – the outer edge of a surfboard, which impacts speed and turning ability and generates lift

Tail – the back end of a surfboard; it can be V-shaped, pintail or squared off, and it affects a surfer's speed and performance while riding the face of a wave

WAVES

Barrel – the hollow part of a breaking wave or the gap between the face and the lip, also called the tube

Face – the steep, unbroken section of a wave

Grinder – a powerful, breaking wave

Lip – the breaking crest at the top of a wave

Bob Simmons, *Hydrodynamic Planing Hull with Dual Keels*, California, 1950, balsa, redwood keels, resin, fiberglass. Collection of John Elwell. Photograph by Ryan Field.

QUESTIONS TO CONSIDER

- How do the surfboards featured in this exhibition relate to the definition of mingei?
- What materials are used to create surfboards? How has the use of these materials changed over time?
- How might our culture's increased focus to environmentally friendly materials and processes be affecting surfboard design and manufacturing?
- How is the historical use and design of surfboards, which began in Hawaii, influencing the contemporary board designers featured in this exhibition?
- How does the design and use of surfboards relate to other boards that you might ride, such as skateboards or snowboards?
- Do you know anyone in your community who is a board shaper or surfer? How are surfboards and surfing a part of life in Southern California? Can you imagine life in Southern California without surfing?

FACTS TO SHARE

- Surfing first came to California in the 1920s.
- Surfing is enjoyed in African countries like Morocco, Asian countries like Japan, Pacific countries like New Zealand, Caribbean countries like Aruba, European countries like Denmark and Middle Eastern countries like Turkey.
- Surfing began in Hawaii with the ancient, massive *olo* boards, reserved for Hawaiian royalty. This board was a whopping 150-pounds.
- Popular surf culture in California exploded when the 1959 movie *Gidget* was released.
- The surfboard is a functional object with elements that include a nose, tail, deck, rail and, in some case, one or more fins. (See diagram and vocabulary section.)

CLASSROOM DISCUSSION AND ACTIVITIES

Modifiable to grade level, to be done either before or after the visit

ACTIVITY 1

SURFBOARDS—COMPARING AND CONTRASTING DESIGNS

OBJECTIVES

- Students will discuss, compare and contrast design elements, using visual evidence to support their conclusions.
- Students will learn surfboard design vocabulary, which they will use in a classroom discussion and in creating their own surfboard design.
- Students will create an original work of art based on the design vocabulary and forms they have observed and discussed.

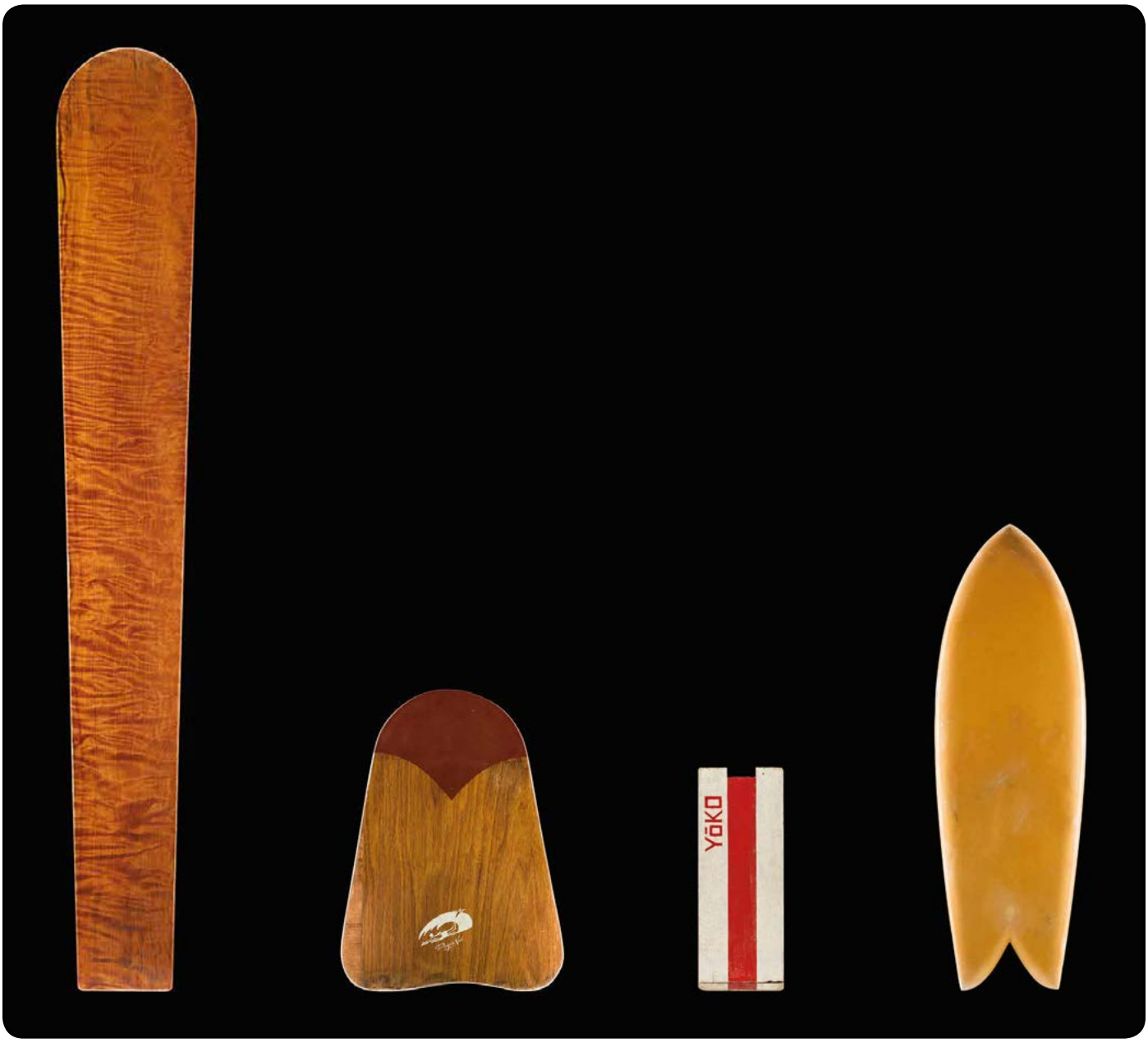
TO ENCOURAGE OBSERVATION AND DISCUSSION

- Have any of you surfed before? What was it like?
- How would you describe a surfboard? Do all surfboards look the same?
- What is similar about the boards shown? What is different?
- Why might some surfboards be shaped quite differently from others?
- What materials do you think these boards might be made out of?
- Why might some surfers prefer their boards to be made out of one type of material, while other surfers prefer another?
- What would your ideal surfboard look like?
- Which board do you think would be the most difficult to ride? Which would be the easiest? Why?

Nick and Barry Mirandon, *Twin Pin*, California, 1968, polyurethane foam, resin, fiberglass. Collection of Hans Newman. Photograph by Ryan Field.

OBSERVATIONS: COMPARE AND CONTRAST

Examine these four examples of surfboards created by shapers in ***SURF CRAFT—Design and the Culture of Board Riding***, shown below. Compare and contrast their shapes, forms, materials and surfaces.

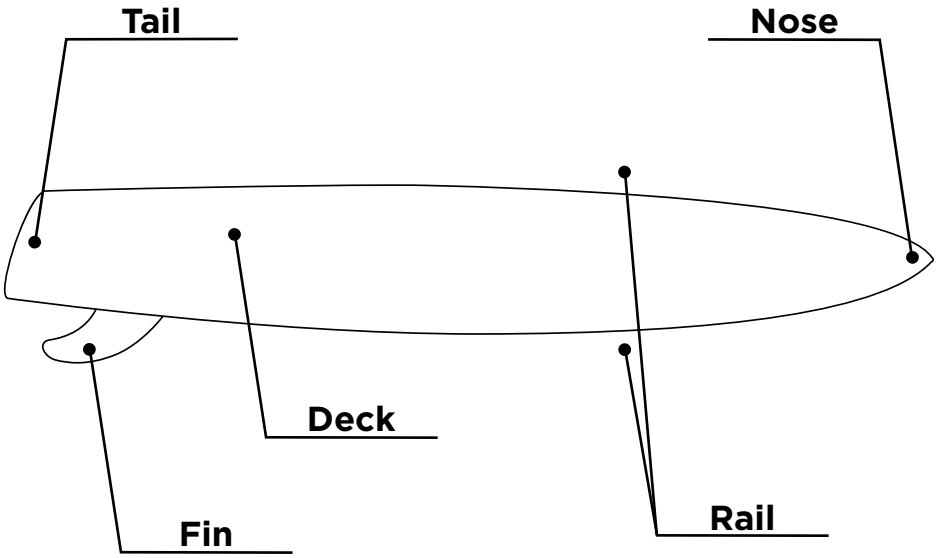


ACTIVITY 1

HAND-OUT: CREATE YOUR OWN SURFBOARD

Use the space below to sketch your own ideal surfboard by taking inspiration from the boards you have seen in the Museum's exhibition. Label all of the surfboard parts; make sure to include a nose, tail, deck and rail.

Digital images of the boards featured in the Museum's exhibition are available online.



ACTIVITY 2

DESIGN A THREE-DIMENSIONAL SURFBOARD

OBJECTIVES

- Student will work collaboratively in a group to identify design characteristics.
- Students will compare and contrast design elements and discuss how they affect the surfboard's functionality.
- Students will create an original work of art based on surfboard design aesthetics.

MATERIALS

- Foam board or cardboard
- Pencils
- Scissors
- Permanent markers (waterproof)
- Tacky glue

WARM UP/DISCUSSION

- Show students several images of surfboards, one by one, from ***SURF CRAFT—Design and the Culture of Board Riding*** (high-resolution images are available on the Museum's website).
- Arrange students in small groups and give each group a copy of the Surf Craft Board Design Guide.
- As each board is shown on the screen, ask each group to discuss what type of board they think is being shown, based on the chart.
- As a class, discuss the following questions based on the boards that students identify:
  - What was similar about the boards that you looked at? What was different?
  - Why might some surfboards be shaped quite differently from others?
  - What materials did you see? Why do you think surfboards might be made out of a variety of materials?
  - Which type of board would you prefer to ride and why?

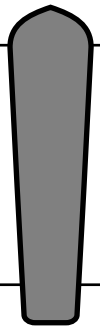
ACTIVITY

1. Ask students to choose their favorite surfboard shape from the Surf Craft Board Design Guide.
2. Ask students to draw the shape of the board on their foam or cardboard with a pencil. Have students pay close attention to the shape of the fin and nose.
3. Students can then cut it out and decorate it with permanent markers.

ACTIVITY 2

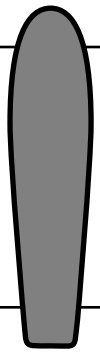
SURF CRAFT BOARD DESIGN GUIDE

OLO BOARDS



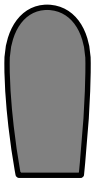
Description	Thick surfboard, often over 16 feet long and weighing more than 100 pounds
Riding Method	Standing
Material	Breadfruit, Hawaiian balsa, koa
Type of Wave	Large, rounded swells
Fun Fact	Olos were traditionally only ridden by Hawaiian royalty.

ALAIA BOARDS



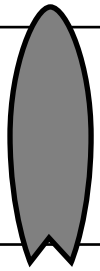
Description	Thin and light surfboard
Riding Method	Kneeling, lying down or standing
Material	Koa, paulownia wood
Type of Wave	Fast-breaking, steep waves
Fun Fact	Though riding an alaia can be difficult, building and shaping your own is a relatively simple process.

PAIPO BOARDS



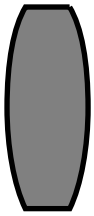
Description	Short, wide board, usually ridden for bodysurfing, although some surfers can ride it standing up
Riding Method	Lying down or standing
Material	Breadfruit, koa
Type of Wave	Small surf
Fun Fact	A surfboard doesn't always have to be ridden standing up. Paipos are typically ridden lying face down.

FISH BOARDS



Description	Short kneeboard with a tail resembling fish fins
Riding Method	Kneeling, lying down or standing
Material	Polyurethane foam, resin, fiberglass
Type of Wave	Small to medium surf
Fun Fact	The fish board gets its name from its fish-like profile.

PLANING HULLS



Description	Foundational surfboard with a flat tail, designed to run on top of the water at a high speed
Riding Method	Standing
Material	EPS or polyurethane foam, epoxy, resin
Type of Wave	All types of waves
Fun Fact	Planing hulls are typically used for high-performance surfing.

ACTIVITY 2

HAND-OUT: FOAM SURFBOARD DESIGN INSTRUCTIONS

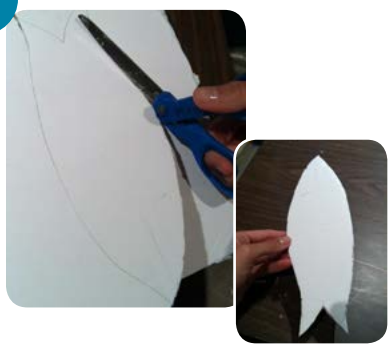
1

Cut large foam board sheets into 10 x 10 inch squares.

2

Ask the students to draw the outline of their favorite surfboard with a pencil.

3



Cut out the outline of the board.

4

Color in both sides of the board with permanent markers.

5

To create a three-dimensional board, use discarded foam board to draw, color and cut out fins.

6

Attach with tacky glue.

7

Let dry completely.

8

Finished product.

ACTIVITY 3

ASYMMETRICAL SURFBOARDS

OBJECTIVES

- Students will learn how to identify symmetry and asymmetry in a work of art.
- Students will compare and contrast functional works of art.
- Students will demonstrate their understanding of asymmetry by designing their own asymmetrical surfboard.

Carol Ekstrom, *Assymmetric Wakeboard* California, wood laminate. Collection of Carl Ekstro. Collection of Eric "Bird" Huffman. Photograph by Ryan Field.

VOCABULARY

Asymmetry – the arrangement of parts in an unbalanced way

Symmetry – the arrangement of parts to create a balanced or mirror image

ASYMMETRICAL SURFBOARD DESIGN

San Diego surfer and shaper Carl Ekstrom began dabbling with asymmetrical surfboard designs in 1965; by 1966, he had received a U.S. patent for his concept. The idea behind asymmetry in surfboards starts with the human body. Modern surfing is rail to tail, which means constantly shifting one's weight from the toes to the heels and back. Asymmetry attempts to optimize each side of the board according to the different weight distribution and anatomical tools on the front and back sides of the human body. Heels and toes are different; hence, the heel side and the toe side of an asymmetric surfboard are different, too.

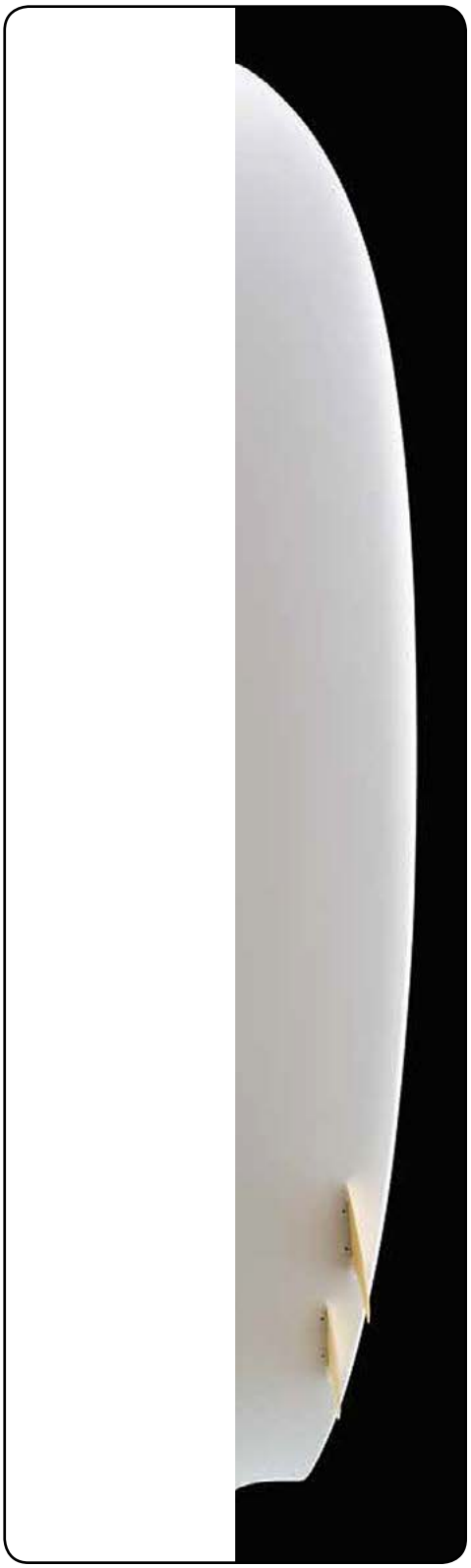
ACTIVITY

- Have students view images of asymmetrical surfboards.
- Questions to engage discussion:
  - *What makes these surfboards asymmetrical?*
  - *How are the two sides different?*
- What other objects can you think of that are asymmetrical?
- Using the worksheet on the next page, have students draw the second half of the board creating an asymmetrical design.

ACTIVITY 3

HAND-OUT: FILL IN THE BLANK

Viewing both sides of the board, draw the second half of the asymmetrical board.



CALIFORNIA CONTENT STANDARD ALIGNED

A visit to Mingei International Museum naturally aligns to the state and national content standards. Here are examples of Visual Art and Language Arts standards that can be used either at the Museum or in your classroom.

VISUAL ARTS

KINDERGARTEN – GRADE 2

- Identify the elements of art (line, color, shape/form, texture, value, space) in the environment and in works of art, emphasizing line, color, and shape/form.
- Demonstrate beginning skill in the use of tools and processes, such as the use of scissors, glue, and paper in creating a three-dimensional construction.
- Describe functional and non-utilitarian art, seen in daily life; that is, works of art that are used versus those that are only viewed.
- Look at and discuss works of art from a variety of times and places.
- Describe what is seen in selected works of art.
- Recognize and discuss the design of everyday objects from various time periods and cultures.
- Perceive and describe repetition and balance in nature, in the environment, and in works of art.
- Use bilateral or radial symmetry to create visual balance.

GRADES 3 – 5

- Compare and contrast two works of art made by the use of different art tools and media (e.g., watercolor, tempera, computer).
- Identify the elements of art (line, color, shape/form, texture, value, space) in the environment and in works of art, emphasizing line, color, shape/form, texture, space, and value.
- Create a work of art based on the observation of objects and scenes in daily life, emphasizing value changes.
- Compare and describe various works of art that have a similar theme and were created at different time periods.

- Identify artists from his or her own community, county, or state and discuss local or regional art traditions.
- Compare and contrast selected works of art and describe them, using appropriate vocabulary of art.
- Identify and discuss the content of works of art in the past and present, focusing on the different cultures that have contributed to California's history and art heritage.
- Identify and describe how a person's own cultural context influences individual responses to works of art.
- Describe how the individual experiences of an artist may influence the development of specific works of art.
- Identify and describe various fine, traditional, and folk arts from historical periods worldwide.

GRADES 6 – 8

- Identify and describe the elements of art (line, color, shape/form, texture, value, space) in the environment and in works of art, (color, shape/form, line, texture, space, and value.
- Describe how balance is effectively used in a work of art (e.g., symmetrical, asymmetrical, radial).
- View selected works of art from a culture and describe how they have changed or not changed in theme and content over a period of time.
- Compare, in oral or written form, representative images or designs from at least two selected cultures.
- Describe the environment and selected works of art, using the elements of art and the principles of design.
- Compare and contrast works of art from various periods, styles, and cultures and explain how those works reflect the society in which they were made.
- Analyze the form (how a work of art looks) and content (what a work of art communicates).
- Identify professions in or related to the visual arts and some of the specific skills needed for those professions.
- Construct an interpretation of a work of art based on the form and content of the work.

GRADES 9 – 12

- Identify and use the principles of design to discuss, analyze, and write about visual aspects in the environment and in works of art, including their own.
- Analyze the material used by a given artist and describe how its use influences the meaning of the work.
- Identify similarities and difference in the purposes of art created in selected cultures.
- Identify and describe the trends in the visual arts and discuss how the issues of time, place, and cultural influence are reflected in selected works of art.
- Demonstrate an understanding of the various skills of an artist.
- Differentiate between things that happened long ago and things that happened yesterday.
- Understand that some goods are made locally, some elsewhere in the United States, and some abroad.

COMMON CORE STANDARD ALIGNED

The new Common Core Standards are a great tool in helping to develop visual literacy and critical thinking skills. While talking about and creating art students will work on their speaking and listening skills while learning to "read" a work or art.

SPEAKING AND LISTENING

GRADES K - 1

- Participate in collaborative conversations with diverse partners about kindergarten and grade 2 topics and texts with peers and adults in small and larger groups.
- Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- Add drawings or other visual displays to descriptions as desired to provide additional detail.
- Speak audibly and express thoughts, feelings, and ideas clearly.

GRADES 2 – 3

- Participate in collaborative conversations with diverse partners about grade 2 or 3 topics and texts with peers and adults in small and larger groups.
- Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
- Add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

GRADES 4 – 5

- Effectively engage with a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 4 or 5 topics, building on others' ideas and expressing their own clearly.
- Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

- Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

GRADES 6 – 8

- Effectively engage with a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade 6, 7 or 8 topics, building on others' ideas and expressing their own clearly.
- Interpret or analyze information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
- Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

GRADES 9 – 10

- Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

GRADES 11 – 12

- Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

READING STANDARDS FOR INFORMATIONAL TEXT

GRADES K – 1

- With prompting and support, ask and answer questions about key details in a text.
- With prompting and support, identify the main topic and retell key details of a text.
- With prompting and support, ask and answer questions about unknown words in a text.
- With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

GRADES 2 – 3

- Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
- Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
- Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 and 4 topic or subject area.

GRADES 4 – 5

- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 and 5 topic or subject area.
- Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

GRADES 9 – 10

- Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone.

GRADES 11 – 12

- Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text.

- Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

READING STANDARDS FOR LITERACY IN HISTORY/SOCIAL STUDIES

GRADES 6 – 8

- Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

GRADES 9 – 10

- Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.

GRADES 11 – 12

- Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

WEB RESOURCES

Mingei International Museum
www.mingei.org

Richard Kenvin, Guest Curator
hydrodynamica.com

SURF ORGANIZATIONS

Surfing Heritage Foundation
surfingheritage.org

California Surf Museum
surfmuseum.org

Surfrider Foundation San Diego
sandiego.surfrider.org

Scripps Institute of Oceanography
scripps.ucsd.edu

San Diego State University - Center for Surf Research
centerforsurfresearch.org

WILDCOAST
wildcoast.net

Sustainable Surf
sustainablesurf.org

SURFERS & SHAPERS

Carl Ekstrom
hydroflex-surfboards.com/shaper/carl-ekstrom-surfboards/index.php

Daniel Tomson, Tomo Surfboards
tomosurfboards.com

Jon Wegener, Wegener Surfboards
wegenersurf.com

Mark Price, FireWire Surfboards
firewiresurfboards.com

Tony Alva, Alva Surf Craft
alvasurfcraft.com

IMAGE GUIDE

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Tom “Pohaku” Stone
Traditional Hawaiian, 2013
Hawaii; redwood
Collection of Larry Fuller
Photograph by Ryan Field

Val Valentine
Paipo nui, 1960s
Hawaii; laminated plywood veneer
Collection of Surfing & Cultural Center
Photograph by Ryan Field

Haruo Tsukakoshi
Itago Bellyboard, 1962
Japan; painted plywood
Collection of Nobuhito “Nobby” Ohkawa
Photograph by Ryan Field

Steve Lis, Keels by Larry Gephart Fish, 1970s
California, San Diego; polyurethane foam,
resin, fiberglass, marine plywood
Photograph by Ryan Field

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Carol Ekstrom
Asymmetric Planing Hull, 2009
California; polyurethane foam, resin, fiberglass,
color tint
Collection of Carl Ekstrom
Photograph by Ryan Field

Carol Ekstrom
Asymmetric “S” Tail Quad Fin, 2013
California; polyurethane foam, resin, fiberglass,
bamboo fins
Collection of Carl Ekstrom
Photograph by Ryan Field