

**COOPER  
HEWITT**

***JAZZING UP THE  
SPACE***

**TEACHER  
RESOURCE  
PACKET**



Smithsonian Design Museum

**TABLE OF CONTENTS**

<b>WELCOME LETTER</b>	<b>3</b>
<b>PREPARING FOR DESIGN FIELD TRIPS</b>	<b>4</b>
<b>DESIGN THINKING RESOURCES</b>	<b>5</b>
<b>PRE-VISIT ACTIVITIES</b>	<b>5</b>
<b>LITERARY LOCALE   K-5</b> <i>SUBJECTS: Language Arts, Art</i> <i>DESIGN PROCESS: Defining the Problem, Getting Ideas</i>	
<b>CULTURALLY RELEVANT   6-12</b> <i>SUBJECTS: Social Studies, History, Language Arts</i> <i>DESIGN PROCESS: Getting Ideas</i>	
<b>POST-VISIT ACTIVITIES</b>	<b>9</b>
<b>UPGRADING THE ABODE   K-5</b> <i>SUBJECTS: Math, Art</i> <i>DESIGN PROCESS: Getting Ideas, Prototyping and Making</i>	
<b>STYLING THE SPACE   6-12</b> <i>SUBJECTS: Social Studies, Math</i> <i>DESIGN PROCESS: Testing and Evaluating</i>	
<b>VOCABULARY</b>	<b>12</b>
<b>WORKSHEET: CULTURALLY RELEVANT</b>	<b>14</b>



# COOPER HEWITT DESIGN K-12

March 31, 2017

Dear Educator,

Thank you for registering for a Design Field Trip! This exciting program is designed to present Cooper Hewitt, Smithsonian Design Museum's compelling content to your class(es) through an interactive tour and corresponding workshop activity.

During the Design Field Trip, students will discover *The Jazz Age: American Style in the 1920's*, a unique exhibition of more than 400 examples of interior design, industrial design, and decorative art that defined the spirit of the period. On the 45-minute inquiry tour, students will actively explore how interior designers collaborate with their clients to create spaces that consider both their client's aesthetic and functional needs. Also included in the experience is a workshop activity where students become interior designers and design mood boards for various client profiles.

This packet provides several resources and activities to help your students prepare for the program and ideas to continue integrating design thinking connections into your classroom. We hope you'll find these lessons helpful in engaging your students with design thinking.

Within a month of your museum visit you will be e-mailed a brief survey. Your feedback about this program is highly valuable, and we hope you will take the time to provide your comments and suggestions so that we can continue to offer a high-quality program for all K-12 schools.

Sincerely,

*Kimberly Cisneros-Gill*

Kimberly Cisneros-Gill

School Programs Manager

*Meagan Mahaffy*

Meagan Mahaffy

Education Assistant

Activities in collaboration with Museum Educator, Cara-Lynne Thomas.



## PREPARING FOR DESIGN FIELD TRIP

During your Design Field Trip, the Design Educator assigned to your group will need your support in helping students stay on task. You must remain with the group at all times with the Design Educator. Please review the following museum guidelines and share them with your chaperones and students.

### ARRIVAL & DEPARTURE

- Please arrive 10 minutes before your scheduled start time to check in; you will be greeted at the main entrance (91<sup>st</sup> Street between Fifth and Madison Avenues)
- Non-NYC teachers with a cash payment, please remit to the Visitor Experience Desk
- Coat check will provide large bins to quickly store and retrieve coats and backpacks
- Please call your bus in advance to meet you in front of the main entrance, and exit through the main entrance).

## MUSEUM RULES AND POLICIES

- Please do not touch the objects or lean on the walls; view the objects at a safe distance
- Use only pencils for taking notes or sketching; pens are not permitted
- Food, drinks, and chewing gum are NOT permitted in the museum
- All items entering and leaving the museum are subject to inspection
- Please remain with your assigned group at all times
- Please leave all backpacks and large purses on the bus or at the coat check
- Photography without flash is welcomed; no tripods or selfie-sticks, please

## TAKE AN ACTIVE ROLE

### TEACHER & CHAPERONES

The classroom teacher and chaperones are essential to the success of a group's visit; they can enhance the success of the tour and the amount of learning that can take place by showing active interest in the objects while supervising student behavior.

- Please ensure that you and your group of students (10 students or fewer per chaperone) stay together during your time in the museum (this includes the Shop)
- You and the group chaperones are responsible for keeping track of each student in your group, and for students' proper behavior of their groups (including their respect of museum rules and policies)
- If you have questions, ask a museum staff member for help

### STUDENTS

- Students will be encouraged to share their ideas and work in teams
- Students must stay with their chaperones at all times while in the museum and Shop
- Please do not allow students to touch anything unless signs, museum staff members, or designated volunteers let you know it's okay



## FOR MORE INFORMATION

Please visit our website at [www.cooperhewitt.org/education/school-programs](http://www.cooperhewitt.org/education/school-programs)

## DESIGN THINKING CONNECTIONS

The following pages include pre- and post-Design Field Trip activities. The pre-visit activities are suggestions for how to help your students prepare for their trip; they are designed to introduce students to concepts that will be discussed during the program. The post-visit activities are suggestions for how to extend your students' thinking beyond the program and reinforce your classroom curriculum. For teachers who would like additional ideas, we recommend our free Educator Resource Center (ERC), which offers 400 design-focused lesson plans (available at: <http://dx.cooperhewitt.org/lesson-plans/>).

## PRE-VISIT ACTIVITIES

### LITERARY LOCALE | K-5

*SUBJECTS: Language Arts, Art | DESIGN PROCESS: Getting Ideas*

*ACTIVITY TYPE: Discussion, Sketching and Writing | 45 mins.*

#### YOUR DESIGN CHALLENGE

*How might we create a space for a favorite book character?*

Using the “Literary Locale” presentation and guiding questions as needed, lead the class in a discussion of what an interior is. Following the discussion, students will work individually to sketch a room for a book character. Students should consider the function of the room (what the character does in the room), and how the room reflects the style of the character (things the character likes).

#### GUIDING QUESTIONS

- For “Literary Locale” Presentation: As students share what is similar about the first three slides, write their responses on chart paper/the white board to help build a definition of “interior”
  - Slide 2: What do you see in this image? What objects are in this space? Who might use this space? What might they do here?
  - Slide 3: What objects are in this space? How is it different from the space in the first slide? Who might use this space? What might they do here? What is the same about this space and the space in the last slide?
  - Slide 4: How is this space similar to the other spaces you’ve seen? How is it different? Who might use this space? What might they do here?
  - Slide 5: What is this space? How is it similar to the other images you’ve seen? How is it different? The places in the first three slides are all interiors.
  - Looking at the words on the chart paper, do you think the place we’re in now is an interior?

- Grades 4-5: What other words have the prefix “in”? What do you think “interior” may mean? What about the word “exterior?”
- You are going to design an interior for a book character. What book are you reading with your reading group now? (Alternately: what book are we reading aloud as a class right now?) Who is a character that you know a lot about in that book?
- What types of things do you know about that character?
- Let’s brainstorm some ideas. What type of interior might this character need? A place to work or do a favorite hobby? A new bedroom?

#### Sketching Questions:

- What types of activities does this character do?
- What things do they like? Do you know any “favorites” that they have?
- How does your design show the personal style/likes of your character?
- How does your design help them do something they like?

#### VARIATIONS AND EXTENSIONS

- If students have selected the same character from a book the whole class is reading or recently read, compare their completed designs. What is similar about the designs? What is different? How do they all reflect the character?
- Grades 2-5: Write a description of the space in the sketch.
- Expand this activity to a series of lessons on the role of setting in a story.

#### MATERIALS AND RESOURCES NEEDED

Chart paper or white board and a marker

Paper

Pencils

Crayons or Colored Pencils

If available, a projector and connection to the Internet

Our “Literary Locale” presentation available at [www.cooperhewitt.org/education/school-programs](http://www.cooperhewitt.org/education/school-programs)

#### VOCABULARY

See Cooper Hewitt’s design vocabulary on Page 12 of this Teacher Resource Packet

#### STANDARDS

Common Core

CCSS.ELA-LITERACY.RL.K-5.1; CCSS.ELA-LITERACY.RL.K-5.3; CCSS.ELA-LITERACY.RL.1-4.7

---

## CULTURALLY RELEVANT | 6-12

SUBJECTS: Social Studies, History, Language Arts | DESIGN PROCESS: Getting Ideas

ACTIVITY TYPE: Research, Writing, and Sketching | 45 mins.

### YOUR DESIGN CHALLENGE

*How might we find inspiration in the world around us?*

Using the guiding questions below, lead students in an introductory discussion about how popular culture, such as music, fashion, and technology, and the world around them, such as architecture/building styles, museums, music venues, and Instagram, may influence them. Using research resources as needed, students will work in groups of 3-4 to complete the “Culturally Relevant” worksheet to explore popular culture and influences of 1920s America, and how they relate to today.

Once students have completed the worksheet, groups sketch a desk and chair to fit into a New York City apartment that reflects one of the influences from the worksheet. Use examples from the Cooper Hewitt collection provided in the materials list for brainstorming.

### GUIDING QUESTIONS

Discussion Questions:

- Have you ever bought or done something because it was trendy or popular? What was it?
- Do you think the fact that something is “trendy” influences your interest in it? Why or why not?
- Do you think being in New York City has influenced your style and what you like? Why or why not?
- If you lived in a smaller town, do you think you would like the same things or go to the same type of places?
- Who decides what is trendy?
- How do you think a trend become popular?
- In times before the Internet or TV, how do you think people learned about trends? Who do you think decided what was popular?

Brainstorming Questions to use with links to chairs from Cooper Hewitt’s collection (below):

- What do you notice about this chair?
- What materials do you think the designer used?
- Would people today like this chair? Why or why not?
- When do think this chair was made?
- What do you think inspired the designer?
- What trends or external factors do you think may have influenced this design?

Sketching Questions:

- How has the need for your desk to fit in an apartment influenced your design?
- What limitations have you had to address in designing for a space in NYC?
- How could you incorporate the influence you chose into your piece?
- How do you think this influence could impact the shape or material of your design? What about the color?
- Is your influence obvious or subtle?



## VARIATIONS AND EXTENSIONS

- Use this worksheet to compare today’s popular culture to a time period being studied.
- Use this worksheet to compare life in NYC to life in another city or country. Then explore how local architecture or furniture design reflects that culture.
- Conduct a materials study to learn more about what types of materials are used in furniture construction today and why. Explore sustainable materials and how they are used today.

## MATERIALS AND RESOURCES NEEDED

Computers, books or other resources to explore popular culture of the 1920s  
“Culturally Relevant” Worksheet on page 14 of this Teacher Resource Packet  
Paper for Sketching

Pencils

Colored Pencils

### Links to chairs from Cooper Hewitt’s collection:

<https://collection.cooperhewitt.org/objects/18705523/>

<https://collection.cooperhewitt.org/objects/69193867/>

<https://collection.cooperhewitt.org/objects/18805041/>

<https://collection.cooperhewitt.org/objects/18636565/>

<https://collection.cooperhewitt.org/objects/18706699/>

<https://collection.cooperhewitt.org/objects/18407005/>

<https://collection.cooperhewitt.org/objects/18638247/>

<https://collection.cooperhewitt.org/objects/18714653/>

<https://collection.cooperhewitt.org/objects/18489261/>

<https://collection.cooperhewitt.org/objects/18797987/>

<https://collection.cooperhewitt.org/objects/890290245/>

<https://collection.cooperhewitt.org/objects/68743477/>

## VOCABULARY

See Cooper Hewitt’s design vocabulary on Page 12 of the Teacher Resource Packet

## STANDARDS

Common Core

CCSS.ELA-LITERACY.RH.6-8.2; CCSS.ELA-LITERACY.RH.6-8.7; CCSS.ELA-LITERACY.RH.9-10.7;  
CCSS.ELA-LITERACY.RH.9-10.9; CCSS.ELA-LITERACY.RH.11-12.2; CCSS.ELA-LITERACY.RH.11-  
12.9





## POST-VISIT ACTIVITIES

### UPGRADING THE ABODE | K-5

*SUBJECTS: Math, Art | DESIGN PROCESS: Getting Ideas, Prototyping and Making*

*ACTIVITY TYPE: Planning Worksheet and Prototype Making | 60 mins*

#### YOUR DESIGN CHALLENGE

*How might we design a space for a family member?*

Students take on the role of interior designer with a parent, guardian or other family member as their client. Students focus not only on the function of the room and the aesthetics of the client (what the family member likes), but also on how things fit into the space. First, using the “Upgrading the Abode” worksheets as a guide, students will lay out the components for their space. The grid page can be used as the floor in the room, and the shapes on the other pages can be used to represent furniture of various sizes and shapes. Then students will build a prototype of their designs, where they can add in additional decorative elements, such as wallpaper, art or posters, and colors, textures and pattern, as well as 3D versions of the components they laid out in their worksheets.

#### GUIDING QUESTIONS

- Who is the user of this room?
- What is the function of this room? Watching tv or relaxing, cooking, working out or another hobby?
- What furniture are you adding to your space? How does that furniture help your user in the room?
- What shapes on the worksheet remind you of the top of a table or desk? What about the top of a bookcase?
- What shapes remind you of the seat of a chair? Or a bed?
- What 2D shapes are you using in this room?
- What was challenging about fitting all the things you wanted into the space?
- How can you turn the 2D shapes from your layout into 3D shapes in your prototype?
- What have you added to make this room comfortable for the user?
- What have you added that shows the aesthetics/likes of the user?

#### VARIATIONS AND EXTENSIONS

- Modify the “Upgrading the Abode” worksheets to create a floor plan of the classroom. How are the needs of a class different from the needs of a family?
- Use blank paper to encourage students to make their own shapes. Discuss symmetry, polygons, and regular and irregular shapes
- K-2: Use this activity as an introduction to a unit on shapes
- 3-5: Use this activity as an introduction to geometry

#### MATERIALS AND RESOURCES NEEDED

Our “Upgrading the Abode” worksheets available at [www.cooperhewitt.org/education/school-programs](http://www.cooperhewitt.org/education/school-programs).



Blank white paper

Pencils

Scissors

Tape or Glue

Shoe boxes or other small cardboard boxes to be rooms for prototyping (use with open-side facing up as if looking down on a room)

Materials for prototyping such as construction paper, model magic, markers, scissors, tape, popsicle sticks, recycled materials

## VOCABULARY

See Cooper Hewitt's design vocabulary on Page 12 of the Teacher Resource Packet

## STANDARDS

Common Core

CCSS.MATH.CONTENT.K-2.G.A.1; CCSS.MATH.CONTENT.K.G.A.2-3; CCSS.MATH.CONTENT.4.G.A.2; CCSS.MATH.CONTENT.5.G.B.3; CCSS.MATH.CONTENT.K.G.B.4-5; CCSS.MATH.CONTENT.3.MD.D.8

---

## STYLING THE SPACE | 6-12

*SUBJECTS: Social Studies, Math | DESIGN PROCESS: Getting Ideas, Prototypes and Making*

*ACTIVITY TYPE: Discussion, Brainstorming, and Prototyping | 45 mins*

### YOUR DESIGN CHALLENGE

*How might we create a new space for an organization that we care about?*

Working in groups of four, students will design an innovative, multifunctional space for an organization or club of which they are a member or want to be a member. Their designs will perform two functions for the group (such as providing practice and performance space for a dance group, small group discussion space and an area for donation distribution for a charitable organization, or meeting space and a place to store gardening tools for an environmental club), as well as consider external influences and the character of the group. Students will create a 3D prototype of their spaces that reflect an accurate scale model of real-world spaces. We encourage students to use images of furniture and decorative objects from Cooper Hewitt's collection, accessible at [www.collection.cooperhewitt.org/](http://www.collection.cooperhewitt.org/).

### GUIDING QUESTIONS

- What is an organization you are a member of or want to join, either in or outside of school?
- What types of activities does this organization do?
- What types of spaces does the organization need to do those activities?
- How do you think the needs of a group might be different from the needs of only one user?
- What are the 2 functions that your design addressed for the user?
- How does your design reflect the character of the group?

- Was it challenging to incorporate multiple perspectives into the overall style of your design? Why or why not?
- How have you found innovative ways to incorporate the two functions of the space?
- What is challenging about being innovative in this design?
- If you were trying to build this space in the real world, what types of materials would you want?

## VARIATIONS AND EXTENSIONS

- Students design an outdoor space for the community. What needs are there in an outdoor space that did not exist in an indoor space?
- Study a designer or design firm that creates interior spaces today. How do they address the challenges students faced in their prototypes? How do they use math within their designs?
- Use a computer program to create a digital rendering of these designs to further explore geometric modeling.

## MATERIALS AND RESOURCES NEEDED

Paper

Pencils

Materials for 3-D prototypes: scissors, glue, hot glue, construction paper, cardboard, popsicle sticks

## VOCABULARY

See Cooper Hewitt's design vocabulary on Page 12 of the Teacher Resource Packet

## STANDARDS

Common Core

CCSS.MATH.CONTENT.HSG.MG.A.1; CCSS.MATH.CONTENT.HSG.MG.A.3; CCSS.MATH.CONTENT.6-8.G.B.6



**VOCABULARY**

<b>Color</b>	Color can convey a message. Designers must understand their audiences' perception of color as part of effective design plans.
<b>Design</b>	To make an object that solves a problem
<b>Design challenge</b>	A difficulty or challenge that can be solved through design
<b>Design process</b>	The steps that you take to solve your challenge: <ol style="list-style-type: none"> <li>1. Defining problems</li> <li>2. Getting ideas</li> <li>3. Prototyping and making</li> <li>4. Testing and evaluating</li> </ol>
<b>Design solution</b>	The way, idea, or answer to a design challenge or problem
<b>Designer</b>	A person who creates a new object, idea, or plan
<b>Empathy</b>	The ability to understand what another person is feeling without adopting that emotion as your own.
<b>Exterior</b>	The outside part of a building
<b>External influences</b>	Influences on design from the world around the designer. External factors can relate to material availability, technology, cultural mores and changes, popular culture, scientific discoveries, and world events.
<b>Form</b>	The shape and structure of any three dimensional object and can be defined by light and dark.
<b>Function</b>	The way something works, or a purpose of an object <i>e.g., the function of a paper clip is to fasten things together</i>
<b>Interior</b>	The inside part of a building
<b>Interior design</b>	The discipline of the design and coordination of the decorative elements of an interior (such as a house, apartment, or office) including color schemes, fittings, and furnishings. Interior design considers space function, aesthetics and improvement of quality of life.
<b>Interior designer</b>	A person who coordinates and designs inside spaces, while thinking about a space's function and their client's needs and aesthetic preferences to improve quality of life in the space.
<b>Line</b>	An element of art used to define shape, contours, and outlines. Also to suggest mass and volume. It may be a continuous mark made on a surface with a pointed tool or implied by the edges of shapes and forms.
<b>Materials</b>	The items you are using to represent your ideas

# COOPER HEWITT DESIGN K-12

<b>Needs</b>	What the user must have in order to use the design successfully
<b>Pattern</b>	Uses the art elements in planned or random repetitions to enhance surfaces. Patterns often occur in nature.
<b>Prototype</b>	An original model on which something is patterned
<b>Solution</b>	The way, idea, or answer to a problem. There can be more than one
<b>System</b>	A group of related parts that work together
<b>Texture</b>	The surface quality of an object; roughness or smoothness.
<b>Team</b>	A group working together on a common goal or activity
<b>User</b>	A person who operates or experiences the design
<b>User-centered design</b>	An approach to design that considers the needs of the user throughout the design process



## CULTURALLY RELEVANT

Work with your team to complete this table about external influences that helped shape culture and design in the 1920s, and how similar factors still influence people today.

Influence	New York in the 1920s	New York Today
Architecture		
Fashion		
Music		
Art Movements		
Technology		
Major Scientific Discoveries or Expeditions		