

## **10<sup>th</sup> Grade Graphic Design (Visual Arts): Toy Design**

### **Central Focus of the Unit:**

The central focus of this 4-week long unit is to use the design process to create unique toy designs that target an unmet need or problem in the toy market, including branding and packaging. This unit integrates skills that students develop earlier in the year, including typography, logo design, and Photoshop illustration skills. Students will use the design process to provide feedback to their peers and develop their critique and reflection skills.

### **New York State Learning Standards for the Arts:**

- Anchor Standard 1: Generate and conceptualize artistic ideas and work.
- Anchor Standard 2: Organize and develop artistic ideas and work.
- Anchor Standard 3: Refine and complete artistic work.
- Anchor Standard 4: Select, analyze, and interpret artistic work for presentation.
- Anchor Standard 5: Develop and refine artistic techniques and work for presentation.
- Anchor Standard 6: Convey meaning through the presentation of artistic work.
- Anchor Standard 8: Interpret meaning in artistic work.
- Anchor Standard 10: Relate and synthesize knowledge and personal experiences to inspire and inform artistic work.
- Anchor Standard 11: Investigate ways that artistic work is influenced by societal, cultural, and historical context and, in turn, how artistic ideas shape cultures past, present, and future.

### **ISTE Standards:**

- 1.1d. Technology Fundamentals: Students understand fundamental concepts of how technology works, demonstrate the ability to choose and use current technologies effectively, and are adept at thoughtfully exploring emerging technologies.
- 1.4a. Design Process: Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- 1.4b. Design Constraints: Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
- 1.4c. Prototypes: Students develop, test and refine prototypes as part of a cyclical design process.
- 1.4d. Open-Ended Problems: Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.
- 1.6d. Customize the Message: Students publish or present content that customizes the message and medium for their intended audiences.

### **Outline of Lesson Sequence:**

1. Project Introduction & Visual Thinking Strategies
2. Designing a Toy
3. Building a Prototype
4. Branding & Package Design

## Project Introduction & Visual Thinking Strategies

### Unit Title: Toy Design

Lesson Plan #: 1

Grade: 10

Length of each  
period: 45  
Number of days: 1

### Essential Questions:

What is the value in engaging in a process of art criticism?

How can the viewer “read” a work of art as text?

### Lesson Objectives:

1. Students will be able to use Visual Thinking Strategies to analyze a work of art.
2. Students will be able to sketch an imaginary creature inspired by Bosch’s *The Garden of Earthly Delights*.

### Assessments:

- Formative:
  - Observation of student participation in class and student work (sketches)
  - Exit ticket: What is the first step of using VTS to understand a work of art?

### Activity/Process:

This lesson serves as an introduction to the Toy Design unit. Students will begin thinking about the concept of monsters through conducting a Visual Thinking Strategies exercise on Bosch’s *The Garden of Earthly Delights*. Then, they will have time to start sketching creatures inspired by his artwork.

### Materials—Artist/ Visual Text/ Technology/ Resources: *Materials for student & teacher*

Slideshow, including image of *Garden of Earthly Delights*  
Sketchbook

### Visual References/Art Historical References:

*The Garden of Earthly Delights*, Hieronymus Bosch (ca. 1490-1500)

### Academic Vocabulary:

Visual thinking strategies: approach to describing, analyzing, and interpreting artwork

### Student Support and Differentiation:

Translated worksheets, vocabulary, and exit tickets for ELLs.

For all students who need:

- Visual cues on board including daily “flow” and visual timers.
- Refocusing prompts.
- Proximity to teacher
- One on One check-ins
- Periodic prompts and check-ins
- Break if necessary
- Assigning teacher assistants to help

## NYS Visual Arts Standards

Creating	Presenting	Responding	Connecting
HS Proficient VA:Cr1.2.HSI a. Consider a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.		HS Proficient VA:Re8.1.HSI a. Construct interpretations of artwork, supported by relevant and sufficient evidence found both in the work and in surrounding contexts.	

### Teaching Procedure/Task Analysis

#### Day 1: Introduction to Project and VTS

**Do Now:** Copy Learning Objective into sketchbook; answer: What do you notice first when looking at a piece of artwork?

#### Key Question(s):

What is the value of engaging in a process of art criticism?

How can the viewer “read” a work of art as text?

How can we draw inspiration from a variety of sources?

#### Presentation of Lesson Objectives:

Lesson objectives posted on slide at beginning of class and during work time.

**Modeling/Demonstration:** Refresh students on VTS structure, lead discussion of artwork

1. What’s going on in this picture?
2. What do you see that makes you say that?
3. What more can you find?

**Transition:** For the remainder of class, we will have time to sketch at least one creature inspired by Bosch. This will not necessarily become your final toy design but could serve as inspiration as we hone our designs later this week.

#### Work Period:

Sketching time

**Reflection:** Pair share sketches

**Closure:** Exit ticket: What is the first step of using VTS to analyze a work of art?

## Images:



*The Garden of Earthly Delights*, Hieronymus Bosch (ca. 1490-1500)

## Designing a Toy

### Unit Title: Toy Design

Lesson Plan #: 2

Grade: 10

Length of each

period: 45

Number of days: 4

### Essential Questions:

Why do artists and designers follow or break from established traditions?

How can the design process help artists and designers find a particular direction that is effective for their work?

### Lesson Objectives:

1. Students will be able to make connections between art historical references and contemporary toy design.
2. Students will be able to use the design process to develop a toy brand for a specific audience.
3. Students will be able to create a detailed character turnaround illustration of their toy design.
4. Students will be able to reflect on the artmaking process to self-evaluate and provide feedback to their peers.

<b>Assessments:</b>
<ul style="list-style-type: none"> <li>• Formative: <ul style="list-style-type: none"> <li>○ Observation of student participation in class and student work (sketches)</li> <li>○ Do Nows/Exit tickets</li> </ul> </li> <li>• Summative: <ul style="list-style-type: none"> <li>○ Illustration graded using a rubric</li> </ul> </li> </ul>
<b>Activity/Process:</b>
<p>This lesson introduces students to the Design Thinking Process and allows them to develop a unique idea for a toy. Students are encouraged to consider a range of art historical references and contemporary toy designers, and they are challenged to develop a unique idea for their toy. This lesson focused on brainstorming, sketching, and designing their toys before moving into a prototyping phase. They will have the opportunity to share their ideas with their peers and receive feedback prior to finalizing their design.</p>
<b>Materials—Artist/ Visual Text/ Technology/ Resources:</b> <i>Materials for student &amp; teacher</i>
<p>Slideshow  Sketchbooks  Drawing Materials (pencils, erasers, markers, colored pencils, Micron pens)  Rulers  Drawing paper</p>
<b>Visual References/Art Historical References:</b>
<p>Design Process Cycle diagram  Slides with references to different toy brands</p>
<b>Academic Vocabulary:</b>
<p>Design process  Brand  Target audience  Illustration  Diagram</p>
<b>Student Support and Differentiation:</b>
<p>Translated worksheets, vocabulary, and exit tickets for ELLs.</p> <p>For all students who need:</p> <ul style="list-style-type: none"> <li>• Visual cues on board including daily “flow” and visual timers.</li> <li>• Refocusing prompts.</li> <li>• Proximity to teacher</li> <li>• One on One check-ins</li> <li>• Periodic prompts and check-ins</li> <li>• Break if necessary</li> <li>• Assigning teacher assistants to help</li> </ul>



## NYS Visual Arts Standards

Creating	Presenting	Responding	Connecting
<p>HS Proficient VA:Cr1.2.HSI a. Consider a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.</p> <p>HS Proficient VA:Cr2.1.HSI a. Generate and develop artistic work in a self-directed manner.</p> <p>HS Proficient VA:Cr3.1.HSI a. Apply relevant criteria and the feedback of others to revise and refine works of art and design in progress.</p>			<p>HS Proficient VA:Cn10.1.HSI a. Document the process of developing ideas; from early stages to full elaboration.</p>

### Teaching Procedure/Task Analysis

#### Day 2: Introduction to Design Process

**Recap:** Review what we did in class yesterday, refresh project flow

**Do Now:** Copy Learning Objective into sketchbook; answer: How do you think designers come up with new ideas?

#### Key Question(s):

How can the design process help us generate ideas?

#### Presentation of Lesson Objectives:

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** Introduce concept of design process, explain “Ask” phase

**Transition:** For the remainder of class, we will have time to work on Step 1 of the Design Process. Consider the following questions as you work. Tomorrow, we will move onto sketching, so please use your time today wisely.

#### Work Period:

“Ask” – consider what gaps there are in the toy market and what your desired target audience might be

#### Working Questions:

- What is the problem?
- What would you like to accomplish?
- What have others done?
- Who is my target audience?

**Reflection:** Share responses at table groups; time to edit responses based on group feedback

<b>Closure:</b> Exit ticket: Who do you think your target audience might be?
<b>Day 3:</b> Design Process: Imagine
<b>Recap:</b> Review what we did in class yesterday, refresh project flow
<p><b>Do Now:</b> Copy Learning Objective into sketchbook; answer: What is the first step in the design process?</p> <p><b>Key Question(s):</b> How can the design process help us generate ideas?</p>
<p><b>Presentation of Lesson Objectives:</b> Lesson objectives posted on slide at beginning of class and during work time.</p>
<b>Lesson:</b> Review concept of design process, introduce “Imagine” phase
<p><b>Transition:</b> For the remainder of class, we will have time to work on Step 2 of the Design Process. Consider the following questions as you work. Tomorrow, we will move onto developing our designs into more finalized diagrams. While we are all designing our own toys, please feel free to brainstorm with you table group and bounce ideas off each other!</p>
<p><b>Work Period:</b> “Imagine” – consider the problem and audience from yesterday.</p> <p><b>Working Questions:</b></p> <ul style="list-style-type: none"> <li>• What are some solutions?</li> </ul> <p><b>Tasks:</b></p> <ul style="list-style-type: none"> <li>• Brainstorm ideas for your toy design</li> <li>• Consider the criteria for the project and constraints (what materials will we have access to?)</li> </ul>
<b>Reflection:</b> Opportunity for peer feedback on sketches; trade sketches with your neighbor and fill out peer feedback form (glow/grow)
<b>Closure:</b> Exit ticket: Take a photo of your current sketch and upload to Jupiter
<b>Day 4-5:</b> Design process: Design
<b>Recap:</b> Review what we did in class yesterday, refresh project flow
<p><b>Do Now:</b> Copy Learning Objective into sketchbook; answer: What is the next step in the design process?</p> <p><b>Key Question(s):</b> How can the design process help us generate ideas?</p>

**Presentation of Lesson Objectives:**

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** Review concept of design process, explain “Design” phase; introduce character turnaround illustration and design diagrams; share available materials (drawing paper, rulers, pencils, markers, colored pencil, Micron pens)

**Transition:** For the remainder of class, we will have time to work on Step 3 of the Design Process. Consider the following criteria as you work. We will have two days to finalize our designs.

**Work Period:**

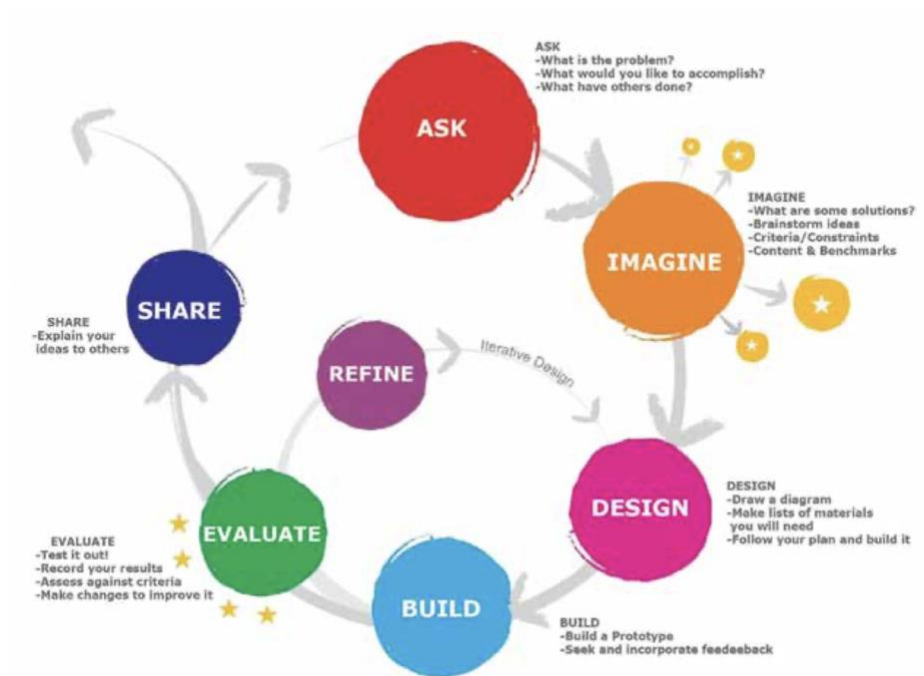
“Design” – consider the information you gathered through the first two steps of the design process to develop your project idea.

**Steps/Criteria:**

- Draw a diagram (start in pencil, then add color)
- Make lists of materials you will need

**Reflection:** Partner share: glow/grow (critique) on finalized illustrations and toy design concept

**Closure:** Self-assessment on illustration rubric

**Images:**

Source: The STEM Fab Studio Design Process developed by Nick DiGiorgio for FabLab and the Cleveland City Public Schools in 2012 (Watson 2015)



## Building a Prototype

### Unit Title: Toy Design

Lesson Plan #: 3

Grade: 10

Length of each  
period: 45  
Number of days: 10

### Essential Questions:

Why do artists and designers follow or break from established traditions?

How can the design process help artists and designers find a particular direction that is effective for their work?

### Lesson Objectives:

1. Students will be able to use the design process to develop a toy brand for a specific audience.
2. Students will be able to create a 3D prototype of their toy design based on their illustrated diagrams using a combination of 3D printing and sculpture materials.
3. Students will be able to provide feedback to their peers on works in progress and incorporate peer feedback to strengthen their designs.

### Assessments:

- Formative:
  - Observation of student participation in class and student work
  - Do Nows/Exit tickets
- Summative:
  - Prototype graded using a rubric

### Activity/Process:

This lesson continues to explore the Design Thinking Process, focusing on developing a prototype of their toy idea. Students will translate their diagrams into 3D prototypes using TinkerCAD and sculptural materials. They will have the opportunity to share their ideas with their peers and receive feedback that can be used to revise their designs as a part of the design process.

### Materials—Artist/ Visual Text/ Technology/ Resources: *Materials for student & teacher*

Slideshow  
 Sketchbooks  
 Design diagrams  
 TinkerCAD account & laptop  
 3D printer and filament  
 Paint  
 Hot glue  
 Variety of sculpture materials including yarn, fabric, found/recycled materials, polymer clay  
 Toaster ovens

### Visual References/Art Historical References:

Design Process Cycle diagram

### Academic Vocabulary:

Design process

## Prototype

### Student Support and Differentiation:

Translated worksheets, vocabulary, and exit tickets for ELLs.

For all students who need:

- Visual cues on board including daily “flow” and visual timers.
- Refocusing prompts.
- Proximity to teacher
- One on One check-ins
- Periodic prompts and check-ins
- Break if necessary
- Assigning teacher assistants to help

Project is designed such that students can work at a range of complexities. Students who are motivated and need enrichment are encouraged to design more complicated or detailed designs. Option for students to create a second prototype or additional toy for their “brand” if they finish early and have additional time.

### NYS Visual Arts Standards

Creating	Presenting	Responding	Connecting
HS Proficient VA:Cr1.2.HSI a. Consider a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.  HS Proficient VA:Cr2.1.HSI a. Generate and develop artistic work in a self-directed manner.	HS Accomplished VA:Pr4.1.HSII a. Analyze, select, and critique personal artwork for a collection or portfolio presentation.		HS Proficient VA:Cn10.1.HSI a. Document the process of developing ideas; from early stages to full elaboration.

### Teaching Procedure/Task Analysis

#### Day 6-8: Introduction to Prototyping & TinkerCAD

**Recap:** Review project flow

**Do Now:** Copy Learning Objective into sketchbook; answer

1. What part of your design are you planning to 3D print? (day 6)
2. What is your goal for class today? (days 7, 8)

#### Key Question(s):

Why do designers make prototypes?

#### Presentation of Lesson Objectives:

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** TinkerCAD Demo

**Transition:** For the remainder of class, we will have time to work on developing our prototypes using TinkerCAD.

**Work Period:**

“Ask” – consider what gaps there are in the toy market and what your desired target audience might be

**Working Questions:**

- Why do designers make prototypes?
- What part of my design do I want to 3D print?

**Reflection/Closure:** Share work at table groups; What struggles have you encountered in translating your design into TinkerCAD? Do you have any tips you discovered to share with your group?

*Note:* On final day, students must turn in TinkerCAD file for 3D printing. 3D printing will be done with the support of the technology specialist. During upcoming studio workdays, students can go check on progress of 3D printing, but most students will not be able to see their personal work printed.

**Day 9-13:** Building Prototypes

**Recap:** Review project flow, update status of 3D printing

**Do Now:** Copy Learning Objective into sketchbook; answer: What is your goal for studio time today?

**Key Question(s):**

How can the design process help us generate ideas?

**Presentation of Lesson Objectives:**

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** Daily materials demos – show students different skills they can use to manipulate materials. Option for students to volunteer to lead demos (e.g., students who know how to crochet can co-teach a short lesson on crochet or students who are experienced with polymer clay can share techniques) Topics include: crochet, soft sculpture, polymer clay, sanding/finishing 3D prints, sewing, working with wire

**Transition:** Today, we have more time to work on our prototypes! Consider your goal for today and what materials you need to make that happen. We will clean up with 10 minutes left in class.

**Work Period:**

Studio time

**Working Questions:**

- Why do designers create prototypes?

**Tasks:**

- Finalize prototype

<b>Reflection:</b> Daily pair share of progress made and opportunity for feedback
<b>Closure:</b> Daily exit ticket: Take a photo of your current prototype and upload to Jupiter
<b>Day 14:</b> Design process: Evaluate
<b>Recap:</b> Review project flow
<b>Do Now:</b> Copy Learning Objective into sketchbook; answer: Why is evaluating our work important?
<b>Key Question(s):</b> How can the design process help us generate and refine our ideas?
<b>Presentation of Lesson Objectives:</b> Lesson objectives posted on slide at beginning of class and during work time.
<b>Lesson:</b> Review concept of design process, explain “Evaluate” phase
<b>Transition:</b> Today, we will work on sharing our prototypes with the class to receive structured feedback.
<b>Work Period:</b> Structured critique in small groups – provide worksheets for students to fill out about their work
<b>Reflection:</b> Exit ticket: What is one change you can make to improve your prototype?
<b>Day 15:</b> Design process: Refine
<b>Recap:</b> Review project flow
<b>Do Now:</b> Copy Learning Objective into sketchbook; answer: What is my goal for studio time today?
<b>Key Question(s):</b> How can the design process help us generate and refine our ideas?
<b>Presentation of Lesson Objectives:</b> Lesson objectives posted on slide at beginning of class and during work time.
<b>Lesson:</b> Review concept of design process, explain “Refine” phase
<b>Transition:</b> Today, we will have time to make any final changes to our designs based on the feedback we received yesterday.
<b>Work Period:</b> Open studio work time

**Reflection:**

Exit ticket: How did peer feedback help you improve your prototype?

## Refining Our Brand

**Unit Title: Toy Design**

**Lesson Plan #: 4**

**Grade: 10**

**Length of each  
period: 45  
Number of days: 5**

**Essential Questions:**

Why do artists and designers follow or break from established traditions?

How do designers create unique visual identities?

**Lesson Objectives:**

1. Students will be able to create unique branding and packaging for their toy prototype, including a logo, color scheme, and graphics using Photoshop.
2. Students will be able to reflect on the artmaking process to self-evaluate and provide feedback to their peers.

**Assessments:**

- Formative:
  - Observation of student participation in class and student work (sketches)
  - Do Nows/Exit tickets
- Summative:
  - Final package design graded using a rubric

**Activity/Process:**

This is the final lesson in the Toy Design unit, and students will have an opportunity to develop a unique brand for their toy prototype. This lesson draws upon student knowledge of typography and Photoshop from previous units and allows them to hone their graphic design skills.

**Materials—Artist/ Visual Text/ Technology/ Resources:** *Materials for student & teacher*

Slideshow  
 Laptops or desktop computers  
 Adobe Photoshop  
 Printer  
 Thin cardboard  
 Plastic sheets  
 Exacto knives  
 Glue

**Visual References/Art Historical References:**

Design Process Cycle diagram  
 Slides with references to different packaging designs and logos  
 Aries Moross  
 April Greiman  
 Ivan Chermayeff

Jessica Walsh

### Academic Vocabulary:

Design process  
Brand  
Prototype  
Logo  
Typography

### Student Support and Differentiation:

Translated worksheets, vocabulary, and exit tickets for ELLs.

For all students who need:

- Visual cues on board including daily “flow” and visual timers.
- Refocusing prompts.
- Proximity to teacher
- One on One check-ins
- Periodic prompts and check-ins
- Break if necessary
- Assigning teacher assistants to help

### NYS Visual Arts Standards

Creating	Presenting	Responding	Connecting
HS Proficient VA:Cr1.2.HSI a. Consider a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.  HS Proficient VA:Cr2.1.HSI a. Generate and develop artistic work in a self-directed manner.  HS Proficient VA:Cr3.1.HSI a. Apply relevant criteria and the feedback of others to revise and refine works of art and design in progress.	HS Accomplished VA:Pr4.1.HSII a. Analyze, select, and critique personal artwork for a collection or portfolio presentation.  HS Proficient VA:Pr5.1.HSI a. Analyze and evaluate how decisions made in the preparation and presentation of artwork affect a viewer's perception of meaning.  HS Accomplished VA:Pr6.1.HSII a. Make, explain, and justify connections between artists or artwork and social, cultural, and political history	HS Proficient VA:Re7.2.HSI a. Analyze the reciprocal relationship between understanding the world and experiencing imagery	HS Proficient VA:Cn10.1.HSI a. Document the process of developing ideas; from early stages to full elaboration.  HS Proficient VA:Cn11.2.HSI a. Investigate how skills used in developing artistic solutions can be applied to study in other disciplines, and explore how they are sought-after work force attributes in other fields

### Teaching Procedure/Task Analysis

**Day 16:** Introduction to Packaging Design

**Recap:** Review project flow



**Do Now:** Copy Learning Objective into sketchbook; answer: Sketch a logo of a famous brand from memory.

**Key Question(s):**

How do brands use graphic design to create unique identities?

**Presentation of Lesson Objectives:**

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** Introduce package design aspect of project; slideshow with examples of famous historical and contemporary graphic designers

**Transition:** For the remainder of class, we will have time to sketch logos for our toy brands.

**Work Period:**

In your sketchbook, begin developing a logo idea. If you have extra time, develop alternates – remember, designers don't just settle on their first idea!

**Working Question:**

- How can I design a unique logo for my brand?

**Reflection:** Share logo sketches with table group

**Closure:** Exit ticket: Upload a photo of your sketch to Jupiter

**Day 17-19:** Working in Photoshop

**Recap:** Review what we did in class yesterday, refresh project flow

**Do Now:** Copy Learning Objective into sketchbook; answer: Why are logos important?

**Key Question(s):**

How do brands use graphic design to create unique identities?

**Presentation of Lesson Objectives:**

Lesson objectives posted on slide at beginning of class and during work time.

**Lesson:** Review basic Photoshop techniques (creating color scheme, selection tools, digitizing sketches, working off a box template)

**Transition:** For the remainder of class, we will have time to work on creating our boxes in Photoshop!

**Work Period:**

On your computer, continue to refine your box design.

**Working Question:**

- How can I design a unique package for my brand?

<b>Reflection:</b> Pair share progress
<b>Closure:</b> Exit ticket: What do you need to work on tomorrow? (Day 17, 18)  Day 19: Turn in finalized PSD for box illustration on Google Classroom.
<b>Day 20:</b> Assembling Boxes
<b>Recap:</b> Review what we did in class yesterday, refresh project flow
<b>Do Now:</b> Copy Learning Objective into sketchbook; answer: What are the class policies for using Exacto knives?  <b>Key Question(s):</b> How do brands use graphic design to create unique identities?
<b>Presentation of Lesson Objectives:</b> Lesson objectives posted on slide at beginning of class and during work time.
<b>Lesson:</b> Review Exacto knife guidelines and demo box assembly steps
<b>Transition:</b> We will have most of the class period to work on finalizing your boxes. You can use the cardboard and plastic film to construct your box. I printed your PSD files on thicker paper, so please find your design at the front table and get started.
<b>Work Period:</b> Work time  <b>Steps/Criteria:</b> <ol style="list-style-type: none"> <li>1. Glue printed box design onto cardboard</li> <li>2. Use Exacto knife to cut out design</li> <li>3. Score cardboard</li> <li>4. Fold box into final shape</li> <li>5. Use glue to adhere box and plastic (if using)</li> <li>6. Place your prototype in your box!</li> </ol>
<b>Reflection:</b> Self-assessment on rubric
<b>Closure:</b> Gallery walk and congratulate students on finishing their projects!

**Rubrics:****Illustration Rubric**

	<b>4 – Advanced</b>	<b>3 – Intermediate</b>	<b>2 – Beginner</b>	<b>1 – Ready to Develop</b>
<b>Technical Execution of Illustration</b>	Neat execution of illustration. Successfully applies illustration techniques learned in class to create a detailed, clear diagram of toy design.	Mostly successful execution of illustration. Mostly successfully applies illustration techniques learned in class to create a diagram of toy design.	Attempted execution of illustration. Attempts to apply illustration techniques learned in class to create a diagram of toy design.	Minimal effort put into execution of illustration and application of techniques learned in class to create a diagram of toy design.
<b>Planning &amp; Design</b>	Effectively engaged with the Design Process. Sketches show numerous revisions and design creatively addresses a problem.	Somewhat effectively engaged with the Design Process. Sketches show minimal revisions and design addresses a problem.	Minimal engagement with the Design Process. Sketches show no revisions and design struggles to address a problem.	Very limited use of the Design Process and minimal evidence of planning.
<b>Participation in Critique &amp; Collaborative Work</b>	Thoughtful and consistent participation in class activities and critique, sharing responsibilities equally with peers.	Consistent participation in class activities and critique process, mostly sharing responsibilities with peers without reminding.	Minimal participation during class activities and critique, rarely contributing to shared responsibilities.	Does not participate during class activities or critique or contribute to shared responsibilities.

## Prototype & Box Design Rubric

	<b>4 – Advanced</b>	<b>3 – Intermediate</b>	<b>2 – Beginner</b>	<b>1 – Ready to Develop</b>
<b>Technical Execution of Prototype</b>	Neat execution of prototype. Successfully integrates 3D printed aspects with other sculpture materials to create an original toy.	Mostly successful execution of prototype. Mostly successfully integrates 3D printed aspects with other sculpture materials to create an original toy.	Attempted execution of prototype. Attempts to integrate 3D printed aspects with other sculpture materials. Toy design may lack originality.	Minimal effort put into execution of prototype. Failed or did not attempt to integrate 3D printed aspects with other sculpture materials. Toy lacks originality.
<b>Box Design &amp; Execution</b>	Successfully creates a unique brand using Photoshop, including a logo graphics, and color scheme. Neat execution of box construction. Design clearly connects with prototype and concept.	Mostly successful creation of a unique brand using Photoshop, including a logo and graphics. Somewhat neat execution of box construction. Design connects with prototype and concept.	Attempted creation of a brand using Photoshop. Execution of box construction lacks attention to detail. Design somewhat connects with prototype or concept.	Minimal effort put into creation of a brand using Photoshop. Incomplete execution of box construction or lacking attention to detail. Design fails to connect with prototype or concept.
<b>Incorporation of Peer Feedback</b>	Effectively engaged with the Design Process, including Refining based on peer feedback. Clear evidence of changes throughout.	Somewhat effectively engaged with the Design Process, including some Refining based on peer feedback. Some evidence of changes.	Minimal engagement with the Design Process and Refining based on peer feedback. Limited evidence of changes.	Very limited or no engagement with the Design Process and Refining based on peer feedback. No evidence of changes.
<b>Participation in Critique &amp; Collaborative Work</b>	Thoughtful and consistent participation in class activities and critique, sharing responsibilities equally with peers.	Consistent participation in class activities and critique process, mostly sharing responsibilities with peers without reminding.	Minimal participation during class activities and critique, rarely contributing to shared responsibilities.	Does not participate during class activities or critique or contribute to shared responsibilities.

**Worksheets:****Peer Feedback Worksheet****Name of Evaluator:****Class Period:****Name of Designer:**

**What is one aspect of this design that is effective?**

**What is one aspect of this design that has room for improvement?**

**What gap in the toy market or demographic do you think this design addresses?**

**References:**

Watson, A. D. (2015). Design Thinking for Life. *Art Education*, 68(3), 12–18.

<https://doi.org/10.1080/00043125.2015.11519317>