MODIFIED UBD LESSON PLAN



COURSE: MIDDLE SCHOOL

UNIT: Architecture **EXERCISE:** Understanding Architectural **TIME FRAME:** 2-3 Hours

Model Making

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PREPARATION: Summary of "to do's" that the teacher should understand and prepare before bringing this lesson to the classroom.

Teachers will need to ensure that the proper supplies are available for students to build their solutions.

You will need the following items:

Materials:

- 11" x 17" PDF Plans
- 11" x 17" Sheet of Museum Board (2/student)
- Spray adhesive
- Hot glue sticks

Tools:

- Cutting tools (Exacto knife/ box cutter)
- Hot glue gun
- Cutting mat
- Metal ruler
- Foam Werks cutting tools and track (optional but recommended)



SAFETY: Summary of safety strategies in the lesson.

Please use this space to describe safety procedures or highlights for this lesson.

DESIRED RESULTS: ESTABLISHED GOALS:

Problem Solving Techniques and Applications Standards:

TRANSFER:

Students will be able to independently use their learning to...

 Architects use models to help communicate building designs with people all over the world. Using the materials and the resources provided, students will explore and learn how to cut, organize and assemble architectural models.

MEANING:

UNDERSTANDINGS

Students will understand that...

- Models show what a building will look like in real life
- Conceptual models are a great way to communicate a design

ESSENTIAL QUESTIONS

Students will keep considering...

- Design intent
- Building Aesthetics
- Size of a building
- Shape of a building

ACQUISITION OF KNOWLEDGE AND SKILL:

Students will know...

- How to use cutting tools safely
- How to create their own Model of a building
- 3d models

Students will be skilled at...

- Measuring to scale accurately
- Cutting material to size
- Model making



COURSE: MIDDLE SCHOOL

UNIT: ARCHITECTURE

EXERCISE: UNDERSTANDING
ARCHITECTURAL MODEL MAKING

TIME FRAME: 2-3 HOURS

S2 EVIDENCE:

EVALUATIVE CRITERIA:

ASSESSMENT EVIDENCE:

Performance Task(s):

Placeholder

Task Placeholder Online quiz

Other Evidence:

- Elevation evaluation
- Activity assignments

LEARNING PLAN: Summary of Key Learning Events and Instruction

1. Activities

Key Terms

Using the presentation provided, discuss architectural key terms. Architects need to be detailed when making models for buildings, using proper terminology helps them to explain their ideas and communicate them effectively.

Architectural Model Prep

Print and attach the PDF Plans (layout of model pieces) to the museum board using spray adhesive. Allow several minutes for the paper to dry on the museum board.

Architectural Model Assembly

Students will carefully cut the pieces for their model out of the museum board. Use the various cutting tools that you are allowing students to use. Remind students to cut away from themselves. Always emphasize safety when using these types of tools. When the pieces are cut out, use hot glue to assemble the model. Refer students to the Activity Video in Level 3 on the Stem101 website. They will use an architect scale, pencil, and template sheet to draw the elevation views taken from the floor plan provided on the instruction sheet.

Progress Monitoring:

Teachers should observe students and provide on-going feedback during the activity. While introducing the unit, the teacher will pause and ask questions to make sure everyone understands.

Students will complete self-assessment and brainstorm how they could improve their skills in the future. At the end of the unit, there will be a quiz to measure their overall understanding.



DIFFERENTIATION: Summary of Key Differentiation Techniques

Please use this space to insert your differentiation techniques. Depending on the needs of students, various techniques might be needed in a classroom, therefore use the information below and experts in the area needed to design your plan for differentiation.

The ASCD Study Guide for Integrating Differentiated Instruction and Understating by Design: Connecting Content and Kids. by Carol Ann Tomlinson, Jay McTighe

Integrating Differentiated Instruction and Understating by Design: Connecting Content and Kids. by Carol Ann Tomlinson, Jay McTighe

ISBN-13: 978-1416602842 ISBN-10: 1416602844

Differentiating Reading Instruction by Laura Robb.

ISBN13: 9780545022989

A Teacher's Guide to Differentiating Instruction
The Center for Comprehensive School Reform and Improvement



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CAREER CONNECTIONS: Summary of Career Opportunities Associated with this Lesson

Please use this space to insert careers that might be connected to this lesson. This section will need continuous updating as new careers and emerging technologies change the opportunities available in the workforce.

Good sources for career connections:

Occupational Outlook Handbook http://www.bls.gov/ooh

The National Career Clusters® Framework http://www.careertech.org/career-clusters



KEYWORDS: Please Insert Keywords from this Lesson with their Definitions

Please use this space to insert keywords and their definitions Use resources like dictionary.com to find definitions to your keywords

