MODIFIED UBD LESSON PLAN



COURSE: MIDDLE SCHOOL

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

Elevation Drawings

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:

- Pencil
- Paper (11" x 17")
- 8.5" x 11" PDF Instruction Sheet (Floor Plan; locate on Stem 101 website)

Tools:

Architects Scale



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 many different drawings to communicate their designs. Elevation drawings
are a tool that architects use to show what the building would look like if we were standing
outside of the building looking at the structure. Most elevation drawings will include a
North, South, East, and West view of the building.

MEANING:

UNDERSTANDINGS

Students will understand that...

- Elevations show what a building looks like before it is built
- Placement of doors and windows is important

ESSENTIAL QUESTIONS

Students will keep considering...

- Design intent
- Building Aesthetics
- Door and window layout
- Symmetry
- Balance

ACQUISITION OF KNOWLEDGE AND SKILL:

Students will know...

- How to use an Architect Scale
- How to create their own Elevations
- Residential home layout
- Symmetry and Balance for a home

Students will be skilled at...

- Measuring to scale accurately
- Basic drawing techniques
- Laying out a set of house elevations



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EXERCISE: UNDERSTANDING
ARCHITECTURAL ELEVATION DRAWINGS

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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 able to communicate their ideas through two dimensional drawings. Elevation details and terminology found in the presentation will help provide a base of knowledge to successfully complete a set of elevation drawings

Elevation Prep

Show the elevation demonstration video. This will show students how to transfer information from a floor plan to an elevation. An example of the final project is in the video.

Elevation Drawing

Students will complete drawings of the four elevation views (North, South, East and West). 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

