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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:*** Pencil
* Paper (11’” x 17”)
* 8.5” x 11” PDF Instruction Sheet (Floor Plan; locate on Stem 101 website)

**Tools:*** Architects Scale

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|  | 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: |  | Transfer: |
| *Problem Solving Techniques and Applications Standards:*  | *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.
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| 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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|  | Evidence:  |
| Evaluative Criteria: |  | Assessment Evidence: |
| * Placeholder
 | *Performance Task(s):* **Task Placeholder**Online quiz |
| *Other Evidence:* * Elevation evaluation
* Activity assignments
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|  | 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 differentiationThe ASCD Study Guide for Integrating Differentiated Instruction and Understating by Design: Connecting Content and Kids.by Carol Ann Tomlinson, Jay McTigheIntegrating Differentiated Instruction and Understating by Design: Connecting Content and Kids.by Carol Ann Tomlinson, Jay McTigheISBN-13: 978-1416602842 ISBN-10: 1416602844Differentiating Reading Instruction*by Laura Robb.*ISBN13: 9780545022989A Teacher's Guide to Differentiating InstructionThe Center for Comprehensive School Reform and Improvement |
|  | 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 definitionsUse resources like [dictionary.com](http://dictionary.reference.com/) to find definitions to your keywords |