



ARCHITECTURE AND CONSTRUCTION CLUSTER

LESSON 2

Lesson Plan Title: Creating a Floorplan		Instructor:
Suggested Total Time for Lesson (minutes): 135 minutes (3 days)		
Content Focus - What Will Students Learn? (Content Skill Sets)		
<p>Students will be asked to design a Tiny Home (under 600 sq ft), not to exceed 8 ft wide and 12 ft high. (Lesson plan supports fundamental understanding in the support of home construction)</p> <p>0972.AR.1843.4 Layout foundation forms 0972.AR.1843.8 Demonstrate understanding of floor systems 0972.AR.1843.9 Demonstrate understanding of wall systems 0972.AR.1843.10 Demonstrate understanding roof systems</p>		
Materials and Resources- What do you need to assemble and prepare before the lesson?		
Materials: <ul style="list-style-type: none"> • Pencil • Grid Paper • Rule • Computer—Resource wire voltage requirements 		Resources: <ul style="list-style-type: none"> • How to Sketch a Floor Plan https://www.youtube.com/watch?v=O5A58npxsps
Lesson Outline: What learning activities will your students do?		
Time	Sequence/Description of Learning Activity	
15 minutes	Get Started/Explain: Students will develop a blueprint or floorplan of a tiny home, using grid paper. The home will be under 600 sq ft, not to exceed 8 ft wide and 12 ft high. The house will include all standard amenities.	
30 minutes 45 minutes 30 minutes	Discover/Engage/Practice: <ul style="list-style-type: none"> • Students will design a floorplan to include the location of doors, windows, stairs, closets, as well as all necessary appliances such as a washer, dryer, stove, refrigerator, etc. • Identify the type of material the roof will be constructed...shingles, metal, ceramic tile? • Will the house have a porch or deck? • Calculate the square footage of the entire home. • Develop and include a scale of measurement on the plans (e.g., 1/8inch= 1inch) • Determine which building materials will be necessary for the construction of the home. • Decide how the home will be heated and/or cooled. • Plan the routing of the required plumbing system. • Properly label each part of the house. 	
15 minutes	Check for Understanding/Summarize/Close: <ul style="list-style-type: none"> • The student completed a house plan to scale, including all necessary requirements for a functional home, including appliances. The home meets the requirements of being under 600 sq ft, not to exceed 8ft wide and 12 ft high. • Students share their creations and discuss their blueprints, the various parts of the house, and different construction components, i.e., wiring, plumbing, etc. 	
Modifications, Support, and Extensions (for those students with IEP)		
Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?		