



WEEK 1 Day 2

Writing & Drawing: Construction Drawings 1

Children create construction drawings, sketching and labeling plans for structures they would like to build.

Big Idea	The process of design and construction includes imagining and being inspired, asking questions, researching, planning, creating, and improving our models. This process includes time to work alone and with others.
Guiding Question	What processes help people construct structures, ideas, and works of art?
Vocabulary	<p>design: to draw something before it is built</p> <p>plan: to think about and make a design for what to do (verb); a proposal or design for something (noun)</p> <p>research: to find out about a topic</p> <p>studio: a special place for creating</p>
Materials and Preparation	<ul style="list-style-type: none"> ● pencils ● large, unlined paper ● blue or black markers ● Architects Work Together slides ● non-fiction books with images of structures ● engineering design process visuals <p>Print out and hang or project the Architects Work Together slides. Make available the blueprints either in printed or digital format. Display the steps for the engineering design process.</p>
Intro to Centers	<p><i>We are starting to construct, or build, many things in our classroom: sculptures, block structures, stories, and even songs and dances. Adults who design things, like architects who design buildings, work in a studio. The studio is designed with different parts for people to do their work.</i></p> <p>Show images of design spaces.</p>

	<p><i>This week in the Writing & Drawing Center you can imagine your building ideas and create plans for them just as if you were architects working in a studio. Here is an example of a construction drawing.</i></p> <p>Show the construction drawings <i>Talk to partner about what you notice</i></p> <p>Think, Pair, Share</p> <p><i>What are you going to design?</i></p> <p>Harvest a couple of responses</p> <p><i>Here are the steps of the Engineering Design Process that an architect might use:</i></p> <p>Show children the steps:</p> <p>ASK: What am I trying to accomplish? How have others approached it? Research.</p> <p>IMAGINE: What are some solutions? Brainstorm ideas. Choose the best one.</p> <p>PLAN: Draw a diagram. Make lists of needed materials.</p> <p>CREATE: Follow the plan and create something. Test it out.</p> <p>IMPROVE: What works? What doesn't? What could work better? Modify the design to make it better. Test it out.</p> <p><i>As you sketch your plans you can try asking yourself what kind of building you want to create. You can do some research and get information, by looking at books and images. As you work on your plan, you can also label the different rooms or spaces like in one of the construction drawings I showed you.</i></p> <p><i>When architects work on their plans they work together and they often take more than one day, they go back to improve it, to make it better. Take your time as you create your plans, and remember you can bring them to Thinking & Feedback to get suggestions for how to improve them.</i></p>
<p>During Centers</p>	<p>As children sketch their plans, support them to follow the steps in the Engineering Design Process. Encourage them to work together and brainstorm ideas. Remind children that they can use more than one day to work on their plan and that revisiting it can help them to improve it.</p>
<p>Facilitation</p>	<ul style="list-style-type: none"> ● What kind of structure do you want to design? ● What rooms are you including in your construction drawing? ● What inspired you? ● How can the design process help you as you work on your plan? ● How does researching for ideas help you to imagine what to build? ● How will you use your plan?

