



Lesson Internalization and Execution for Math

This resource supports internalization and execution of lessons for in-person or at-home learning when a teacher is using a high-quality curriculum. All internalization considerations for facilitating at-home learning are bolded. The major ways that instructional preparation should be adjusted for at-home learning are:

- reduce the number of problems
- select tasks that have multiple solution pathways and encourage discussion

Step	Questions to Consider
<p>1. Do The Math: Solve the problem(s) for the lesson.</p>	<ul style="list-style-type: none">▪ What are the various solution methods/representations that could be produced?▪ What representations from previous grades support this math?
<p>2. Identify the Standard(s) and the Aspect(s) of Rigor: Identify the standard(s) connected to the lesson and assessment.</p> <p>Which aspect(s) of rigor is/are the standard(s) calling for?</p> <p>Circle:</p> <p>Conceptual Understanding</p> <p>Procedural Skill and Fluency</p> <p>Application</p>	<ul style="list-style-type: none">▪ Given the math in this lesson, which standard(s) is/are being addressed?▪ What standards from the previous grade are the building blocks for this standard? Are opportunities present to address those prior standards within the lesson directly? If not, what resources will I need?
<p>3. Name Key Takeaways: After completing the exit ticket and/or problem set, list the key takeaways for the lesson.</p>	<ul style="list-style-type: none">▪ What is the essential math I want students to walk away from the lesson knowing?▪ Which aspects of the lesson will be most important to complete together? Which aspects can be completed independently?



Step	Questions to Consider
4. Anticipate Misconceptions: <i>While thinking of the key takeaways for the lesson, note where students will struggle.</i>	<ul style="list-style-type: none">▪ Where do I anticipate my students will struggle? Why?<ul style="list-style-type: none">○ What support can be offered in-person (e.g., scaffolded practice problems, reteach in small groups, assign partner work)?○ What support can be offered at home (e.g., video reteach, targeted virtual lesson, phone call to specific students, scaffolded practice problems)?
5. Design Student Work	<ul style="list-style-type: none">▪ Based on my understanding of the key takeaways and connections to the standard, which activities must all students engage in to have access to the intended outcomes of the lesson?<ul style="list-style-type: none">○ How can I maximize on-screen group learning and independent work time?▪ What questions will I ask to check for understanding (both from what is written in the lesson and additional)?
Step 6 Design the Student Experience	<ul style="list-style-type: none">▪ What is the purpose of each activity?▪ What student interactions need to happen during each activity?<ul style="list-style-type: none">○ Independent○ Partners○ Group▪ What student to teacher interactions need to happen during this activity?<ul style="list-style-type: none">○ One-on-one○ Teacher to partners/groups▪ What resources or platform will help you maintain the integrity of this activity?<ul style="list-style-type: none">○ Nearpod, SeeSaw, Google Jamboard, Flipgrid, Kami, PearDeck, Google Docs, etc.▪ What features will you use to help maintain the integrity of this activity?<ul style="list-style-type: none">○ Chat box, breakout rooms, annotations, share screen, etc.▪ How can I execute this lesson using the least number of platforms possible while maintaining the integrity of the lesson?<ul style="list-style-type: none">○ Should I use Nearpod and add links?○ Will a Google Doc be best or too much?▪ What preparations do I need to make to use this platform?<ul style="list-style-type: none">○ Is there a resource I can pull from?○ Will I need a note catcher?▪ What instructional decisions will I make if “what -ifs” happen?<ul style="list-style-type: none">○ Technology issues, internet Issues, time, etc.



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