|  |  |  |
| --- | --- | --- |
| **LEARNING GOAL** | | |
| What do you want students to know and understand as a result of this lesson?  “I understand…”  What evidence will you and the students use to determine how they are progressing toward the learning goal?  “I can…” | | What ***mathematical practice(s)*** will be the focus of the lesson? Which practice(s) will support student learning?   * 1. Make sense of problems and persevere in solving them. * 2. Reason abstractly and quantitatively. * 3. Construct viable arguments and critique the reasoning of others. * 4. Model with mathematics. * 5. Use appropriate tools strategically. * 6. Attend to precision. * 7. Look for and make use of structure. * 8. Look for and express regularity in repeated reasoning. |
| **ENGAGE** | | |
| What ***connections*** exist between important ideas in this lesson and past/future lessons?   * What prior knowledge will students need? How can we activate/frontload this prior knowledge? * How can we create interest and connect to students’ personal experiences??   [Coherence Map](http://achievethecore.org/coherence-map/) <https://goo.gl/c4Lefp> [CA Math Framework](http://www.cde.ca.gov/ci/ma/cf/mathfwchapters.asp) https://goo.gl/2VcKgk | | |
| **EXPLORE** |  | |
| How can we create ***opportunities for students to explore ideas and concepts*** to make connections?   * How will the students work— independently, in pairs, or small groups? * What resources or tools will help students enter and reason through the task? * How will students record their work?   How can we ***ensure all students have access*** to the task?   * How will you introduce the task? * What words, phrases, or symbols may need to be explicitly discussed within the lesson? * What ***questions*** will you ask to—   + help a group get started or make progress on the task?   + assess students’ understanding of key mathematical ideas, strategies, or the representations?   + address misconceptions?   What might be some ***possible solutions or strategies*** for the task?  How might you ***extend*** the task so as to provide additional challenge? | | |

|  |
| --- |
| **EXPLAIN (SHARE & DISCUSS)** |
| How will you ***orchestrate the class discussion*** so that you accomplish your mathematical goals?   * Which solution do you want to have shared during the class discussion? In what order? * What specific questions will you ask so that students will—   + make sense of the mathematical ideas that you want them to learn?   + question the solutions being shared?   + make connections among the different strategies that are presented?   + look for patterns and begin to form generalizations? |
| **EVALUATE (REFLECT & ASSESS)** |
| What will you see or hear that tells you that all students understand the mathematical ideas that you intended for them to learn? What could you have students say, do or write to ***demonstrate their understanding***? |