# DI/UDL Math Lesson Plan Template

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| Lesson Plan Subject & Topic:  **Developed by:**            **Grade level:**  **Date:**                               **Unit:** | | | |
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| Common Core Math Standards    IEP Math Objectives  NCTM Process Standards | Materials | |
| **Technology**  *Bold all that apply*     * Teacher laptop * SMART Board * LCD projector * SMART Senteos * Computers * iPad or tablet * iPod or mp3 player(s) | * Webcam * Digital camera * Document camera * Digital microscope * Video camera * Scanner * Color printer * Calculators * FM system |

UDL Procedures: Bold all that apply

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| Multiple Means of Representing   * Think aloud strategy * Use multiple modalities for instruction (auditory, visual & kinesthetic) * Sequence instruction from concrete to representational to abstract (CRA) * Use tangible/concrete materials/manipulatives to illustrate & teach abstract concepts (base-ten blocks, fraction strips, Cuisenaire rods, geoboards) * Explicitly teach math vocabulary * Use math word walls with visuals * Pre-teach concepts and vocabulary before the lesson * Use visual representations (concept maps, pictures & other visual aids) * Use virtual manipulatives (digital objects that resemble physical objects) * Use color-coding/different fonts for operation symbols to encourage operation sense & reduce confusion * Record lessons for review; provide access to students * Highlight essential components in texts, worksheets, problems * Use story maps or graphic organizers for sequencing, retelling, or summarizing | Multiple Means of  Action & Expression   * Repeat directions * Simplify directions * Read aloud text/problems, repeat, review * Use practical/familiar items to improve focus * Use hands on activities * Provide multiple strategies for instruction * Provide guided notes * Provide frequent opportunities for review of rules, facts, formulas, strategies, etc. * Teach math strategies, mnemonics, stories, rhythm or music and use visual cues rules or facts * Encourage use of note taking; allow use of notes during assignments * Teach & use the two-column notes strategies to assist with a review of concepts/test-taking * Provide desk & pocket size tools (multiplication & measurement tables, number lines, addition tables, bar models, fraction/decimal conversions, etc.) * Use of calculator to check work. * Use technology, computer algebra systems, online tools, digital manipulatives * Use tablets & apps for note taking, procedural, conceptual review, frequent practice, etc. * Use computer assisted instruction for highly structured systematic tutorials, and independent practice with immediate feedback * Allow class presentations to be given as a group * Explicitly teach purpose & application of models/tools; teach use of knowns & unknowns for strategy selections | Multiple Means of Engagement   * Reduce math anxiety-don’t use timed math facts tests * Allow choice in problem solving strategy * Encourage positive self-talk. * Set purpose for learning * Create a safe learning environment * Reduce emphasis on peer competition & perfection * Make learning relevant/connect examples to student’s daily life * Make connections between math and the real world * Use flexible grouping (heterogeneous grouping to minimize the barriers of disability) * Provide environmental accommodations (quiet space with minimal distractions, headphones or earplugs, study carrels) * Create consistent classroom routines & procedures to help focus attention on math * Connect to prior learning & background knowledge * Use culturally relevant & developmentally appropriate examples * Provide immediate corrective feedback * Use small group instruction * Teach self-monitoring (self-questioning, self-evaluation and self-regulation strategies) * Monitor progress frequently to ensure appropriate application and encourage students to set data-based goals |

Direct Instruction Procedure

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| Introduction    Lesson | I doWe doYou do |
| Summative Assessment |  |
| Review |  |