**APPENDIX A: INSTRUCTIONAL GROUPING STRATEGIES**

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| **Type of Group** | **Suggested Strategies (All content areas, literacy focus)****Strategies taken from the** [**EngageNY Protocols and Resources document**](https://www.engageny.org/resource/grades-3-8-ela-curriculum-appendix-1-protocols-and-resources) | **Suggested Strategies (Math Only)****Strategies taken from:** **[Mathematics Instruction for Students with Learning](http://www.centeroninstruction.org/files/Mathematics%20Instruction%20LD%20Guide%20for%20Teachers.pdf)** **[Disabilities or Difficult Learning Mathematics](http://www.centeroninstruction.org/files/Mathematics%20Instruction%20LD%20Guide%20for%20Teachers.pdf),** [**Assisting Students Struggling with Mathematics**](https://ies.ed.gov/ncee/wwc/practiceguide/2) |
| **Small group for teaching (teacher-led)*** The teacher leads this small group to do re-teaching, reinforcement, or to teach skills that only the small group needs to learn.
 | * Interactive word wall (p.18)
* Praise, question, suggest (p.25) – particularly useful for writing
* Annotating text (p. 54)
* Mystery quotes (p.21)
 | * Providing models of proficient problem solving
* Verbalization through the problem-solving process
* Guided practice
* Corrective feedback
* Use of visual representations
* Use of a step-by-step approach for problem solving (example: Read the problem. Highlight the key words. Solve the problems. Check your work.)
 |
| **Small group for practice (student-centered)*** Students work in a group independently while the teacher is working with another small group.
* Useful for reinforcement or additional practice
 | * Infer the topic (p.17)
* Jigsaw (p.20)
* Rank-talk-write (p.27)
 | * Fluency practice
* Math facts practice
* Use of visual representations
* Peer-assisted instruction
* Ongoing cumulative review (warm ups/ daily math)
* Video tutorials ([Khan Academy to MAP Crosswalk](https://community.nwea.org/docs/DOC-2049))
 |
| **Small group for discussion (student-centered)*** These groups may be either teacher led or student led depending on the focus or activity
 | * Concentric circles (p. 10)
* Discussion appointments (p.11)
* Fishbowl (p.13)
* Socratic seminar (p.31) – appropriate for middle school (7-8)
 | * Students verbalize decisions and solutions to math problems
* Peer-assisted instruction
* [Math talk](http://minds-in-bloom.com/getting-started-with-effective-ma/)
 |
| **Pairs** | * Back-to-Back and Face-to-Face (p.5)
* Quiz-quiz-trade (p.26)
* Say something (p.28)
* Think-pair-share (p. 35)
* Written conversation (p. 37)
 | * Students verbalize decisions and solutions to math problems
* Use of visual representations
* Peer-assisted instruction
* Ongoing cumulative review (warm ups/ daily math)
* [Math talk](http://minds-in-bloom.com/getting-started-with-effective-ma/)
 |
| **Whole class*** Appropriate if the majority of the class continues to struggle with a particular topic.
* These whole class activities can be followed up with group work for practice
 | * Mystery quotes (p.21)
* Tea party (p. 34)
* Close reading (p. 57)
 | * Providing models of proficient problem solving
* Verbalization through the problem-solving process
* Guided practice
* Corrective feedback
* Use of visual representations
* Use of multiple instructional examples
 |
|  | For additional Math strategy suggestions, see: * Pages 16-20 of the[*Common Core Guide to Implementing a Story of Units*](https://www.engageny.org/sites/default/files/resource/attachments/how_to_implement_a_story_of_units.pdf)
* [**Nine Ways to Catch Kids Up**](http://www.ascd.org/publications/educational-leadership/nov07/vol65/num03/Nine-Ways-to-Catch-Kids-Up.aspx)
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**APPENDIX B: GENERAL INSTRUCTIONAL STRATEGIES**

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| **NONCONTENT SPECIFIC HIGH YIELD STRATEGIES\*** |
| **Lesson Objectives*** Use Bloom’s Taxonomy verbs in the objective that ensure greater rigor.
* Connect the objective of the lesson more tightly to what and how students will be assessed.
* Compose objectives that clearly identify students will know \_\_\_\_\_ by doing \_\_\_\_\_\_.

**Formative Assessment*** Use “Do Now” at the beginning of class as opportunities to review or to reteach.
* Use a tracking sheet to show students’ performance (and improvement) on “Do Now”.
* Keep records to note which students are struggling with “Do Now” and follow up with oral review.
* Revisit prior days’ objective using “Do Now”.
* Use “Exit Tickets” at the end of class to check understanding of lesson.
* Create a tracking sheet to show students’ performance on exit tickets.
* Follow up the “Exit Ticket” with a “Do Now”

**Questioning*** Develop method for whole class response that allows checking for understanding and enhanced student engagement/participation (i.e. clapping)
* Use “cold call” (call on students without raised hands)
* Compose questions to ask before each day’s lesson.
* Follow up student response with “Why do you think that is the answer?” or “Explain how you arrived at that answer?”
* Require students to support their answers with evidence from the actual text.
 | * Do not let students “opt out” when unable to answer a question. Come back to them and ask them to restate another student’s response in their own words.
* Task students to “use their own words” when defining a concept.
* Ask “what if questions”
* Ensure varied questioning techniques: probing, prompting, and redirecting.
* Consider lengthening your wait time before calling on a student.

**Differentiate Instruction*** Use leveled questions in assessments
* Prepare different Do Nows or worksheets
* Group students based on the skill they need to enhance
* Create stations
* Use assignments that have a menu of options (by content, process, and/or product)

**Peer Support*** Task certain students to re-teach to small groups
* Use: think, pair, share.
* Create mentoring relationships within and out of classrooms.

**Homework*** Incorporate a spiral review in homework assignments
* Use leveled homework assignments
* Require homework errors to be corrected
* Ensure students are given opportunities to do grade appropriate “challenge’ assignments.
* Review homework problem areas
* Design homework questions aligned with NYSED test format

\*Based on Paul Bambrick-Santoyo’s *Driven by Data*, pgs. 81-84.  |