Colleen Sheridan

February 11, 2013

**Symmetry Lesson Plan**

Subject: Math Activity: Lines of symmetry: Resource Room # of Students: 3

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| **Statement of Objective:**\*Observable/Measurable (A,B,C,D)\*GLCE/IEP | When given a direction, students will construct lines of symmetry on their paper with 85% accuracy**Common Core Standard-** [CCSS.Math.Content.4.G.A.3](http://www.corestandards.org/Math/Content/4/G/A/3) Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry**IEP Goals-*** Mary: Read 75 wcpm with 8 errors or less on a 2nd grade reading fluency passage. Verbally answer comprehension questions with 80% accuracy on a 1st grade BRI. Obtain a score of 52 correct on a 2nd grade nonsense word fluency probe
* Ian: Obtain a score of 32 on the 2nd grade math computation probe. Obtain 26 cws on a timed writing probe.
* Mason- temporary 30 day placement
 | **Accommodations** |
| **Materials:**\*Prepared and organized\*Available for all | * Symmetry paper
* Pencils
* Circles
* Rulers
* Learning target notebooks
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| **Opening:**\*Gain attention/motivate\*Activate prior knowledge ~link/relate; assess; prepare for new learning (e.g. vocabulary)\*State goals/set purpose ~explain task: why, what, how, and when  for strategies\*Clear directions | * Have the students look at their learning target notebooks and explain the two learning targets to them
* Talk about what we went over yesterday (90, 180, 270, 360 degree angles)
* Have them draw the angles
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| **Presentation:**Teacher:\*Variety of learning (T/S, S/S, S/T)\*Organizational framework ~construct, clarify, and link concepts in a meaningful context\*Present visually, verbally, kinesthetically, real world (e.g. LESH)\*Model and think aloud to make visible ~language practices/processes ~learning strategies and adaptations (how,  when and why) ~organization, relationships, and clues\*Transfer of control ~students explain, justify, clarify, etc.\*Clear directions\*Check for understanding ~appropriate feedback: praise, prompt probe/question (in ZPD) ~assess/error drill ~monitor and adjust instructionStudents:\*Participation ~overt and active ~instructional dialogue, think aloud, explain, justify, evaluate, etc. | * Tell students that we are going to learn what symmetry is today
* Give each student a mirror image sheet
* Demonstrate how to fold the paper and then draw dots for the lines
* Tell the students that they don’t need to write the letters very neatly
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| **Guided Practice:**\*Activity related to presentation/objectives\*Active student participation ~provide rationale for assignment ~multi-sensory and real world ~instructional dialogue \*Transfer of control ~students explain, justify, clarify, think aloud\*Check for understanding ~ensure high success rate ~appropriate feedback: praise, prompt, probe/question (in ZPD)**Individual Practice:**~assess/error drill ~monitor and adjust instruction\*Management/monitoring ~scan, circulate, assess, support, praise | * Have students draw the dots on the back of their paper. Give them two minutes to do this
* Have students connect the dots on the right side, then have them do it on the other side
* Ask students what they notice
* Tell them that the two images is a mirror image. A mirror image is the same size and shape but faces in opposite directions
* Tell the students that a shape is symmetric if it can be folded in half so the two sides match
* Line of symmetry- the fold line
 | Assist students if they are having trouble drawing the dots |
| **Closing:**\*Adequate time\*Students summarize content and  accomplishments\*Assess/identify new goals\*Link to future learning | * Have students work on their learning targets and rate themselves
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