

Teacher/School: Karen Burrus

Unit Title: Transformations

Grade Level: Geometry 6-8

Subject/Topics:

What MSP content from last summer's training is incorporated in this plan?

"I Respond" units (for review and test purposes)

Time Needed: 2-4

Learning Objectives: What will students learn?

Students will investigate transformations and will recognize patterns when using rotations, translations, reflections and dilations.

Students will become familiar with the following **vocabulary words:**

Coordinate plane (x and y axis)

Dilation (to enlarge or reduce a figure)

Reflection (flip)

Rotation (turn)

Transformation (movement of a figure)

Translation (slide)

Sunshine State Standards:

MA.C.2.3.1-4

Materials/Supplies:

pencils, chart paper & markers, copies of activities sheets, for guided practice & independent practice, pictures to be used to demonstrate all of the above.

Instructional Procedures: What will the teacher be doing? What will the students be doing?

The teacher will show students a picture of a cat or other animal which has been placed in quadrant # 1 of the coordinate plane. Students will describe what they see in the picture in one minute and one student will record the information on chart paper.

Next, the teacher will show the picture of animal #1 in quadrant #1 and then place another identical animal in quadrant #2. Students will describe what they see and the information will be recorded on chart paper or the board by another student. (Students should respond with the second animal is identical, and has been placed in quadrant # 2) The teacher will show animal #1 and animal #3 and ask students what they see. Students will respond with "the animal turned around or the mirror image of the animal." The procedure continues until the demonstration is complete.

The teacher will continue with "it is time to learn the correct math terms for each of the movements." Students will then review the vocabulary list of words. The teacher will use the "I Respond" units to have students answer questions in relationship to the vocabulary words and when given a choice of pictures, will be able to choose the correct answer representing each transformation.

I used the Kaplan web site: <http://www.kaptest.com/K12.home.html> to get ideas for my unit lesson plan. Included are copies of guided practice and independent practice. ESE and ESOL students will basically follow the same procedure; however, it may be necessary to expand the lesson or repeat some of the components to have a successful unit and meet the original goal. The gifted student could design some additional practice exercises which could be presented to other class members. The practice vocabulary and test questions are entered into the "I Respond" software on my laptop computer and include questions such as:

Assessment:

Sample question: (assessment question)

Directions: Choose the correct answer.

This picture is an example of

a.dilation b. translation c. reflection d. rotation

Students must answer the 10 test questions with 80% accuracy in order to meet the original goal.