Glenda Lollis-Hawkins Summer Math Institute 2011

"Using Math Card Games to Teach Two-Dimensional and Three-Dimensional Shapes"

1. Goal or Objective:

 3a, Analyze and describe the similarities and differences between and among two- and three- dimensional geometric shapes, figures, and models using mathematical language.
(DOK 2) 2007 Mississippi Mathematics Framework Revised(Grade 4)

2. Math Concepts:

- Attributes of 2D shapes
- Attributes of 3D shapes

3. Materials:

- index cards
- ziploc bags
- permanent markers
- manipulatives (plastic or wooden 3D shapes)/2D shapes
- HSP math Teacher's Edition

4. Management:

• Things to prepare ahead of time

- 1. Talk to the principal and set a date.
- 2. Have 2D and 3D shapes sorted in ziploc bags.
- 3. Tell the teachers to bring their HSP math Teacher's Edition.

• Participant groupings

- 1. The teachers will work in pairs to do this activity.
- Time Frame
 - 1. The approximate time for the entire activity is 45 minutes -1 hour.

5. Procedure:

• Introduction

- Using prior knowledge, ask the teachers questions about 2D and 3D shapes. (What is a 2D shape? What is a 3D shape? What shape has 6 faces, 12 edges, 8 vertices, and all the faces have equal lengths?)
- 2. Show the manipulatives of 2D and 3D shapes. Discuss.
- 3. Tell the teachers that today we will be making "Who Am I?" card games for 2D and 3D shapes.

• Content Activities

- 1. Give each teacher 10 index cards, a permanent marker, and a ziploc bag.
- 2. Place the 2D and 3D manipulatives on the table.
- 3. The teachers will use the HSP math Teacher's Edition to get information about the shapes or look at the manipulatives for the information needed.
- 4. Show teachers an index card already made.

(front of card)	(back of card)
I have no sides and I am the base of a cone. Who Am I?	circle
Who Am I?	circie

5. The teachers will make a set of 10 cards for their classroom. (They can make more!)

Closure

 Ask the teachers did they enjoy making the "Who Am I?" card game. Ask the teachers do they think their students would enjoy playing the game.

- 2. Tell the teachers to make card games to teach other math concepts. Let the teachers know that card games are great for reviewing math skills.
- Tell the teachers to be prepared to share card games they created using other math concepts at our next meeting. Let the teachers know I will share some "I Have, Who Has" games at our next meeting.