Rice University School Mathematics Project
Classroom Observation Protocol

Teacher _____ School _____

Observer _____ Date _____

Pre-observation Conference

Discuss with the teacher the materials that the teacher brought in preparation for the classroom observation

Ask the teacher to give a brief description of what will take place during the class period with an emphasis on both what the teacher will be doing and what students will be doing.

Ask the following questions if necessary or appropriate:

- What pre-requisite knowledge do you feel the students need before beginning the lesson?
- What lesson preceded the lesson you will teach?
- What manipulatives and/or technology will you and the students be using in this lesson?
- How will you determine that students understand the concept being taught?
- How will you differentiate instruction if needed?

Rice University School Mathematics Project
Classroom Observation Instrument

~ Instructional Process Protocol ~

Course/
Subject:_____
Grade:_____
Date: _____
Start time: _____
End time: _____
Observer: _____

I.

During the observation, you should take running notes, focusing primarily on the teachers' interactions with students and students' interactions with each other. Write the time and number of minutes the class was engaged in each class strategy (i.e. teacher-led, student group work, and individual student work). Include topics and activities. You should provide clear descriptions of observed activities and behaviors. Whenever possible, record the exact words used. Abbreviations may be used (T for teacher, G or G1, B or B1 etc. for the students.) **It is important to ask for a copy of any worksheets that are used.**

As soon as possible after you have completed the observation, you may re-write the rough notes into a more polished narrative for legibility. Additional comments should also be written as a narrative to include a detailed description of the classroom, materials used during the lesson (if not listed on this form) and instructional factors that impact the learning environment and the learning process. The observer should complete the following checklists to help describe the classroom and instruction**. On the last page, please draw a ½ page to one-page map of the classroom to show the seating, displays, etc.**

Seating arrangement:
___ Students have assigned seats.
___ Seating appears to be random.
___ Desks are arranged in rows and columns.
___ Desks are arranged in semi-circles.
___ Desks are arranged in clusters (more than two).
___ Tables are used, not desks.
___ Desks are arranged in pairs (side-by-side/facing each other).

Walls:
___ Student-generated work
___ Math-related
___ Unrelated to mathematics
___ Administrative information (rules of behavior, bell schedule, etc.)
___ Motivational posters

Students:
Total number of students _____

Complete the table with numbers.

Ethnicity	Male	Female
White		
Black		
Hispanic		
Asian		
Other		

Materials used:
___ Textbook
___ Worksheets
___ Manipulatives

List manipulatives:
_____
_____
_____
_____
_____

___ Other (Specify:_____)
___ Other (Specify:_____)
___ Other (Specify:_____)
___ Other (Specify:_____)

Technology used:
___ Calculators
___ Calculator Networks (e.g., Texas Instruments Navigator)
___ Computers (utilized more than for projection of info.)
___ CBR/CBL data usage/storage/retrieval
___ Smart Board (used for interactive demonstrations)
___ Classroom Performance Systems (student response systems including Palms, clickers, video clips, or animation clips).
___ Other (Specify:_____)

[**Please put "S" if used by student and "T" if used by teacher.]**

II. Lesson checklist – *This section should be completed during or soon after the observation.*

List the concept(s) taught:_____

Teacher-led portion (if applicable) – approximate number of minutes _____
This includes both direct instruction (e.g., lecture, teacher-student dialogue or teacher-led discussion) and teacher-led guided practice. During teacher-led instruction, students may be asked, occasionally, to do one or two problems on their own-- but teacher is still guiding as the students work through these problems, usually through prompts provided to the entire class. Time spent going over warm-up problems or homework is also considered teacher-led instruction.
Describe briefly:

_____

_____

_____

Check appropriate box.

Teacher-led portion	1 Never	2 Occasionally	3 Sometimes	4 Frequently	5 Always
The teacher demonstrates without having students participate.					
The teacher has students demonstrate.					
The teacher raises questions that encourage students to explore several solutions.					
The majority of students are engaged in the lesson.					
The whole class works with demonstration materials.					
The teacher raises questions that prompt students' thinking.					
The teacher's responses to students' questions are positive and/or encouraging.					
The teacher lectures without much student input.					
The teacher leads the lesson and engages in dialogue with students.					
The teacher leads the lesson and integrates students' affirmations and questions.					
The teacher incorporates manipulatives.					
The teacher incorporates technology.					

	1 Never	2 Occasionally	3 Sometimes	4 Frequently	5 Always
The teacher uses hands-on, interactive activities to develop the concept (not just textbook problems).					
Based on the teacher's questions or modeling, students create their own explorations or solutions.					
Students are interacting with each other.					
Students are working independently (without immediate, ongoing direction from teacher or other students).					
Students use a variety of materials (not just worksheets or textbook).					
Students are encouraged to explain how they reached a solution.					
Students are given adequate time to develop an explanation of how they reached a solution.					
Students are provided adequate time for deeper thinking to construct their own explorations or solutions to problems.					

Student group work (if applicable) – approximate number of minutes _____
During student group work, students in at least groups of two work independently with minimal teacher input. Teacher assistance is usually provided only on an "as needed" basis as the teacher continually monitors the class. The focus during this part of the lesson is on collaboration, problem-solving and discovery. **DO NOT** count the number of minutes here for group-work that is embedded in a teacher-led portion. *Describe briefly:*

_____

_____

_____

Check appropriate box.

Student group work	1 Never	2 Occasionally	3 Sometimes	4 Frequently	5 Always
Students are interacting with each other constructively.					
Students use a variety of materials (not just worksheets or textbook).					
Students ask each other questions.					
The majority of students are engaged in the mathematics activity.					
The teacher circulates around the room to keep everyone engaged and on track.					

Student individual work, not teacher led (if applicable) – approximate number of minutes _____
Independent practice work for students. This can include warm-ups, drills, class work and homework given to students to work on individually in class. *Describe briefly:*

_____

_____

_____

Check appropriate box.

Student individual work	1 Never	2 Occasionally	3 Sometimes	4 Frequently	5 Always
Students use a variety of materials (not just worksheets or textbook).					
The majority of students are engaged in their work.					
The teacher circulates around the room insuring that everyone engaged and on track.					

General comments	1 Never	2 Occasionally	3 Sometimes	4 Frequently	5 Always
Students appear to be comfortable with the teacher.					
The student/teacher relationship is respectful.					
The teacher explicitly reinforces building students' mathematics vocabulary.					
Teacher's interactions with students are equitable (Consider gender, ethnicity, skill level, learning styles, and language fluency).					
The teacher's wait-time or response time allows student input.					
The teacher promotes student-thinking.					
The teacher promotes student-responding.					
The teacher promotes student-writing.					
The teacher makes content errors.					
The teacher's classroom management style supports constructive learning for all the students.					
The teacher's discipline style supports constructive learning for all the students.					
The teacher maintains an appropriate pace during the lesson.					

Teacher uses a variety of assessment methods: (Check one) _____ Yes _____ No

Assessment methods include (Check all that apply): ___Open-ended questions; ___Observations; ___Constructed-response tasks; ___Selected-response items; ___Performance tasks; ___Journals; ___Conversations; ___Portfolios; ___Other (specify:_____)

III. Please provide <u>teacher's comments</u> (verbatim or paraphrased) about the RUSMP's impact on his/her classroom, school or collegial experiences:

_____

_____

_____

_____

_____

Additional comments: You may provide comments to further describe the instructional activities that you observed.

_____

_____

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_____

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_____

V. Please draw a basic map of the classroom to show the seating, displays, etc.

Date _____

Post- Observation Conference

Discuss the classroom observation with teacher. Ask the following questions:

A) What do you think went well during the lesson?

B) What was the most successful part of the lesson?

C) What was the most difficult part of the lesson?

D) Will you change anything the next time you teach the lesson? If so, what?

Be honest in providing any feedback that the teacher asks for—accentuating positives but addressing any errors in mathematics or pedagogy.