

THE 5 E'S MODEL FOR THE TEACHING OF MATHEMATICS IS BASED ON THE CONSTRUCTIVIST APPROACH TO LEARNING. LEARNING NEW CONCEPTS OR ATTEMPTING TO UNDERSTAND SOMETHING FAMILIAR IN GREATER DEPTH, IS NOT A LINEAR PROCESS. THEREFORE, SUGGESTED TIME SLOTS FOR EACH OF THE STAGES WITHIN THE MODEL MAY VARY ACCORDING TO THE ACTIVITY PLANNED FOR THE INSTRUCTIONAL DAY.

90 MINUTE MODEL <i>Suggested time allotments may vary</i>	5 E's	Questions for Planning	Planning/Observation/Notes
10 minutes	Engagement (Focus) <ul style="list-style-type: none"> <input type="checkbox"/> *Objective stated written/orally <input type="checkbox"/> Focuses students on key skills <input type="checkbox"/> Defining a problem <input type="checkbox"/> Literature experience <input type="checkbox"/> Problem of the Day (POD) 	What should students know and do as a result of the lesson? <i>Students will <u>review LCD</u> in order to <u>add fractions</u>.</i>	
20 minutes	Exploration (Teach) <ul style="list-style-type: none"> <input type="checkbox"/> Cooperative grouping <input type="checkbox"/> Review homework <input type="checkbox"/> Whole class <input type="checkbox"/> Use of manipulatives <input type="checkbox"/> Use of technology (calculators, software, internet, etc.) <input type="checkbox"/> Demonstration/modeling of concepts <input type="checkbox"/> Questioning strategies 	What will students do together (whole group and/or small group) to use the new concepts or skills? What is your motivating task? What prior knowledge will they need to use in the exploration of the task?	Students will a video from www.unitedstreaming.com that covers LCD and adding fractions. The video is added as an attachment.
25 minutes	Explanation (Teach) <ul style="list-style-type: none"> <input type="checkbox"/> Vocabulary development and review <input type="checkbox"/> Guided practice <input type="checkbox"/> Independent practice <input type="checkbox"/> Clarification of misconceptions 	How will you aid students in constructing meaning of new concepts? How will you introduce new skills or procedures? What vocabulary is important for understanding the concepts?	I will use the web site http://nlvm.usu.edu/en/nav/frames_asid_106_g_2_t_1.html Because it has the visual representation of the fractions.
30 minutes	Elaboration (Practice/Apply) <ul style="list-style-type: none"> <input type="checkbox"/> Flexible grouping <input type="checkbox"/> Independent activities (e.g., worksheet) <input type="checkbox"/> Centers <input type="checkbox"/> Word problems <input type="checkbox"/> Problem of the Week (POW) <input type="checkbox"/> Games 	What opportunities will students have to use the new skills and concepts in a meaningful way? How will students expand and solidify their understanding of the concept and apply it to a real-world situation? How will students demonstrate their mastery of the essential learning outcomes?	In pairs, students would work on textbook problems and then the class would use the web site http://www.webmath.com/addfract.html to check answers and the steps to solve each problem.
5 minutes	*Evaluation (Assess) <ul style="list-style-type: none"> <input type="checkbox"/> Journal <input type="checkbox"/> Student centered evaluation <input type="checkbox"/> Focus for next lesson <input type="checkbox"/> *Closure/review of daily activity 	How will you assist students in reflecting upon what they learned today? How will you ensure that all students have mastered the identified learning indicators? How will you assess their learning? What homework will be assigned to help students practice, prepare, or elaborate on a concept or skill taught?	There is a practice online test on the following site: http://www.glencoe.com/sec/math/studytools/cgi-bin/msgQuiz.php4?isbn=0-07-829631-5&chapter=6&headerFile=4&state=

*Indicates part of every lesson