

Online Learning Experience (OLE) Planning Grid - ITEC 7480 – Y. Bates

2nd Grade Math Standards:

MCC2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.

a. 100 can be thought of as a bundle of ten tens — called a —hundred.

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

MCC2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

MCC2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Student Objectives/Outcomes:	Bloom's Level:	Activities:	Assessments:
<p>1. Review place value to 1000 so as to develop a firmer foundation for work completed in the remainder of the course.</p>	<p>Remembering</p>	<ul style="list-style-type: none"> Watch the place value tutorial through slide 11 (we do not study place value in decimals in 2nd grade) http://www.sheppardsoftware.com/mathgames/placevalue/value.htm Watch and sing along to the place value video http://www.youtube.com/watch?v=vZLbnFE_Yf4&feature=related 	<ul style="list-style-type: none"> Complete the online activity at: http://www.sheppardsoftware.com/mathgames/placevalue/MatchingPV.htm. At the end, the student will type his/her name, submit the score, and send their score to the email address you provide. Expanded notation work page that will be used as a pre and post assessment for the unit (to be completed in class)
<p>2. Model three-digit numbers using base-ten blocks in multiple ways to show given numbers.</p>	<p>Applying</p>	<ul style="list-style-type: none"> Participate in the online activity for expanded notation using base ten blocks at: http://www.learningbox.com/Base10/BaseTen.html Practice more of this skill at: http://www.ixl.com/math/grade-2/place-value-models-up-to-thousands Watch the video: http://www.youtube.com/watch?v=ho7OPDMODXA&feature=related. Choose a number to show all the different ways it can be modeled (like the boy did in the video). Use Voice thread or create a video to show your finished product. Play the partner game Building Base Ten Numbers and complete the work page as you play (this activity will be explained and played in class and then taken home to play for extra practice) 	<ul style="list-style-type: none"> Voice Thread or Video submission will be assessed based on teacher rubric. Example of Voice Thread video here. Building Base Ten Numbers work page will be used as an assessment Formative Assessment Questions for teacher to ask when working with partners: <ol style="list-style-type: none"> How did you decide in which order to place your dice? What would happen if you changed the order of your dice? What would happen to the size of your numbers if you used more or fewer dice? Which representation of your numbers makes the most sense to you?
<p>3. Explain and demonstrate place value concepts within the context of a place value partner game.</p>	<p>Analyze</p>	<ul style="list-style-type: none"> Watch the video of the children playing the Place Value Game. Think about how you would explain this game to a friend at school. Be ready to come to school and be able to explain the game to your group during math time. Make sure you know what materials you will need to play the game, as well as how you will determine the winner (the video was not clear as to when the end of the game would be). Write down what you would say or make a recording/video to explain the game. Once the teacher has assigned groups, one person from each group will volunteer to be the leader and explain the rules so students can play. 	<ul style="list-style-type: none"> Written, recorded, or videoed directions for the game will be reviewed by the teacher and graded using a rubric to determine how affective and clear the explanation was. Teacher observation of the game will be used to see if players are playing correctly using knowledge from the directions and from the place value concepts.

<p>4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>	<p>Analyzing</p>	<ul style="list-style-type: none"> • Watch the video: http://www.youtube.com/watch?v=c05UMVWDndw&feature=related and write a reflection to the video you watched • Practice comparing numbers using the online activity at: http://www.ixl.com/math/grade-2/place-value-models-up-to-thousands and: http://www.toonuniversity.com/flash.asp?err=509&engine=9 (at home) • In the video you watched, the boy and girl were competing to create the largest number they could with the numbers they were given. Go to this site: http://education.ilab.org/placevalue/result.html to compete in a similar challenge. Write down the number you made and the highest number that could have been made. Complete at least 5 number challenges to submit. • Play the partner game Catch the Caterpillar (in class) 	<ul style="list-style-type: none"> • Video Reflection - Answer the following questions: <ol style="list-style-type: none"> 1) What was the theme of the video? 2) How did the characters in the video represent this theme? 3) What is something you would have done or explained differently? • Submission of 5 number challenges showing the number made and the highest number possible based on numerals given • Catch the Caterpillar partner game and work page will be used as an assessment • Formative Assessment questions for teacher to ask groups: <ol style="list-style-type: none"> 1) How close is your number to the target number? 2) Is your number smaller or larger than the target number? 3) How would you write your number in word form? 4) Can you represent this number in expanded form? 5) What is the difference between place and value?
<p>5. Write clues to a game using place value correctly.</p>	<p>Applying</p>	<ul style="list-style-type: none"> • Play the place value game and help Jimmy deliver his newspapers at: http://www.sheppardsoftware.com/mathgames/placevalue/scooterQuestJunior.htm • At school, students will play the "I have, Who has" place value game. • At home, students will use the blank cards grid to write your own "I have, Who has" game to play with a group of friends. Remember that your game needs to indicate a starting point and stopping point with answers in between that make sense. 	<ul style="list-style-type: none"> • Teacher will assess through observation by traveling to each group to see if students are keeping up with the game • The at-home/online component of writing their own "I have, Who has" game will be assessed to see that each card makes sense and has a match using appropriate place value clues.
<p>6. Evaluate the importance of the number zero when working with place value.</p>	<p>Evaluate</p>	<ul style="list-style-type: none"> • Watch the video: http://www.teachertube.com/viewVideo.php?video_id=58200 • Explain what is happening to the zeros in the expanded form. Why are those zeros there? What would happen if they were not there? • Complete the Activity: 100 or Bust. You will need 1 die and 2 charts to play with a friend or grown up. 	<ul style="list-style-type: none"> • Video Reflection • 100 or Bust recoding sheet
<p>7. Compare three-digit and four-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of</p>	<p>Applying</p>	<ul style="list-style-type: none"> • Use this site to work more with expanded notation. Start and stop the ticker at least 5 times and write the number where you stopped in its standard form and expanded notation. • In class, students will play the partner game Fill the Bucket. There are 2 versions (3-digit and 4-digit). Each student needs a recording sheet and a set of digit cards. 	<ul style="list-style-type: none"> • Submission of 5 number combinations in standard and expanded notation written correctly • Fill the Bucket recording sheet will be checked by teacher and used as an assessment • Formative Assessment questions for teacher to ask groups <ol style="list-style-type: none"> 1) What is the difference between place and value? 2) How does the order of the digits change the value?

comparisons.			<p>3) How did you know that you created the largest number? 4) How did you know that you created the smallest number? 5) What symbol would you use to compare these numbers? 6) How would you say this number in word form?</p>
<p>8. Evaluate the method chosen for counting, and showing a large number and solve the number riddle.</p>	Evaluate	<ul style="list-style-type: none"> • Watch the clip: Bianca on the Run (3:26) and answer these questions in a video reflection: 1) Do you think Bianca's form of counting was the best? Why or why not? 2) Can you think of a different way she could have counted the runners? • Solve the mystery place value riddles. You only HAVE to try to do #1, but can get extra credit for any extras completed correctly. Please show all your work. • Watch the video about the earth's population to get a better understanding of how to read larger numbers. Then try the activity that follows. Report back on what you learned in a reflection. 	<ul style="list-style-type: none"> • Video reflection questions for Bianca on the Run • Completion of Mystery Riddle #1 based on the student rubric (with extra credit recorded for other correct riddles completed) • Video reflection for second video on the earth's population