

	Assignments		Assessment
<b>Week 1</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome/Goal</b>			
Students will identify and verify they have read the course objectives and expectations.	Read class objectives. Post expectations of the class and reason for enrolling.		Include a short bio, reason for taking the class, and what type of learning you are. <b>10 points</b>
Students will identify themselves and state their purpose for the class	Post a short bio as an introduction and respond to two classmates bios.		
Students will identify what type of learner they are.	Review web site on learning styles and take a self quiz.		
<b>Week 2</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome/Goal</b>			
Students will identify what type of learner they are targeting in a given lesson plan.	Choose an existing lesson used or one linked to textbook and identify what type of learner it was developed for.		Post new lesson and what was changed.

**Standards**

Seat Time

MST # 3 - Number Sense will be addressed - Performance Indicators and grade levels will vary; examples given.

*Strategies/Instructi*

MST Standard # 2: Information Systems.... Students will access, generate, process, and transfer information using appropriate technologies.	<b>Expectations - 15 min</b>	<i>Learning Contract</i>
	<b>Bio - 30 min</b>	<i>Forum</i>

**Quiz and Response - 30 min**

*Self-Directed Learning*

MST Standard # 2 Students will access, generate, process, and transfer information using appropriate technologies.

**30 minutes**

*Small Group Work Discussion*

Students will list different activities that address different types of learners.	Choose three learning styles and match them with a particular activity; example - math chants for auditory learner.		3 activities and learning styles
			10 points
			2 Points - read and respond to 2 other students lessons.
<b>Week 3</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome/Goal</b>			
Students will identify what number sense is.	Review articles on number sense. Watch a teaching video and respond to it.		Respond to video and state one new thing you learned.
Students will use mathematical play to develop number sense.	Develop games that can be used to develop number sense.		Start project - game that can be used for number sense.
			Total Points 10
<b>Week 4</b>			

MST Standard # 3 - Mathematics - Content Strand: Number Sense  
 Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.  
 3.N.1 - Skip count by 25's, 50's to 100's.  
 3.N.3 - Compare and order numbers to 1,000.  
 3.N.5 - Use a variety of strategies to compose and decompose numbers.

**90 minutes**  
**30 minutes on each**

*Project*

**Response - 15 min**

MST Standards 2- Information Systems - Students will understand the meanings of operations and procedures, and how they relate to one another.  
 MST # 3 - Number Sense and Operation Strand

**Video - 1 hour**

*Lecture, Forum*

**30 minutes**

*Project*

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.  
 2.N.17 - Demonstrate fluency and apply addition and subtraction facts up to and including 18.  
 1.N.15 - Explore and use place value.

**20 minutes online response**

What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome</b>			
Students will use movement as a learning tool.	Review different energizes and plan one as a introduction to existing lesson. Example - Find Your Matching Number.		Post Energizer
Students will develop a lesson that has activities that address one of the MI.	Review Howard Gardner's research and develop activities that address 2 or more learning styles.		
Students will create learner tool bags.	Develop a learning bag students can use as a resource. Example: number line, cards etc...		List contents of Learning Tool Bag
<b>Week 5</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome</b>			
Students will create "math labs" that allow their students alternate pathways to learn.	Plan five different activities that have one main objective. Example; greater and less than.		5 Activities - with learning styles.
			10 Points

MST Standard # 3  
Connections Strand: Students will recognize and use connections among mathematical ideas.  
1.CN.5 - Understand meanings of operations and how they relate to one another.  
2.CN.9 - Recognize and apply mathematics to objects, pictures and symbols.

**1 hour** *Small Group - Guided*

MST Standard # 2 Information Systems - Students will understand the meanings of operations and procedures, and how they relate to one another.  
**30 minutes** *Project*

MST # 3 - Number Sense and Operation Strand  
Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.  
**30 minutes** *Project*  
**20 minutes - online responses**

MST # 3 - Number Sense and Operation Strand  
**2 hours** *Self-Directed Learning Project*

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.  
1.N.22 - Use the words higher, lower, greater, and less to compare two numbers.  
**20 minutes - reacting to other labs**

<b>Week 6</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome</b>			
Students will use a CSA approach to teach students concepts.	Research what CSA is and review different ideas from teachers. Study done by Jordan Miller.		
Students will develop two activities that use concrete or semi-concrete approach.			Complete game project
<b>Week 7</b>			
What tools and strategies can I use to differentiate instruction of number sense?			
<b>Outcome</b>			
Students will align their activities with NYS Standards and their current curriculum.	Match activities with NYS Standards.		
Students will assess their students.	Use a pretest and post test after activity.		post results
<b>COURSE EVALUATION</b>			

MST Standard # 2 Students will access, generate, process, and transfer information using appropriate technologies.  
MST # 3 - Number Sense and Operation Strand

*Self-Directed Learning Project*

**2 hours**

*Project*

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.  
1.N.15 - Explore place value  
1.N.16 - Compare and order numbers to 100.  
4.N.5 - Recognize equivalent representations for numbers up to four digits.

**20 minutes - review one other game from class and respond**

**1 hour**

*Project, Forum*

MST Standard # 2 Students will access, generate, process, and transfer information using appropriate technologies.

**1 hour**

*Case Study, Discussion*

15 minutes


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