SMILE Lesson Plan – Rotation B

Lesson Plan (#) 1 of 1
Grade Level: 2 **Duration:** 45 minutes

Phase 1: General Planning

Central Focus: *No lesson is taught in isolation. Individual lessons are connected to previous and/or subsequent lessons. The central focus is the "bigger" idea or concept that connects multiple lessons. Consider: What do you want your students to learn? What are the important or core understandings that you want students to develop on this topic?*
Number lines to 100

Content Standards (Common Core/ NGSS): *List relevant state-adopted content area standards. Include the number and text of each standard that is being addressed. If only a portion of a standard is being addressed, then strike though the portions that are not relevant.*
2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole number sums and differences within 100 on a number line diagram.

Lesson Objective(s)/ (Single Lesson) *Objectives are what students will be able to do as a result of this one (1) lesson. These objectives will directly support and align to the Learning Segment. They should also align with standards, instructional activities, and assessments. Write objectives using clear, measureable terminology.*	**Formative Assessment:** *How will students demonstrate their learning? What activities or products will you use to check for students' understanding as you progress through this lesson? What student product will you collect at the end of the lesson?*

• Students will be able to represent numbers as lengths from zero on a number line with equally spaced points
• Students will identify and place the mid point and end points on number line
• Students will explain their work in a complete sentence utilizing academic vocabulary.
	• Number line individually done on the back of Number line worsheet
	  • Students will identify and place the mid point on number line
	  • Students will locate and label the numbers 23, 57, and 83 on the number line
	  • Students will circle the end points and midpoint
	  • Students will explain their work in a complete sentence utilizing academic vocabulary.

Instructional Resources and Materials including Technology: *List **key** resources and materials necessary to complete this lesson. Consider both student and teacher materials. In a simple sentence or phrase explain how each of these materials support the lesson objective, student FOK, and/or student developmental, linguistic or cognitive needs,*

- **Clothesline Numbers and Yarn to Hang Numbers On -** Students will work as a whole group to accurately place the numbers/number representations on a number line.
- **Promethean Board to Project Flip Grid with Essential Information-**
    - Used to project the numbers that the students will place on their number line
    - Used to scaffold students with academic vocabulary- Math Word Bank
    - Display Math Focus
- **Number Line Worksheet-** Pre-drawn number line worksheet for the students to log their number points

Prior Academic Learning and Experiences:
Describe the knowledge, skills, personal/cultural assets your students already have related to the lesson's learning objectives, language expectations, and activities of this lesson. What do they know? What can they do? What are they still learning to do? Make clear connections to their skills and knowledge. If possible **Use or Reference actual Assessment Data.**
Focus on what students

a. can do independently.
b. can do with assistance from a peer or teacher.
c. cannot do at all but will learn as a result of this lesson.

(a) *Independently*- Students can identify the end points and midpoint of a number line and estimate numbers on a number line between 0 and 20. Students can utilize academic vocabulary pertaining to the number line, such as, before, after, endpoints, and midline

(b) *With Assistance*- Students can draw and label their number line, endpoints, and midline. Students can estimate two digit numbers placement on their number line. Students can utilize academic vocabulary while talking about a number line diagram: end points, mid point, before, after, greater than, less than

(c) *Cannot do, but will do*- Students will be able to accurately estimate placement of whole numbers on a number line in sequential order

Supporting Diverse Learners (differentiation and scaffolds) *What will you do to support students with different abilities to succeed during this lesson? (E.g. linguistic, academic, learning, behavior, students functioning above grade level.) How will you incorporate or apply principles of Universal Design for Learning (UDL) such as multiple means of representation, expression and engagement.*

List subgroups and/or individual students. *Refer to Context for Learning*	**List supports:** (*scaffolds, modifications and/or accommodations)*
ELL	• Sentence frames to use durning speaking and writing. • Academic vocabulary word bank • Differentiated worksheet with boxes to guide number placement • Back table support

Phase 2: Planning for Instructional Delivery

Anticipatory Set: *(Activating Student Background Knowledge, Establishing Rapport and Motivation, Setting Learning and Behavior Expectations)*	
(B) Behavior Expectations/Conduct: including Transitions *What are your expectations for students' behavior? What teaching behaviors/strategies will you implement during the anticipatory set and main instructional activity that encourages and supports appropriate student behavior and minimize behavior issues?*	• Students will be filled engaged and participating int he lesson. • Students will work in partners respectfully and participating in equal amounts of work. • Teacher will utilize a "3 count" to move students to/from rug and into partner talk. • Teacher will ring a bell to bring students back together • Teacher will call on off task or disengaged students for answers to bring them back into the lesson. • Teacher will offer table points to exemplary table groups
(C) Connection to Students: *Given what you know your students can actually do, design an **INTRO activity** that* • *Allows students to use their prior knowledge in a way that relates to the lesson.* • *Incorporates or builds on RELEVANT student personal, cultural experiences and/or interests to both excite and situate students in understanding the learning objectives.*	Student will engage in an activity where the teacher pretends to have mixed up a bunch of numbers for a number line project that she is working on. Since the students have been working on placing whole numbers on a number line, the teacher will ask the students to help her put them back in the correct order on the yarn number line hanging in the front of the room. Students will have to work together to represent a sequentially accurate number line.

Main Portion (body) of the Lesson: *How will you present/teach the content and skills to your students? When and how will students practice the skills/concepts with support (teacher guided or in collaboration with peers)? How will you provide students opportunities to master what you taught them?(Independent practice) Describe in sequential order what students are doing during the lesson (not what the teacher is doing). (Remember all tasks/activities need to relate to the learning objectives). List approximate time for each task/step.* •		
Time in min.	*How will you present/teach the content and skills to your students? Describe what will be happening at various points in the lesson. Base these descriptions on what students are doing **not** what the teacher is doing*	**Checks for Understanding.** *What questions or learning tasks will you present that allows you to check for student understanding?* • *Will students be engaged (partner talk, small group activity, quick write, etc)?* • *Do your questions or tasks represent a range LOT and HOT?*
Lauch:		
5	1. Students will be directed to help Miss Cohen sort her number tents into sequential order 2. Each student will be given a number tent with a numeral, picture, or visual representation of a number 3. "Turn and Talk" to the person next to you and decide what number is represented on their tents 4. Class with come back together	• Students will turn and talk to their partners to establish what number is represented on their tent.

10-15	5. Starting with Table 3, students will come and place their number tent on the yarn tied to the promethean board acting as a tangible number line. 6. After placing their tents on the number line, each student will pick a "smart spot" on the rug. 7. After all of the tents are placed, everyone will come together for a whole group discussion: 1. Turn and talk: How did you know where to place your tent? 2. What is the mid point of our number line? 3. What would our next number be? 4. If we started here and counted by 10s 3 times what number would we get? 8. Students will be given directions to the number line worksheet to complete and released back to their seats on a "3 Count."	• Students can work in their table groups to accurately estimate where their tent may go. • Turn and Talk about tent placement • Share out of a few student answers • Sentence frames to use during whole group discussion
Explore:		
10-15	9. Students will work in pairs to place given sets of numbers on the provided number lines, label the mid point, and identify end points 10.Students explain their reasoning to each other using academic vocabulary	• Students can work together in pairs
Summarize:		
5	11. Class will be refocused for peer share out of partnership work and whole group discussion	Presenting partnership will be asked to share how they decided to place the numbers where they did on their number line using Math Vocabulary. Whole group will then discuss 1. "Did our group correctly identify the mid and end points?" 2. "Did our group accurately estimate their number placement?"

Closure: *How will you bring closure to this activity/lesson? How will you firm student understanding at the end? How will you transition students to the next activity?*

After the whole group discussion summary, students will be asked to complete the back of their worksheet individually where they will have to draw a number line themselves, label the end points 0 and 100, place the mid point, and place three additional whole numbers. Worksheet will then be collected and used as formative assessment.

Follow-up Planning / Analyzing Student Learning: *Based on the formative assessment(s) and checking for understanding during the lesson, what sort of knowledge or learning did the students demonstrate relative to your lesson objective? Where are there confusions or misunderstandings? What will you do in your next lesson to continue, extend or reteach the learning objective? Additionally, how will you provide feedback to students individually or collectively on their accomplishments?*

Students can accurately identify and place the end points and midpoint of a number line from 0-100. Students were able to express that the midpoint of a number line from 0-100 is 50. Students can identify where the numbers go on a number based off of whether it comes before or after the midpoint/end points, whether it is greater than or less that the previous number, and they can use their academic vocabulary to explain their thinking. Some misconceptions came at the beginning of the lesson ands where to place their number on the “clothesline.” Multiple students got their numbers out of order, a couple even placing their numbers after the midpoint even though their number was less than 50. With that being said, however, all of the students were able to correctly identify their number or number representation on their “number tent.” Once all of the students had placed their tent on the clothesline, they were able to work as a group to straighten out the number line so that they were all in sequential order. When students returned to their seats to do the worksheet, they worked together in a timely matter to get the problems done and unanimously placed the numbers in the correct spots and were able to identify the mid and end points. They also used their academic vocabulary while talking about where they were going to place their number and whether or not they went before or after the mid/end points. The formative assessment showed that the students were able to correctly place their given numbers on their number lines and label the mid and end points. We had been working on this skill of number line components for about a week. This lesson shows that the students have mastered these objectives and are read to move on. The follow up lesson will be how to efficiently use their number lines as a tool for addition problems. I plan to write comments on their formative assessments with compliments/constructive feedback and hand them back to the students within the next few days.

DIRECTIONS:

1. Draw a number line
2. Label the end points 0 and 100
3. Place the mid point
4. Place the numbers 13, 77, 64 on number line
5. Write a complete sentence telling which numbers come **before and after** the midpoint.

I put the numbers _____ before the midpoint because,

_____

and I put the numbers _____ after the midpoint because,

_____.

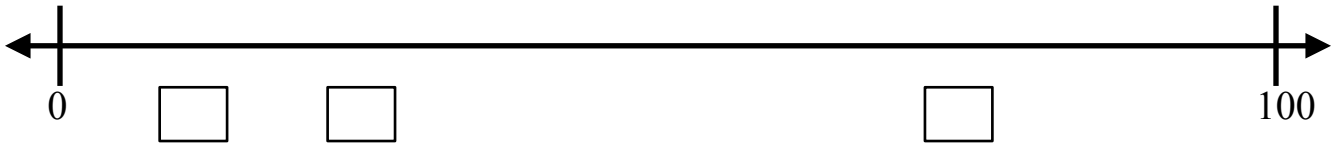
Name:_____

Directions: Work with a partner to...

1. Place **mid point** on number line
2. Place numbers in correct box on the **number line**. Discuss with your partner to determine if they come **before** or **after** the mid point and why?
3. Circle the end **points** and **mid point**.

Remember to use Math Vocabulary with your partner.

15, 75, 25



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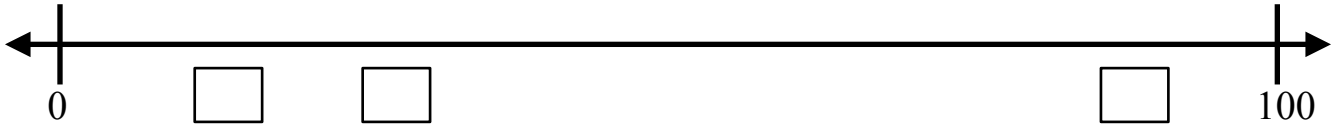

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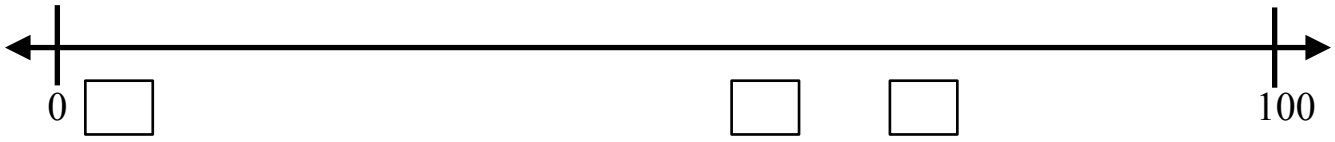

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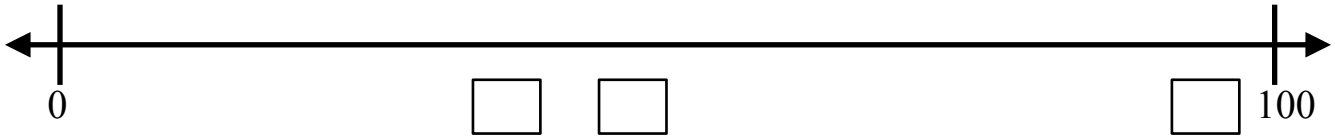


DIRECTIONS:

6. Draw a number line
7. Label the end points 0 and 100
8. Place the mid point
9. Place the numbers 13, 77, 64 on number line
10. Write a complete sentence telling which numbers come **before and after** the midpoint.

_____

_____

_____

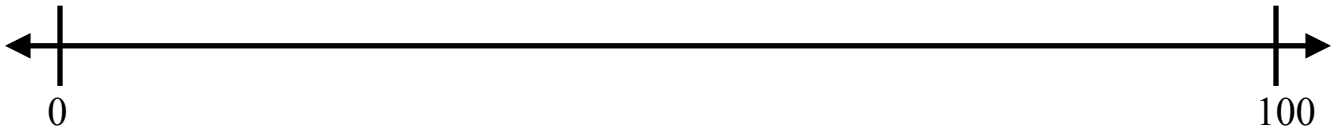
Name:_____

Directions: Work with a partner to...

1. Place **mid point** on number line
2. Place numbers on the **number line**. Discuss with your partner to determine if they come **before** or **after** the mid point and why?
3. Circle the **end points** and **mid point**.

Remember to use **Math Vocabulary** with your partner.

15, 75, 25



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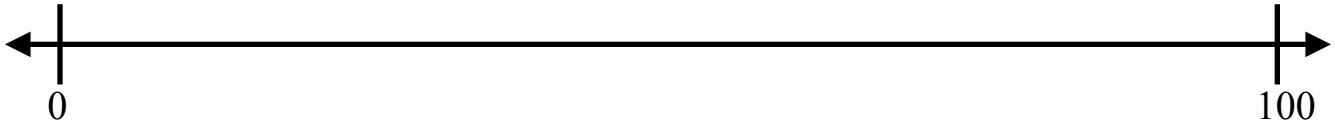

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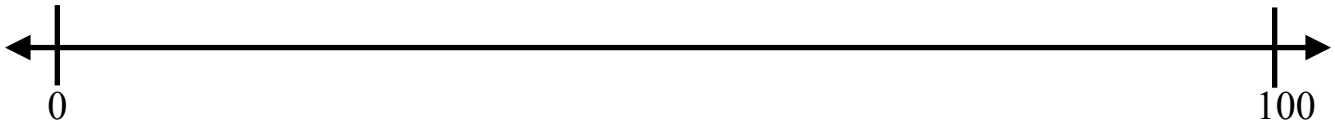

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