

TASK 1: PLANNING COMMENTARY

Respond to the prompts below (**no more than 9 single-spaced pages, including prompts**) by typing your responses within the brackets. Do not delete or alter the prompts. Pages exceeding the maximum will not be scored.

1. Central Focus

- a. Describe the central focus and purpose of the content you will teach in the learning segment.

[In lesson #1 students will be able to learn and understand the correct way to measure the length of an object first with multiple objects, such as blocks, and paperclip. They will learn and understand where to start and where to stop in order to measure an object without having any gaps. In lesson #2 the students will be introduced to measuring tools to apply their knowledge of measuring. The students will show an object can be measured in different units such as inches, feet, and yards. They will also present an understanding of the best measurement unit to use to measure an object based on its length. In lesson #3 The students will demonstrate and apply their knowledge about measuring by measuring their school's basketball court and drawing a representation of it with its real measurements. Throughout the lessons, the students would be introduced to vocabulary such as length, measure, units, align, feet, inches, and yard]

- b. Given the central focus, describe how the standards and learning objectives within your learning segment address

- conceptual understanding,
- procedural fluency, **AND**
- mathematical reasoning or problem-solving skills.

[The standard “2.3.2.2 Understand length as a measurable attribute; use tools to measure length” addresses the use of tools to measure length. Throughout my lessons, the students would learn strategies that emphasize the correct way of measuring an object. It is important for students to understand the correct way of measuring before they are introduced to measuring tools, therefore lesson #1 is focused on teaching students to understand the correct way to measure the length of an object with multiple objects. Through the lessons the students would demonstrate their procedural fluency by transferring their knowledge of measuring to different contexts, therefore the students will have different assessments in a set of sections to demonstrate their understanding of their mathematical proficiency. The standard requires the use of tools; therefore, the students would be introduced to a variety of tools to focus their skills on measuring objects, with the skills learned the students would be able to strengthen their conceptual understanding by recognizing, understanding, and demonstrating the correct way to measure objects. I have set a diverse of assessments as sections for the students to use their mathematical reasoning and skills of measuring to demonstrate their knowledge throughout different problem settings.]

- c. Explain how your plans build on each other to help students make connections between

- concepts,
- computations/procedures, **AND**
- mathematical reasoning or problem-solving strategies

to build understanding of mathematics.

[The standard for my lesson emphasizes the use of tools to measure length. For students to gain skills in using measuring tools, first they need to understand the correct way to measure an object, therefore lesson #1 focuses on teaching students the correct way to measure the length of an object with multiple objects. Then lesson two is focused on introducing students to measuring tools but with students having already the understanding and knowledge of the correct way to measure, the students would be able to apply what they learned from lesson one in lesson two but using measurement tools. When the students reach lesson number 3, they will already have a background of knowledge about the correct way of measuring, how to use measuring tools, and the units used in measuring tools. Then in lesson number 3, the students will demonstrate strategies to measure large objects demonstrating mathematical reasoning when they are measuring their school gym.]

2. Knowledge of Students to Inform Teaching

For each of the prompts below (2a–c), describe what you know about **your** students **with respect to the central focus** of the learning segment.

Consider the variety of learners in your class who may require different strategies/support (e.g., students with IEPs or 504 plans, English language learners, struggling readers, underperforming students or those with gaps in academic knowledge, and/or gifted students).

- a. Prior academic learning and prerequisite skills related to the central focus—**Cite evidence of what students know, what they can do, and what they are still learning to do.**

[I am constantly reminding students of procedures, respect, and how to work in groups or in sections. At the beginning of each lesson, I establish discussions as pre-assessments that give me valuable information about the students' pre-knowledge. Also, throughout the lessons, I would ask the students open-ended questions to help them link their thoughts with the new knowledge they are getting. Teachers need to be prepared for the diverse needs of their students, one of my students has learning disabilities and needs visual aids when learning math. I will be prepared for this student with different tools that can help him such as numbers lines. I will also introduce students to new vocabulary, I will have the vocabulary in different formats such as written and picture formats. This will help students to have a visual aid if they do not understand the written format of the vocabulary. Most of my students are interested in activities that they practice at home such as fishing. Most of my students bring conversations into the classroom about fishing adventures that they have with their families since my lesson focuses on measuring length, one of the assignments is about students measuring the length of a fish. By incorporating activities, the students practice at home with their families into the classroom, they are linking their new knowledge to their prior knowledge helping them retain better information.]

- b. Personal, cultural, and community assets related to the central focus—**What do you know about your students' everyday experiences, cultural and language backgrounds and practices, and interests?**

[There is a diversity of students in the classroom with different preferences, some of them like superheroes, cars, dolls, etc. They also show interest in family activities such as fishing. Most of the students also show interest in sports, since most of the boys play on the basketball team and most of the girls go with their families to the games to cheer. Most students try to make connections to their own life when learning a subject in Math or any other. Having in mind my students' interests and hobbies, I am trying to incorporate them into my lesson plans to trigger their engagement but also to create a connection between their pre-knowledge with the new

knowledge they are going to be learning, therefore, I have some assignments based on their interest such as measuring the fish.]

- c. Mathematical dispositions related to the central focus—**What do you know about the extent to which your students**
 - **perceive mathematics as “sensible, useful, and worthwhile”¹**
 - **persist in applying mathematics to solve problems**
 - **believe in their own ability to learn mathematics**

[When learning mathematics, my students like to communicate ideas and show persistence in finishing their assignments. Some students feel confident in math, but others do not, I am teaching them to feel confident even if the answer is wrong. This encouragement helps students with their persistence when working on mathematical problems. I am trying to make students understand that there are different situations in their life where they would need to measure and apply their knowledge and skills about measuring. Open-ended questions are essential for students to promote their thinking since they require a full answer. Throughout my lessons, I am incorporating different opened ended questions to make the students think and respond with logical answers. I am also planning on making students explain their answers, when students explain their answers, they solidify their thinking, their understanding and their confidence.]

3. Supporting Students’ Mathematics Learning

Respond to prompts below (3a–c). To support your justifications, refer to the instructional materials and lesson plans you have included as part of Planning

Task 1. **In addition, use principles from research and/or theory to support your justifications.**

- a. Justify how your understanding of your students’ prior academic learning; personal, cultural, and community assets; and mathematical dispositions (from prompts 2a–c above) guided your choice or adaptation of learning tasks and materials. Be explicit about the connections between the learning tasks and students’ prior academic learning, their assets, their mathematical dispositions, and research/theory.

[I consider the students’ interests and hobbies to incorporate them into my materials and assessment that would be part of my lessons. Since my students are interested in toys and nature, my opening engagement activity at the beginning of each lesson include short hands-on activities where students can share their logical thinking. For example, in lesson #1 I would let a car go down a ramp and ask the students how we can measure how far the war went if we do not have a measuring tool. Or in lesson #2, I will bring frog toys into the classroom, the students will make the frog jump and then measure the jump of a frog with a measuring tool. Lev Vygotsky argued that inner speech develops from external speech through a gradual process of internalization, meaning that thoughts themselves develop as a result of conversations. Knowing this argument, I will encourage a learning process in which my students would engage in discussions and meaningful conversations. With this in mind, I would also create an environment in the classroom where students need to respect others’ thoughts to foster a safe environment in which students can feel safe when asking questions and sharing their thoughts. Vygotsky also believed in the Zone of Proximal Development which helps to identify a student’s current level of understanding and performance; what a student can do on his/her own, and what a student can do with assistance. Teachers can identify the level of students and provide them with the support that is necessary. With this information, in the future, I can give students support as they need it such as providing guidance, modeling, and support to help them achieve

¹ From the Common Core State Standards for Mathematics

tasks they cannot do alone or to give them more challenging activities if they are more advanced in their skills. This information is great for teachers to know that they need to give students support for learning a skill, as Vygotsky emphasizes in his theory with the support of a more “Knowledgeable Other”, the students can reach their full potential of abilities and skills. This information is valuable to know that teachers can pair students with others who are more knowledgeable to help them.]

- b. Describe and justify why your instructional strategies and planned supports are appropriate for **the whole class, individuals, and/or groups of students with specific learning needs**.

Consider the variety of learners in your class who may require different strategies/support (e.g., students with IEPs or 504 plans, English language learners, struggling readers, underperforming students or those with gaps in academic knowledge, and/or gifted students).

[Students’ mathematical ideas would be considered in the classroom since each student is expected to respect the answers and points of view of their peers during discussions or when they answer in the whole class. The mathematical beliefs of students would be welcome in the classroom, I would try to use strategies to help students make connection in mathematical concepts to their lives. For example, students build their knowledge when they understand vocabulary. I will present the students with new mathematical vocabulary in different formats, visual and written, to cover the needs of my students but I will also encourage the students to make a connection to their experience and the vocabulary they were learning. By helping the students create a connection between their experience to the new vocabulary learned, they would be linking their new knowledge to their prior knowledge helping them retain better the vocabulary learned.]

- c. Describe common mathematical preconceptions, errors, or misunderstandings within your central focus and how you will address them.

[My students might have in mind that units are only inches, or feet, in the first lesson, I will make sure that they understand that a unit can be any object that is used to measure the length of an object. Since they will be using different objects to measure the length of an object in the first lesson, I will emphasize that the multiple objects that are used to measure the length of an object are units. I would also put the unit vocabulary into flashcards where the students can visualize the meaning of the vocabulary in different forms, written and picture forms. The students might also have a misunderstanding on following the instructions from each section from the summative assessment on lesson number 1, I will try to have the direction written in each section, and I would also explain them to the students before they go to their section. The repetition of directions would help students avoid misunderstandings.]

4. Supporting Mathematics Development Through Language

As you respond to prompts 4a–d, consider the range of students’ language assets and needs—what do students already know, what are they struggling with, and/or what is new to them?

- a. **Language Function.** Using information about your students’ language assets and needs, identify **one** language function essential for students to develop conceptual understanding, procedural fluency, mathematical reasoning, or problem-solving skills within your central focus. Listed below are some sample language functions. You may choose one of these or another language function more appropriate for your learning segment:

Categorize	Compare/contrast	Describe	Interpret	Justify
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Please see additional examples and non-examples of language functions in the glossary.

[In lesson #1 students will identify the lengths of objects in terms of multiple copies of another object. At the end of the lesson, students will show the correct way to measure the length of an object by using different objects. In lesson #2, students will be able to recognize, and show which unit (inch, feet, or yards) would be the best to use based on the length of an object. The students will be able to use their measuring skills to present the best measurement unit to use based on the size of an object. In lesson #3, students will demonstrate and apply their knowledge about measuring by measuring their school's basketball court.]

- b. Identify a key learning task from your plans that provides students with opportunities to practice using the language function identified above. Identify the lesson in which the learning task occurs. (Give lesson day/number.)

[In lesson #3 the students will be provided with a picture of their basketball court, or they can draw their own picture. They would be split into two groups, and they would need to work as a team to demonstrate their knowledge of measuring. They will be going to the school's basketball court to get the right measurements of it using a measuring tape. The students will work in teams providing cognitive learning skills from the area of creating from the Bloom's Taxonomy by applying, transferring, and creating a module of their Basketball court with its real measurements. Throughout the lesson I would be modeling and demonstrating to the students the correct way to measure the length of an object, at this point in lesson #3 the students would have gained measuring skills that they would need and use to apply on the assessment. The idea of working on teams is that if some students need help some other student can aid him or her.]

- c. **Additional Language Demands.** Given the language function and learning task identified above, describe the following associated language demands (written or oral) students need to understand and/or use:

- Vocabulary and/or symbols
- **Plus** at least one of the following:
 - Syntax
 - Discourse

[Through the lessons the students would be comparing objects size such as long, longer, and longest. They will also be comparing the difference in the size of units such as inches, feet, and yards. Students will also build their knowledge through vocabulary. I will present to students with visual aids of the math vocabulary that I will introduce to them. I will introduce vocabulary in a PowerPoint with the meaning of the vocabulary in written and picture versions. I will also tape vocabulary in the classroom for students to refer to them if they need it. When I introduce vocabulary to the students, I will try to help them make a connection to their experience and the vocabulary they were learning. By creating a connection between students' experience to the new vocabulary learned, they are linking their new knowledge to their prior knowledge helping them retain better the vocabulary learned]

- d. **Language Supports.** Refer to your lesson plans and instructional materials as needed in your response to the prompt.

- Identify and describe the planned instructional supports (during and/or prior to the learning task) to help students understand, develop, and use the identified language demands (vocabulary and/or symbols, function, discourse, syntax).

[Throughout the lessons the students must justify their learning by using the vocabulary repeatedly during the three lessons. I will establish conversations and open-ended questions where the students would be encouraged to listen and keep practicing the mathematical vocabulary. Throughout the lessons, the students will master different measurement skills and understanding. They will identify the lengths of objects in terms of multiple copies of another object; when students master these skills, they will show the correct way to measure the length of an object by using different objects. The students will also be able to recognize, and show which unit (inch, feet, or yards) would be the best to use based on the length of an object, then they will be able to use their measuring skills to present the best measurement unit to use based on the size of an object. After the students are exposed to measuring techniques that I would be modeling, vocabulary, and knowledge of measuring, they will demonstrate and apply their knowledge about measuring by measuring their school's basketball court. The more practice the students have in hands-on activities the better for the learning of the students and thought out the lessons there are diverse hands-on activities that the students will be practicing. Hands-on activities improve the students' cognitive understanding of the subject and materials therefore I have added in lesson #1 different sections where students can practice, and in lesson #3 where students need to measure their basketball court.]

5. Monitoring Student Learning

In response to the prompts below, refer to the assessments you will submit as part of the materials for Planning Task 1.

- Describe how your planned formal and informal assessments will provide direct evidence of students' conceptual understanding, computational/procedural fluency, **AND** mathematical reasoning or problem-solving skills **throughout** the learning segment.

[Open-ended questions will be provided to the students throughout the three lessons. Open-ended questions are essential for students to promote their thinking since they require a full answer. Throughout my lessons, I am incorporating different opened ended questions to make the students think and respond with logical answers. I am also planning on making students explain their answers. When students explain their answers, they solidify their thinking and their understanding. I would also make students have discussions to connect the context of the mathematical subject to the students' experiences. I will make students understand that there are different situations in their life where they would need to measure and apply their knowledge and skills about measuring. In lesson #1 the students will prove their understanding of identifying the lengths of objects in terms of multiple copies of another object. The students will work in multiple sections, to provide cognitive learning skills from the area of remembering from the Bloom's Taxonomy. In the sections the students will need to demonstrate knowledge of the correct way to measure objects with multiple objects remembering where to start and stop measuring an object without having gaps. Section 1: Students will identify length using tiles. Section 2: Students will order objects by length. Section 3: The students will measure a book with different objects such as cubes, blocks, and paper clips. Section 4: The students will catch a fish and write down the length of the fish in cubes. In lesson #2 students will be able to recognize and show which unit (inch, feet, or yards) would be the best to use based on the length of an object. The students will look for an object (their choice or assigned by teacher) and measure the length of the object. The students would need to make the decision on what unit he/she will use base on her/his logical thinking of the size of the object. For example, if the

student chooses to measure the length of the classroom, the student must pick the longest unit of the meter stick (yards) to measure the length of the classroom. The students need to answer these questions: What is the object? What is the best unit to measure its length? What is the length of the object? Why did you use the unit? Once the students have gathered their information, they will present to the class the object and explain to the class why for his/her decision on the units he/she picked. During show and tell assignment, the students will provide cognitive learning skills from the area of analyzing from the Bloom's Taxonomy by presenting the best unit to use based on the length of their object. On lesson #3 students will demonstrate, and apply techniques about measuring by measuring their school's basketball court. The students will be provided with a picture of their basketball court or they can draw their own picture. They would be split into two groups, and they would need to work as a team to work together. They will be going to the school's basketball court and get the right measurements of it using a measure tape. The students will work in teams providing cognitive learning skills from the area of creating from the Bloom's Taxonomy by applying, transferring, and creating a module of their Basketball court with its real measurements.]

- b. Explain how the design or adaptation of your planned assessments allows students with specific needs to demonstrate their learning.

Consider the variety of learners in your class who may require different strategies/support (e.g., students with IEPs or 504 plans, English language learners, struggling readers, underperforming students or those with gaps in academic knowledge, and/or gifted students).

[I have added assessments that contain pictures to include the needs of some of the students such as struggling readers. Most of the assessments are assessments for students to work with peers or groups, this strategy helps students to work collaboratively and permits students to give assistance to each other. I would also be walking around the students when they are working on their assessments to see if help is needed. I would also have manipulatives and tools that students can use during assessments such as number lines for students with learning disabilities. The assessments also have a minimum of written directions for students who are English Learners so they do not have difficulties reading, the students can also show their answers in different formats written, numerical, or drawing. The assessments in section format and hands-on activities also help my students with hyperactive-impulsive symptoms, these students would demonstrate their understanding and knowledge not only by answering a worksheet from their place but moving around sections that contain different assessments and working on hands-on activities such as measuring items around the classroom.]