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

   [The central focus of this learning segment is for students to identify and recognize the quarter, dime, nickel, and penny, know their values, and calculate the value of combinations of quarters, dimes, nickels, and pennies. Throughout the lessons, students will be pushed to expand their knowledge using the quarter even though it is not a first grade Minnesota standard. Students will also learn to count money given a specific scenario or word problem. The purpose of this learning segment is to engage students in learning vital mathematical concepts (money) through various hands-on activities. Money is something that these students hear about on a daily basis and is something that they will need to understand at a young age through everyday life. When this learning segment is complete, students will be able to succeed in all of the tasks.]

   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 Minnesota State Mathematics Standards are what I used to make sure that my central focus was related to and on topics that first graders need to understand and succeed in. Each lesson’s objectives are similar and consistent. Each first grader should be able to recognize a specific coin and know its value. They will also be able to count coins to find a total value. Students will use the skills learned from previous knowledge and direct instruction to solve real world problems (word problems). Using the Everyday Mathematics curriculum, lessons are mostly whole group direct instruction which launches the students into guided practice and independent practice. During work time, I rotate from pod-to-pod and work with each student to ensure the student is understanding the material being presented to him/her. Within the first lesson, a review of dimes, nickels, and pennies is used to ensure success in that area before adding on a new component to counting coins. It is vital that each student has their tool kit present with various coins in each kit. This is vital for hands-on learning in which many students need to learn, succeed, and grow. Hands-on learning with different activities is important in first grade as students are learning through movement and with their bodies. Throughout the days, I will incorporate in-depth thinking through questioning and building on previous knowledge (especially from during morning meeting). Within the procedural fluency segment, students will be learning the importance of mathematics as well as how. Counting money and coins is something that many students enjoy as they are able to relate to their parents or guardians. Students will identify the coins and count various given coins to find the total value to meet the standard and objectives. Many of the problems will be similar between the lessons; however, practice is very important at such a young age. Counting coins, in the first lesson, begins with basic counting such as counting pennies, or counting a combination of pennies, nickels, and dimes. As the lessons proceed, counting coins gets more difficult as students are now counting by 25’s or adding 10 onto 25 instead of a 10 (dime). The final assessment is the same as the pre-assessment and is geared towards quarters as students have shown mastery with dimes,
nickels, and pennies. Throughout the learning segment, I will pose questions for students which will encourage students to think more deeply into money. Some questions may include: *How many cents would you need to buy a candy bar out of a vending machine? When you go home tonight, how many cents are in your dad’s pocket?* Students will need to link their everyday life to money and counting coins/money. They will also need to use previous knowledge to answer these questions such as beginning with the largest coin value present.]

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 concept of counting coins/money naturally builds with each lesson that is presented to the students. Money is a concept that students grow up around but is presented lightly by parents/guardians. Each day, a something new is added to the concept. For example, in kindergarten, skip counting is introduced and mostly mastered. This is just a stepping stone to counting coins. In the curriculum, a new concept is covered to advance their knowledge; however, previous concepts are incorporated into the new concept. Students will learn that counting money will come up throughout each lesson and is somehow incorporated into many new concepts. Each day and lesson will build off of each other. Students will move through the lessons and learn to recognize dimes, nickels, and pennies to recognizing a quarter and know its value to counting various coins to find a total value. During the last lesson of the learning segment, students will use the skills learned to count a variety of coins and find its total value. I encourage student participation and encourage students to work together, This strategy encourages teamwork and helps students who may not know the answer or who may not recognize a coin to get assistance from a peer. Each day we will review the day before so the students can recollect what was previously taught. There is always a way to incorporate review into the new lesson which assists students in understanding and gaining knowledge on the subject matter (coins). Reviewing the material can also help students increase their confidence if they struggled with the material the previous day during class time.]

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.

   [All of the students in my classroom have been exposed to money, coins, and counting coins before this learning segment began. Many students commented about learning coins in kindergarten. It is also reviewed daily in Morning Meeting. Morning Meeting money consists of plastic coins attached to the board with Velcro. The “substitute” is in charge of completing this activity. The job rotates each week. The substitute must arrange the coins from greatest value to least value, count the coins, and write its value in two forms (i.e. 46¢ and $0.46). Then, as a
class, we count the money together and discuss. Oftentimes, students are exposed to money in their home lives; however, it is not discussed. If a student wants a gumball from a gumball machine, many parents will just give the student a quarter and not expand on it with them. Students will need to use their previous knowledge from their everyday lives and morning meeting to count various coins and find its value. The one student with a specific learning disability will be given assistance with his assignments and work. Everything will be read to him and will be worked on with a paraprofessional.

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?

[Based on the location of Nicollet Public School, I know that the students who attend are mostly middle class, Caucasian students with at least one working parent. It is evident that parents are willing to work at home with their child on homework, reading, or even just practicing math facts. There are also numerous parents who have volunteered to come into the classroom and help out, as needed. I do not have any other ethnicities in my classroom other than White. I do, however, have two students on IEP’s; however, their parents are very willing to work with their child on whatever subject area is needed. I have greatly gotten to know each and every one of my students during our first month together. I know many of the students’ interests, favorites, and hobbies. I plan on relating counting coins to all of the students’ lives and ensure students understand how important the concept is in relation to their daily lives.]

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

[According to my students’ responses, I have come to a conclusion that the majority of them think that “math is fun” or that “math is one of the best parts of the day.” This makes me excited to teach something that the students love and look forward to. As typical first graders, their “favorite subject” seems to change daily. If the content interests my students, math is exciting for many; however, if the content does not interest them, they will be tempted to “check out” for the day. Due to this, it is important that I incorporate various activities with movement around the classroom. Throughout the learning segment, I will ensure that students are given chances for movement so they are not stationed in their desk for the entire time period. I will also incorporate their lives into it by ensuring that I relate counting coins to their everyday lives. Reviewing the material each day is important for students to persist in solving various problems. It is important for first grade students to build confidence in their mathematical abilities. I will enhance this through encouragement, praise, and opportunities for individual success. Confidence will lead to students believing in themselves and their own ability to learn mathematics and the world around them.]

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.

¹ From the Common Core State Standards for Mathematics
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.

[All of my students have had experience counting coins before these lessons. They have also been introduced briefly to coins before coming to first grade. This means, however, that I need to focus back on the basics of coins (dimes, nickels, and pennies) before extending my lesson. Before beginning my learning segment, I noticed that the majority of students enjoy working hands-on. This helped me plan my lessons to promote that type of learning style as well as moving around in the classroom frequently. The guided practice from the students’ math journals and practice problems in class will be independent work time to promote intrapersonal learning while there will be centers for group work to promote the interpersonal learning. Some students can not focus while working in a small group as they need time to think and process the information themselves. However, on the other hand, some students need to talk aloud to their peers to process the information presented to them. These various methods of teaching and learning came from Howard Gardner. He firmly believed and stressed that students learned through different intelligence modalities which include: musical/rhythmic, visual-spatial, verbal-linguistic, logical-mathematical, bodily-kinesthetic, interpersonal, intrapersonal, and naturalistic. Jean Piaget stressed that students develop in different stages. According to his theories, first grade students are in the preoperational stage of development. Language development is one of the main developments of this period as well as playing and pretending. At this age, many children want to play the role of “mommy”, “daddy”, “teacher”, or “cashier.” Counting coins is an important skill for these students to start practicing as they undergo this stage of development. Another learning theorist that I used to guide my lesson planning was Lev Vygotsky and the Zone of Proximal Development which encouraged educators to teach students at their level; however, students needed to be given the opportunity to be challenged to expand their learning. I knew that students had dimes, nickels, and pennies mastered so I decided to expand their learning with quarters.]

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).

[In my class, I have two students on an IEP. One of those students is pulled out for a portion of mathematics in which he has his mathematics instruction in a special education classroom where he has one-on-one attention. The other student is on an IEP due to his emotions and behaviors as his mathematics skills and abilities are above most in the class. With that being said, it is important that I ensure my first 15 minutes of instruction is supporting the needs of my special education student who struggles with math and reading. Every lesson begins with a review of previous content. I ensure that this is read aloud to the students to avoid him reaching his frustration level immediately just from attempting to read a sentence. This helps students relate back to the content from the previous day, fill in the gaps, ensure that it “clicks.” Within each lesson, I will provide examples of counting coins so that the students can visually see the proper way of how to count coins prior to them accidently developing bad habits. For students who are struggling readers, I will ensure that I read and repeat directions. I will also ask other
students to repeat the directions in which I just stated to ensure everyone is on the same page. It is important that I provide an appropriate amount of time for students to work on and finish their work while giving them time to ask questions, if needed. I have strategically placed students’ desks in pods to provide the ultimate learning experience for all students. This will ensure that students are able to work together, ask questions with their peers, and “fill in the gaps” on something that may have been confusing when I explained it. I also use the pods to promote teamwork. Students must work out and find the answer before coming together as a team to check their answer. If one student is correct, they all need to go back, count their money again, and determine what the correct answer is. My class has 2 Gifted and Talented students during mathematics instruction in which they need challenges beyond their instructional level. To challenge these specific students, I have provided additional opportunities such as various coin games and reading various books about coins and the history within it. This also integrates other subjects into the world of mathematics, as well. The final assessment is simply just assessing if students are able to recognize different coins and count them accurately. Though some are smaller amounts, students still have to recognize the coins and count them from the highest coin value to the lowest coin value. My special education student on an IEP will take the assessment, however, he will receive assistance from the paraprofessional in the classroom.

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

Money is a concept that has room for error. Even adults who have been counting coins and money for years miscount on a daily basis. Students may be confused as to which coin is what coin as the penny is the only coin which varies in color. In the first lesson, each student will get a chance to review what they should already know which is counting just dimes, nickels, and pennies. This was introduced in kindergarten and stressed daily during Morning Meeting throughout the entire first grade year thus far. This will ensure that students will grasp these concepts and know these coins before adding a new coin to the mix. Students may also be confused counting on from 25. For example, if there is a quarter, dime, and a penny, students are not used to counting from 25 to 35. Instead they are used to the ones digit being a zero when they count on from a coin. I will ensure that students understand this by using a hundreds chart in the front of the classroom or using the hundreds chart which is on their desk nametag.

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:

<table>
<thead>
<tr>
<th>Categorize</th>
<th>Compare/contrast</th>
<th>Describe</th>
<th>Interpret</th>
<th>Justify</th>
</tr>
</thead>
</table>

Please see additional examples and non-examples of language functions in the glossary.

[The main language function of my learning segment is evaluate. Counting coins is a skill that requires evaluating a mathematical representation in which this case is coins. However, I want
my students to be able to evaluate the value of coins but also be able to write the amount of coins in correct notation (describe). Again, as stated previously, quarters is an extension to the standard as students have previously mastered the standard prior to this learning segment.]

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, students are encouraged to participate in various centers. Within these centers, students will use their previous knowledge as well as their knowledge of quarters (which will also be discussed during Morning Meeting) to evaluate the values of coins in various ways. The various centers include activities around sorting and counting different values of coins. Throughout these activities, students will be exposed to the notation of describing time such as ___ ¢ and $___ . ___ ___.]

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

[Students are evaluating various values of coins but also using vocabulary terms while counting. The vocabulary terms in this learning segment include: value, exchange, quarter, dime, nickel, and penny. Students must know what coin is presented in order to know the value. This encourages students to use vocabulary but also understand the value of that coin, as well. Students will be exposed to the term “value” continuously throughout the lesson as I ask questions such as, “What coin do you have in your hand? What is the value of that coin? What is the total value of those coins shown?” This will be used as I conduct class discourse, or class discussions with the class during whole group instruction. Students will be exposed to these terms throughout each lesson.]

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).

[Every lesson is a constant review of what we learned the previous day. Each lesson is building off of one another. However, the first lesson is a building block from previous knowledge from first grade and Morning Meeting time. Lesson one contains recognizing and counting dimes, nickels, and pennies only. This is a review for all students as they have mastered this content previously. Lesson two contains a building block: counting quarters. To practice recognizing coins, I will instruct students to hold up various coins from their tool kit. This will ensure that they can identify the coins before counting them. The review each day will also provide students practice as well as filling in the gaps that some students may have had. All of the practice activities will allow students to use the vocabulary and discourse within each lesson.]

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.
a. 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.

[As I want to ensure that students are counting the same value of coins through each assessment, I will administer the same assessment for the pre-assessment as well as the post-assessment. This will ensure that it is equal as I did not want to make the post-assessment more difficult due to the lesson being an extension of the standard itself. Each lesson provides a way for myself to visually note where students are at with counting coins. It allows me as an educator to see where the confusion may be for some students. Is the confusion counting on after the quarter? Is the confusion not being able to recognize the difference between a quarter and a nickel? Is the confusion not knowing which coin to count first? Several activities I will use to evaluate their conceptual understanding and their ability to count coins and relate that value to something that they may purchase with that amount. This will be done orally as I circulate around the room or after the post-assessment as I discuss their assessment with each individual student. The small class size makes circulating much easier as I am able to walk around with a clipboard and make notes of where each individual student is at in their skill. I will be observing the students to see which students are able to recognize, arrange, and count the coins. These students I know have grasped the content presented to them. I will also note during instruction which students raise their hand voluntarily to answer questions and which students are more hesitant to raise their hand. With this, however, it is important to note that some students may simply not raise their hand due to the nature of their personality. The students will be able to use their hundreds chart on the assessments and throughout the activities. Students will also be asked to fill out a self-evaluation which is geared for first grade as they can relate to emoji’s. They will be instructed to circle of emoji face in which they can relate to in regards of how they feel about counting coins as well as coin recognition.]

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).]

[At this age, many students get frightened by the word “test.” This is important as this may alter the way that they perform on an assessment. My one student on an IEP and in special education for mathematics will have assistance with each activity and assessment from his paraprofessional. The other student on an IEP will have no assistance with his mathematics activities unless his emotions or behaviors on that day are altered. The struggling readers will have all the directions read aloud to them; however, they will need to count their coins on their own. On the assessment, I left the directions short and simple so students are able to easily remember them. Throughout the learning segment, if needed, talented and gifted students will have additional activities that extend into other subject areas, as well. These include activities such as coin games, coin books about the history of money and coins, and competitive online games which are intriguing to many first graders.]