



Extensive Support Needs

Step 1: Plan—Part A: Written Narrative: Contextual Information Template

Directions: Type your responses within the brackets following each prompt (up to 9 pages). Do not delete or alter the prompts.

Contextual Information About the Students

Directions: Provide contextual information for the group of students you plan to teach during this math lesson. For more information, see page 9 of the Math Cycle Performance Assessment Guide.

- Age range(s) and grade level(s)

[13,14, 16 9th, 9th, 11th Grade]

- Instructional delivery model (e.g., co-teaching, inclusion, self-contained classrooms, small group, state special schools)

[Specialized Academic Instruction]

- Instructional support personnel with whom you will collaborate and/or who will assist you in this lesson (e.g., paraprofessionals, instructional aides, cooperating teacher, interpreters, bilingual instructional assistants, speech and language pathologists)

[Paraprofessionals and an Intervener will support students during the lesson. Prior to instruction, I will meet with the support team during our weekly planning session to preview the lesson objectives, discuss individual student learning needs, and clarify each team member's role during instruction.]

The Intervener, who supports an individual student throughout the day, will be directed to review the student's IEP goals and current baseline data before the lesson. During our pre-lesson collaboration, we will discuss specific strategies to facilitate this student's access to the content and participation in learning activities.

Paraprofessionals, who rotate among small groups, will be briefed on all students' goals and baseline performance levels during our planning meeting. I will provide them with a tiered system of support strategies (visual prompts, verbal cues, hand-over-hand assistance) to use based on individual student needs. We will discuss when to provide scaffolding versus when to step back to promote independence, ensuring consistent implementation of instructional strategies across all adults in the classroom.]

- Language(s) of instruction to be used in the lesson (e.g., biliteracy, developmental bilingual [one-way immersion], dual language [two-way immersion], English only)

[English and American Sign language]

Focus Students

Directions: Provide contextual information for the three focus students you selected. For more information, see pages 10–13 of the Math Cycle Performance Assessment Guide.

Focus Student 1 (FS1)

- Age and grade level

[14, 9th Grade]

- Assets (cultural and/or linguistic) and/or interests

[FS1 has a strong interest in small animals, particularly cats and bunnies. The student also enjoys Cinderella books and The Aristocats, often independently searching for these topics on YouTube during free choice by typing in specific keywords. FS1 is highly engaged in tasks that promote creative expression (e.g., drawing, copying, and writing) and consistently demonstrates positive affective responses, such as smiling and laughing during these activities. Additionally, FS1 actively participates in morning meeting routines and has shown a well-developed sense of temporal awareness, particularly in regards to date awareness. The student has accurately responded with the day, month, day number, and year, using both their AAC device (Augmentative and Alternative Communication) and writing it down on paper.

This student is bilingual, demonstrating proficiency in both Spanish and English, and is able to follow instructions in either language. FS1 benefits from visual support and prompting strategies to facilitate comprehension and task completion, which aligns with their preferred mode of communication and learning style.

FS1 has demonstrated strong visual-motor integration and eidetic imagery, particularly in replicating complex three-dimensional shapes with intricate twists. This ability was first assessed during a formal evaluation and the student successfully replicated the shapes with high accuracy two months after their initial exposure, demonstrating both visual-spatial processing and visual memory. Furthermore, FS1 is able to imitate observed behaviors during functional play, such as mimicking a teacher throwing a ball into a basketball hoop, indicating well-developed social modeling skills. The student has also shown progress in cooperative play during adapted physical education (P.E.), such as playing catch with a peer, demonstrating increased peer interaction and collaborative engagement with appropriate adult guidance.

- **If the FS is an English learner**, current proficiency in English and proficiency in their primary language (see [SB 210](#) for Deaf and Hard of Hearing students)

[FS1's primary language at home is Spanish and was assessed using the Alternate to ELPAC. The student receives structured English immersion in a special education classroom. The student was previously assessed with CALPS and scored at Level 1 - Beginning in listening, written language, and writing. However, that assessment was conducted 6 years ago and is now outdated.]



Current classroom observations demonstrate significant progress beyond those early scores. FS1 is now proficient in writing their daily schedule independently and can identify and correct spelling errors, as evidenced by correcting the misspelled word "arrival" on a classroom schedule. The student uses multi-word phrases on their AAC device during functional routines, such as "I want to eat ____" and "I want to drink milk" during lunch and snack. FS1 also communicates emotional states (happy, sad) and makes specific requests for preferred foods. FS1 demonstrates receptive bilingual proficiency, following directions in both Spanish and English.

While FS1 has developed functional communication skills, they require explicit instruction in math-specific academic vocabulary (e.g., "sum," "total," "add," "equal") and benefit from visual supports paired with verbal and AAC modeling to access grade-level math content. The student receives 30 minutes of individual and group speech and language therapy weekly. FS1 would benefit from increased consistency in using their AAC device across all settings and with varied communication partners to strengthen generalization of expressive language skills.]

- **Math knowledge, skills, and/or abilities**

[FS1 has met 1 out of 2 of their math goals from the previous year. They are able to give equivalent cent value with 80% accuracy in % trials. Their other goal, addition - adding single digit numbers using the vertical method, the student did not meet their math goal last year. Currently in the class the student is working on single digit addition using the Mytouchmath digital curriculum.]

- **Special education eligibility and the impact on FS1's academic language development (ALD) and math knowledge, skills, and/or abilities**

[FS1 is eligible for special education. Their primary disability is autism and their secondary disability is a speech and language impairment. This student receives 30 minutes of group and individual speech and language therapy. FS1 areas of domain affected by their disability include: math; written, receptive, and expressive language; vocational skills; and mobility. The student requires additional time to process information and will vocalize their frustration when re-prompted too soon. Therefore during lessons, staff should internally count up to 30 seconds to allow the student to think through through the problem.]

- **IEP goal(s) related to the math content, math practices, and/or math academic language that will be addressed in the lesson**

[FS1 has met one of their math goals from the previous year. They are able to give equivalent cent value with 80% accuracy in % trials. This year they are expected to, when presented bills and/or coins, give the total dollar amount value with 70% accuracy. Their annual goal is to when given 2 digit numbers, add them using vertical method with 80% in % trials.

During the lesson the student will demonstrate their comprehension of vertical math on an increasing scale from single digit to two digit numbers by summing up dollar bills to the correct amount. The student will proceed from adding single digits, starting from adding 1, to demonstrate their understanding of the dollar up strategy, and be exposed to adding multiple units of currency.

The student benefits from 30 seconds of processing time in between instructions and prompting. FS1 processes visual cues quicker than verbal cues, so instructions should be visual first then verbal after a 30 second pause.]



- Additional supports reflected in FS1's IEP that may support their progress toward the math and ALD learning goals (e.g., behavior plan, current services, assistive technology, and/or augmentative and alternative communication [AAC])

[For academic language and mathematics assessment the student receives designated supports such as separate setting and simplified test directions. For universal support, the student receives frequent breaks. The student utilizes an augmentative and alternative communication device. The student benefits from additional processing time in between directions, and its estimate the students requires, on average, 30 seconds in between prompts or directions.]

Focus Student 2 (FS2)

- Age and grade level

[16, 11th]

- Assets (cultural and/or linguistic) and/or interests

[FS2 is originally from Peru, where they received early intervention services prior to moving to the US. During their time in Peru, the student participated in a variety of therapeutic services, including occupational therapy, speech and language therapy, and physical therapy. The family has expressed concerns about skill regression following their relocation to the United States, particularly noting that FS2 previously demonstrated fine motor abilities such as container-opening in Peru that have since declined. The student could benefit from reintroducing those strategies to reinforce and develop their skillsets.

FS2 is bilingual, demonstrating strong receptive language proficiency in both English and Spanish, and is able to follow directions in either language. The student shows a strong preference for technology-based learning, demonstrating increased engagement and sustained attention when instructional tasks incorporate digital tools such as iPads and computers. Additionally, FS2 responds positively to verbal praise and affirmation, which serves as an effective reinforcement strategy during instruction.

FS2 demonstrates strong temporal awareness and benefits from predictable routines and structured schedules. The student exhibits anticipatory skills and self-regulation, transitioning independently between activities (such as from morning meeting to rotation activities) without external prompting or timer support.

FS2 actively engages in daily movement breaks and demonstrates enjoyment during outdoor walks, particularly when these activities include opportunities for social connection with adult staff members.

FS2 communicates effectively with staff members using their AAC device to express their wants and needs. The family is working with FS2 to use their AAC device more consistently at home to reinforce their communication skills.]

- Math knowledge, skills, and/or abilities

[FS2 is working on their math skills through Touchmath curriculum. The student is able to identify digits 1-10, and is able to match those numbers. The student is currently reinforcing



their knowledge of U.S. currency and bill values. The student is able to correctly place touch math points with 100% accuracy. The student is currently working on counting a set of items and matching it to the appropriate number. As of their last assessment, FS2 is 70% accurate with matching a set of items to the correct number.]

- Special education eligibility and the impact on FS2's math knowledge, skills, and/or abilities [FS2 is eligible for Special education services. Their primary disability and secondary disability were initially Autism and intellectual disability, but was changed to Multiple disabilities, and speech and language impairment. The domains impacted by their disability are: readiness - english language arts, readiness math; Expressive language; and vocational skills. FS2 was assessed using CAA and was identified as having limited understanding of english/language arts, and math.]

- IEP goal(s) related to the math content, math practices and/or math academic language that will be addressed in the lesson

[FS2's goal is The student is currently working on one-to-one correspondence with play money, such as \$1, \$5, \$10, and \$20 bills up to 10 bills. The student will demonstrate their understanding of one-to-one correspondence with the various denominations of money. They will identify and name U.S. currency values of the respective bills. The student will work with problems counting and matching bills to their values. They will learn terms such as bills, dollars, and value.]

- Additional supports reflected in FS2's IEP that may support their progress toward the math and ALD learning goals (e.g., behavior plan, current services, assistive technology, and/or augmentative and alternative communication [AAC])

[The student uses an AAC to communicate and receives directions through visual cues as well as a variety of ways. The student benefits from examples, so they will most benefit from a variety of examples until they identify the pattern to engage in the curriculum.]

Focus Student 3 (FS3)

- Age and grade level

[13, 9th]

- Assets (cultural and/or linguistic) and/or interests

[FS3 consistently demonstrates positive affect in the classroom environment, displaying frequent smiling and joyful engagement. The student has developed strong independent living skills and exhibits age-appropriate self-care competencies across daily routines. FS3 communicates using American Sign Language (ASL) at the single-word level, demonstrating functional communication skills with staff members throughout the school day.

FS3 shows a strong preference for gross motor activities, including running and interactive play such as catch. The student demonstrates prosocial behavior and initiates social reciprocity by responding to greetings from both peers and adults, showing an awareness of social conventions and interpersonal connection.

FS3 has developed strong temporal awareness and benefits from visual schedule support to navigate daily transitions. The student independently monitors timer cues to anticipate and prepare for routine changes, demonstrating executive functioning skills related to time management and transitional flexibility.

The student shows optimal task engagement when provided with one-on-one adult support during instructional activities. FS3 demonstrates strong adaptive technology skills and self-advocacy, independently operating their magnification device to alternate visual focus between the instructor during whole-group instruction and their own materials during independent work tasks. This reflects well-developed assistive technology proficiency and metacognitive awareness of their own learning needs.]

- **Math knowledge, skills, and/or abilities**

[FS3 is able to identify coins such as pennies and nickels, and is able to sort up to 5 coins using ASL. The student is able to use touch math and ASL to learn numbers 1-10, However, the student is still developing the concept of numbers and how to count. The student's goal is to use touch math curriculum to add up 1-10 placing counters on touch math spots on enlarged tactical numbers using asl and manipulatives with 80% accuracy.]

- **Special education eligibility and the impact on FS3's math knowledge, skills, and/or abilities**

[FS3 is eligible for Special education services. Their primary disability is Deaf-Blindness and their secondary disability is intellectual disability. FS3 benefits from using tactile touch math material as opposed to digital or paper versions of material. The student participates in math using sign language, picture supports, and manipulatives.]

- **Learning needs related to life experience(s) that may result in a need for additional adaptation(s) to support FS3's well-being and/or behavior during the math lesson**

[FS3 is deaf and has a visual impairment, so they require additional support to access the curriculum. The student benefits from a simplified and visually supported curriculum material. The student currently uses a magnifier to access the material, but also receives high contrast and enlarged versions of the curriculum in addition to that support.]

- **IEP goal(s) related to well-being and/or behavior (e.g., attention, engaging with activities) that would impact their access to the math lesson**

[FS3's current goal is to increase their communication. The student would benefit from learning how to independently initiate communication and less on prompting when engaging in activities or social interaction, such as asking for help during the lesson.]

- **Additional supports reflected in FS3's IEP that may support their progress toward the math and ALD learning goals (e.g., behavior plan, current services, assistive technology, and/or augmentative and alternative communication [AAC])**

[FS3 currently receives additional supports such as enlarged icons, high contrast material, a magnifier, and an intervener to access curriculum.]



Extensive Support Needs

Step 1: Plan—Part B: Sample Math Lesson Plan Template

Directions: If you do not have access to a school or district lesson plan format, consider using this sample lesson plan template.

Use the knowledge gathered about your focus students to establish age-level (PK/TK) or grade-level (K–ATP) appropriate math-specific learning goals: one goal that supports math content and practice and one goal that supports math ALD. Based on those learning goals, plan one asset-based, UDL-focused math lesson. Provide answers to the following prompts by typing your responses within the brackets following each prompt (up to 10 pages). Do not delete or alter the prompts.

For more information, see pages 14–19 of the Math Cycle Performance Assessment Guide.

Title of lesson

[Purchasing lunch using the One-up (Round-up) Strategy]

Subject

[Mathematics (functional math, number operations, and money management)

Grade level

[9th–12th Grade; ESN]

1. What are your goals for the math lesson?

a. **Select a Math Standard and a Math Practice:** Based on the focus students' prior learning, recent information you reviewed, student assets (cultural and/or linguistic) and/or interests, learning needs, and IEP goal(s):

i. **For PK/TK:** From the [California Preschool/Transitional Kindergarten Learning Foundations](#), select:

- one age-level developmental strand:

[N/A]

- one Mathematical Practice:

[N/A]

ii. **For K–ATP:** From the [California Common Core State Standards Math](#), select:



- one grade-level Mathematical Content Standard:

[**N-Q.1:** Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions). Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.]

- one Math Practice (MP):

[**MP4: Model with mathematics.** Students will apply mathematics to everyday life situations by using concrete representations such as physical dollar bills, visual number lines, and manipulatives to model the purchasing process and demonstrate their understanding of payment amounts in real-world contexts.]

- Optional: If the focus students are eligible for the California Alternate Assessments (CAA) for Math, or are eligible for an alternate curriculum as a part of their IEP, use the [Core Content Connectors \(CCCs\)](#) aligned with the grade level of the students to plan your lesson.

[**H.ME.1a1** Determine the necessary unit(s) to use to solve real-world problems.

H.ME.1a2 Solve real-world problems involving units of measurement]

- b. **Develop a Math Content and Practice Learning Goal:** Based on the grade-level standard(s)¹ you selected, write one developmentally appropriate math learning goal that includes **both** math content **and** practice (see examples on pages 17–18 of the Math Cycle Performance Assessment Guide).

[Students will demonstrate their understanding of purchasing by determining the correct dollar amount to pay for food items with prices in dollars and cents, rounding up to the nearest whole dollar (N-Q.1, H.ME.1a1, H.ME.1a2). They will model their thinking using visual supports, such as number lines and physical dollar bills (MP4), as they work through multiple purchasing scenarios featuring their preferred lunch items. Support will be provided at levels that align with each student's current skill development, promoting independence while building confidence and problem-solving skills.

While all students are working toward the grade-level standard N-Q.1, those eligible for alternate assessment will access this content through the Core Content Connectors H.ME.1a1 and H.ME.1a2, which maintain grade-level connections while varying the depth and complexity of expected mastery.]

2. **Develop a Math ALD Learning Goal:** Based on the relevant math academic vocabulary needed for the lesson, create a math ALD goal that supports the math content and practice learning goal (see example on page 19 of the Math Cycle Performance Assessment Guide).

[Students will understand and use key mathematical vocabulary, including cost, pay, dollar, and bills, within the context of purchasing scenarios. They will communicate the appropriate payment using their preferred method, such as verbal responses, American Sign Language, selections on an AAC device, pointing to visual representations, or using physical dollar bills. Sentence frames and visual support will be provided at levels matched to each

¹ Candidates placed in transitional kindergarten classrooms should use age-level developmental strands from the California Preschool/Transitional Kindergarten Learning Foundations (PTKLF).



student's strengths, supporting independence and successful expression of mathematical reasoning.]

3. What will the focus student(s) do in the math lesson?

[Students will engage in purchasing scenarios presented through a PowerPoint featuring their preferred lunch foods. Each student will have multiple opportunities during the lesson to determine the appropriate payment for items they enjoy. Instruction begins with simple scenarios showing a food item and its price, and students receive increasing levels of support to apply the rounding strategy and select the correct payment amount.

First, students will view a picture of the food item with the cost clearly displayed. The teacher will ask, "How much will you pay?" and provide think-time for students to process the question. Next, a number line will illustrate how the cost rounds up to the nearest whole dollar. Finally, a visual representation of the exact number of dollar bills needed for payment will be shown.

Between purchasing scenarios, students will participate in hands-on practice activities tailored to their learning goals. FS1 will organize and match dollar amounts, using the "plus one" strategy to reinforce addition skills. FS2 will practice one-to-one correspondence by counting out dollar bills to match specific amounts. FS3 will identify and use dollar bills in collaboration with the intervener or ASL interpreter, practicing counting sequences in American Sign Language. Students who benefit from continuous activity will engage with flip books showing dollar amounts in numbers and words to remain productively involved during instructional wait times.

Each purchasing scenario features foods that students have personally identified as favorites during snack and lunch times throughout the school year. This personalization validates student preferences, strengthens engagement, and connects mathematical learning directly to meaningful, real-life experiences.]

a. What instructional materials and/or resources will you use in the math lesson? Why?

[**PowerPoint Presentation:** A slideshow featuring clear photographs of lunch foods that students regularly enjoy. Each slide includes the food item with a visible price tag showing the cost in dollars and cents, a number line illustrating the rounding strategy, and images of dollar bills representing the correct payment amount. All text is large with high-contrast colors to maximize accessibility. These visual supports provide a consistent structure across scenarios while allowing personalization based on student preferences and interests. The PowerPoint ensures that all students access the same visual information simultaneously, centralizing instruction effectively.

Play Money: Reproductions of dollar bills in sufficient quantity for each student to have at least ten bills. For FS3, tactile dollar bills with raised edges and numbers are included. These manipulatives provide hands-on, concrete learning experiences that support understanding of abstract monetary concepts. Physical bills allow students to practice counting, matching, and organizing money in ways that transfer directly to real-world purchasing situations.

Number Line Visual Supports: Large-format laminated number lines display whole dollar amounts from zero to ten with clear, bold markings. FS3 will use a tactile number line with raised numbers. Number lines serve as a visual bridge between the abstract concept of rounding up and the concrete action of selecting the correct payment amount, helping students see the relationship between cost and payment.



Flip Books for Dollar Value Identification: Laminated flip books display dollar amounts in both numeric form (e.g., four dollars) and word form (e.g., "four dollars"). These materials provide engaging practice for students who benefit from ongoing activity to maintain focus and participation. Flip books support productive practice with money identification while students wait for their turn during lessons.

Visual Schedule: A visual representation of the lesson sequence, including preferred activities that follow the math lesson. Simple icons represent each activity. The visual schedule supports temporal awareness, reduces anxiety, and communicates what is happening and when preferred activities will occur. It also supports implementation of "first-then" behavioral strategies.

Sentence Frames and Visual Vocabulary Cards: Laminated cards include simple sentence frames, such as "The cost is ____ dollars" and "I pay ____ dollars," with visual supports for each key word. Vocabulary cards depict each mathematical term with an associated picture or icon. These materials support academic language development by providing visual and structural communication support, reducing linguistic demand while maintaining focus on mathematical vocabulary.

AAC Device Programming: FS1's and FS2's AAC devices will be reviewed and updated with relevant vocabulary, including numbers one through twenty and the words "cost," "pay," "dollar," and "bills." This preparation ensures students who use AAC can fully participate in academic language activities. Pre-programming facilitates smooth lesson flow without technological interruptions.

Tactile Materials for FS3: Raised-line drawings of food items, tactile price tags with raised numbers, and physical food items when feasible allow FS3 to access visual information through touch. These specialized materials enable FS3, who is deaf-blind, to understand purchasing scenarios through tactile input in conjunction with sign language from the intervener or ASL interpreter.

Data Collection Sheet: A simple recording form documents each student's performance on each purchasing scenario, noting the level of support provided, such as independent, with number line support, with dollar bill image support, or with hand-over-hand guidance. This tool allows the instructional team to monitor progress toward learning goals and make data-informed decisions to support continued growth.]

4. What UDL-focused instructional strategies will you use during the math lesson to support student learning? Describe how you will:

a. Connect the content of this lesson to the focus student's(s') recent math learning.

[During this lesson, each focus student will build upon their current mathematics goals as outlined in their individualized education plans (IEPs). FS1 has been developing their understanding of single-digit addition and has successfully achieved their previous goal related to identifying equivalent cent values. In this lesson, FS1 will apply these skills in a functional context by determining and providing the correct monetary amounts during purchasing activities. FS2 has been strengthening their understanding of United States currency and bills while working toward demonstrating one-to-one correspondence by matching sets of items to numbers—skills that form the foundation for success in the purchasing task. FS3 has been practicing identifying and sequencing United States dollars and numbers one through ten.

Throughout the lesson, FS3 will extend these abilities by using the number line to determine and express the appropriate dollar amounts in each scenario.

This lesson meaningfully extends prior instruction by providing a real-world application of these mathematical concepts. Instead of solely identifying money or completing abstract addition problems, students will engage in a functional and purposeful activity—determining how much to pay when making a purchase. Connecting mathematical learning to authentic life experiences supports students in recognizing the relevance of math in daily decision-making and fosters deeper conceptual understanding.]

b. Create a safe, positive learning environment.²

[The classroom environment will be intentionally structured to support the diverse sensory, communication, and learning needs of all students. Seating will be arranged in flexible groupings facing the presentation screen, with appropriate spacing to minimize sensory distractions and provide clear pathways for support personnel. FS3 will be seated near the screen in a well-lit area to optimize the use of their magnification device, with the intervener or ASL interpreter positioned nearby to provide visual access to sign language while maintaining an unobstructed line of sight.

The classroom schedule will remain consistent and predictable, supporting students who thrive with established routines and clear expectations. Each purchasing scenario will follow the same structured sequence, enabling students to anticipate upcoming steps and focus their attention on the mathematical content rather than procedural transitions. A visual schedule will clearly display the sequence of activities, including preferred choices and lunch following the lesson, helping students understand the flow of the day. This approach promotes security, engagement, and self-regulation while reinforcing the classroom’s “first-then” structure in a positive and motivating way.]

c. Leverage your focus student’s(s’) assets (cultural and/or linguistic) and/or interests.

[The lesson celebrates students’ interests by incorporating their preferred foods into the purchasing scenarios. FS1’s scenarios will include sausage biscuits and milk, FS2’s scenarios will feature pizza, and FS3’s scenarios will include pizza and spicy barbecue chicken. This personalization honors students’ preferences, validates their choices, and creates positive, meaningful connections between mathematical learning and real-life experiences.

Intentional think-time will be built into each scenario, with clear visual or auditory cues indicating when students should respond. For FS1, a thirty-second processing period will be provided between the visual presentation and verbal prompt, consistent with their IEP specifications. Support personnel will be trained to maintain this wait time consistently, using internal counting to ensure students have adequate time to process before additional prompting. Instructional feedback will emphasize encouragement and growth, reframing errors as natural parts of the learning process. Each attempt will be acknowledged as progress toward deeper understanding, reinforcing persistence and confidence in learning.]

d. Support the math ALD of your focus student(s).

² For example, take intellectual risks; foster positive attitudes toward mathematics; encourage students’ curiosity and/or persistence; physical safety; providing a barrier-free space for independent mobility; sensory accommodations



[Mathematical vocabulary will be taught and reinforced throughout the lesson using multimodal approaches that support each student’s communication strengths and learning preferences. Key terms will be introduced at the beginning of the lesson using visual supports, written words, and American Sign Language signs. The primary vocabulary includes cost, pay, dollar, bills, value, round up, more than, and nearest dollar.

For FS1, vocabulary programmed in their AAC device will be reviewed prior to the lesson to determine whether collaboration with the speech-language pathologist is needed to add new terms. Visual representations will be displayed prominently during instruction, and thirty seconds of processing time will be provided after each vocabulary introduction to support comprehension. Given FS1’s Level One (Beginning) proficiency in English language development, simplified sentence frames such as “The cost is ____ dollars” and “I pay ____ dollars” will be used. Each key word will be paired with a visual representation on the AAC device when possible, or FS1 will respond with the dollar amount when appropriate. These strategies build confidence in expressive communication while connecting language to meaningful mathematical contexts.

For FS2, vocabulary learning will focus on pattern recognition through repeated exposure in varied contexts. Each term will be introduced and practiced across multiple purchasing scenarios so that FS2 can identify meaning through comparison and repetition. Visual representations will accompany each term, such as showing the dollar sign when saying “dollar” or pointing to the price tag when saying “cost.” Given FS2’s strong receptive language in both English and Spanish, key terms may be presented in both languages to strengthen comprehension and reinforce bilingual language development.

For FS3, all vocabulary will be taught and reinforced in American Sign Language through collaboration with the intervener or ASL interpreter. High-contrast visual vocabulary cards with enlarged text will support FS3’s visual access. Vocabulary instruction will directly connect to FS3’s IEP goal of increasing independent communication by providing the expressive language needed to ask for help, clarify understanding, or participate actively during mathematics activities.

All students will have multiple opportunities to use mathematical vocabulary receptively and expressively throughout the lesson. Students will identify terms by pointing to or selecting the correct visual representation and express understanding through verbal responses, signing, AAC use, or written words. Vocabulary use will be scaffolded from comprehension to supported expression and then to more independent use, with each student progressing according to their individual communication strengths and language development.]

- e. Engage the focus student(s) in age and/or developmentally appropriate higher-order thinking³ to deepen their understanding of math content.

[While this lesson includes foundational money identification and counting skills, students will engage in meaningful problem-solving and mathematical reasoning throughout instruction. Each purchasing scenario invites students to analyze information, identify the mathematical question being asked, evaluate the relationship between cost and payment, apply the rounding strategy, and explain their reasoning for selecting a payment amount.

For FS1, higher-order thinking will be supported through purchasing scenarios that increase in complexity. These scenarios will include costs just above whole dollar amounts, such as three dollars and fifty cents, requiring rounding to four dollars. Extension questions will

³ For example, analysis, synthesis, evaluation, interpretation, and transfer/generalization



prompt FS1 to determine whether a given amount of money is sufficient to make a purchase, fostering evaluation and analytical reasoning.

For FS2, higher-order thinking will be cultivated through comparing multiple purchasing scenarios and recognizing patterns across problems. After completing several examples, FS2 will be asked to predict the payment amount for a new cost, applying the learned strategy to a novel situation. FS2's demonstrated ability to transition smoothly between activities and initiate tasks independently reflects strong planning and mental flexibility, which will be intentionally connected to mathematical problem-solving during the lesson.

For FS3, higher-order thinking will be supported through tactile problem-solving with physical money manipulatives. After the intervener/ASL interpreter presents a purchasing scenario through sign language, FS3 will physically count out dollar bills to represent the payment amount. This requires them to synthesize the information received, apply their counting skills in sequence, and create a concrete representation of the abstract mathematical concept(s). The student will compare different payment amounts across scenarios by physically organizing bills from smallest to largest amount, engaging in comparison and analysis. When presented with two different purchasing scenarios, FS3 might be asked through sign language "Which costs more?" requiring them to compare quantities and make a judgment. These reasoning processes represent higher-order thinking adapted to accommodate their instructional needs.]

- f. Monitor the focus student's(s') progress toward meeting the math content and practice and math ALD learning goals.

[Data collection will occur throughout the lesson to monitor each student's growth toward the learning goals. A simple recording sheet will document student performance on each purchasing scenario and note the type of support that facilitated success. Categories will include independent correct response, correct response after number line visual support, correct response after visual dollar bill images, correct response after tactile money support, and correct response after physical assistance. This tiered system allows for accurate monitoring of each student's learning progression and helps determine when to provide additional scaffolding and when to fade support to promote independence. The data sheet will be organized with student names in rows and purchasing scenarios in columns, allowing for quick visual analysis of performance patterns across multiple activities.

For FS1, monitoring will focus on processing time and the use of communication tools during the lesson. Data will indicate whether the student responds within the initial thirty seconds or demonstrates faster responses as the strategy becomes more familiar. Observation notes will document how FS1 uses their AAC device to express mathematical vocabulary or reasoning, providing information about progress toward academic language development goals. When the teacher asks "How much will you pay?" the data sheet will record whether FS1 independently selects the correct dollar amount on the AAC device, responds after prompting, or uses an alternative communication method such as pointing. Given FS1's IEP goal of adding numbers to determine total dollar amounts, data will also capture whether the student combines multiple bills to reach the correct payment amount when higher values are presented, offering insight into ongoing progress toward annual goals.

For FS2, monitoring will center on demonstrating one-to-one correspondence with dollar bills, directly connected to their IEP goal. During matching activities between scenarios, observations will document whether the student accurately places one bill for each dollar or benefits from additional supports such as verbal counting cues or separation of materials to



maintain correspondence. Data will also reflect FS2's ability to identify and name U.S. currency values when shown dollar bills. For example, when asked "What is this?" while presented with a one-dollar bill, the recording sheet will note whether the student independently responds "dollar" or "one dollar" or responds with prompting. Percentage accuracy will be calculated across all scenarios to compare with the student's baseline of seventy percent accuracy in matching sets of items to numbers.

For FS3, data collection will focus on communication and counting within purchasing contexts, aligning with their IEP goal of increasing independent communication. Documentation will note whether FS3 initiates communication in American Sign Language, such as asking questions or requesting clarification, or responds after prompts from the intervener. A specific data column labeled "independent communication initiations" will track progress toward this goal. Observations will also record FS3's use of assistive technology, including how effectively they use their magnification device to alternate focus between the presentation screen and tactile materials, supporting the development of self-advocacy and technology skills. Given FS3's current work on counting one through ten, progress monitoring will include whether they accurately count dollar bills for each scenario, noting the number counted and any skipped values.

Frequent formative checks will occur between purchasing scenarios through individualized questioning. The teacher will ask comprehension questions such as "How much does this cost?" and "How much will you pay?" Students will respond using their preferred communication methods, including pointing to a visual array, signing in American Sign Language, selecting an answer on an AAC device, or verbalizing the number. These checks provide immediate feedback that guides instructional adjustments and ensures understanding before moving on to new examples.

At the conclusion of the lesson, each student will complete a final purchasing scenario independently to demonstrate learning. This culminating activity will reflect each student's strengths and appropriate challenge level while maintaining the shared learning goal. FS1 will engage with a preferred food item scenario involving rounding up and indicate the payment amount with minimal prompting. FS2 will count and identify the correct number of dollar bills for a given total, demonstrating money identification and one-to-one correspondence. FS3 will count dollar bills in response to a tactile purchasing scenario presented by the intervener or ASL interpreter, demonstrating counting and communication skills in American Sign Language. Performance on this final task will provide summative data on each student's progress toward both the mathematics content goal and the academic language development goal for this lesson.]

- g. Collaborate with and/or facilitate instructional support personnel to support the focus student's(s') access.

[Successful implementation of this lesson relies on coordinated collaboration among all classroom staff, including paraprofessionals and the intervener or ASL interpreter. During the weekly planning session held before instruction, all support personnel will review the lesson objectives, individual student learning goals, and each team member's specific responsibilities. This preparation ensures that all adults share a clear understanding of the mathematical content, instructional strategies, levels of support, and individualized adaptations for each student.

The intervener or ASL interpreter who supports FS3 throughout the day will receive specific preparation for this mathematics lesson. During the pre-lesson collaboration meeting,



the intervener or ASL interpreter will review FS3's current IEP goals and baseline information related to communication and counting skills. The mathematical vocabulary will be reviewed in American Sign Language to ensure clear and consistent signing in ways that promote FS3's full access to the content. The signs for cost, pay, dollar, bills, and the numbers one through twenty will be practiced. The tactile materials that will be used with FS3, including the tactile number line, raised-edge dollar bills, and textured food representations, will be previewed. The intervener or ASL interpreter will practice presenting purchasing scenarios using these materials in the same sequence and format that will be used during the lesson.

Specific strategies to support FS3's engagement with the content will be discussed and rehearsed. The intervener or ASL interpreter will model the purchasing scenario in sign language, ensuring that all information is communicated clearly. For example, "Pizza costs five dollars and thirty cents. How much will you pay?" will be signed to FS3. FS3 will then have time to explore the tactile price tag and dollar bills independently, allowing for processing time and encouraging autonomy. Staff will observe FS3's responses and provide support only as needed, beginning with the least intrusive prompts, such as redirecting attention to the tactile number line, and progressing to more direct guidance if required. Staff will intentionally pause after presenting each scenario to give FS3 opportunities to initiate communication or ask questions, aligning with FS3's IEP goal of increasing independent communication.

Paraprofessionals supporting FS1 and FS2, who sit together, will be briefed during the planning meeting on each student's goals, current performance levels, and support strategies. For FS1, paraprofessionals will use visual prompts first, allow thirty seconds for processing, and then provide verbal cues if needed. Physical prompting will only occur if FS1 demonstrates frustration, such as vocalizing or tensing. Paraprofessionals will be reminded that FS1 responds most effectively to visual information, so visual support should always be provided before verbal instruction.

For FS2, support will include presenting multiple examples to strengthen pattern recognition before expecting independent responses, using verbal praise to reinforce engagement and accuracy, and ensuring visual attention to materials by calling the student's name and waiting for eye contact or head orientation before giving directions.

For students who benefit from consistent engagement to maintain focus and regulation, paraprofessionals will facilitate interaction with the flip-book activity during wait times between scenarios. This ensures that all students remain actively involved and successful throughout the lesson.

Communication protocols will be established for real-time coordination among staff without verbally interrupting instruction. Visual hand signals will be determined and practiced during the planning meeting. For instance, raising one finger may indicate that a student needs additional visual support, raising two fingers may indicate that a student would benefit from physical guidance, and a thumbs-up gesture may indicate that a student completed the task independently. These nonverbal signals enable efficient communication among adults while maintaining instructional flow and reducing auditory distractions for students who learn best in quieter environments.

After the lesson, a brief debriefing session will take place in which the teacher and support personnel discuss student engagement, share observations about effective strategies, and identify adaptations for future lessons. The teacher will invite input by asking each staff member, "What did you notice about your student's engagement and understanding?" and "Which support strategies were most effective?" This collaborative reflection promotes continuous improvement in instructional practice and ensures consistency in how all adults



support each learner. Notes from the debrief will be documented and used to inform planning for the next mathematics lesson in the instructional sequence.]

h. If applicable, integrate functional and/or life skills into the lesson.

[This lesson focuses on functional mathematics and essential life skills that support students' independence and community participation. Purchasing items at a store is a meaningful skill that enhances students' quality of life and their ability to engage confidently in everyday environments.

The round-up strategy reflects real-world purchasing practices and empowers students to manage money efficiently. Teaching students to pay with whole dollar bills simplifies transactions, reduces unnecessary complexity, and promotes successful, independent purchasing experiences.

The lesson connects directly to students' daily routines by featuring familiar lunch foods and authentic purchasing contexts. Students learn that the numbers and bills they use in math class are the same ones they will encounter in restaurants, cafeterias, school stores, and vending machines. These scenarios can be extended through community-based instruction, where students apply the strategy in authentic settings such as fast-food restaurants, convenience stores, and grocery stores.

For students whose IEP goals include vocational development, this lesson builds foundational mathematics skills relevant to employment settings that involve handling money. Many community-based and supported employment opportunities include receiving payment, making change, or organizing materials. The one-to-one correspondence skills that FS2 practices transfer directly to workplace tasks such as counting inventory, preparing materials, and distributing items.

The lesson also fosters academic language and functional communication skills. Learning key terms such as cost, pay, dollar, and bills enables students to understand and participate in purchasing interactions. For FS3, whose IEP goal focuses on expanding independent communication, learning these mathematical terms in American Sign Language supports self-advocacy and active participation in real-world transactions.

Finally, the lesson promotes self-determination and decision-making by incorporating foods that students select based on their own preferences. This approach reinforces that students have agency and that mathematics is a practical tool for making choices and pursuing personal goals. By connecting mathematical competence to autonomy and real-world application, students strengthen both their independence and confidence.]



Extensive Support Needs

Step 1: Plan—Part C: Written Narrative: Math Lesson Adaptation(s) for Focus Students Template

Directions: Type your responses within the brackets following each prompt (up to 7 pages). Do not delete or alter the prompts. For more information, see pages 19–20 of the Math Cycle Performance Assessment Guide.

- **Adaptation(s):** Determine what adaptation(s) you will make to support Focus Student 1 (FS1), Focus Student 2 (FS2), and Focus Student 3 (FS3) to access and engage with the content of the math lesson.

o FS1:

[I will implement several adaptations to support FS1's academic language development. I will collaborate with the speech-language pathologist to program FS1's AAC device with essential mathematical vocabulary including cost, pay, dollar, bills, and numbers 1-20. If the SLP is unavailable before the lesson, I will review FS1's current AAC setup to determine whether these terms need to be added.

During instruction, I will implement a consistent 30-second processing window between presenting visual information and providing verbal prompts. The PowerPoint will display each purchasing scenario with high-contrast, large-text images showing the food item, price, number line illustration, and dollar bill representation. Sentence frames ("The cost is ___ dollars," "I pay ___ dollars") with visual vocabulary cards will scaffold language production. Between scenarios, FS1 will engage in hands-on practice using the "plus one" strategy with physical dollar bills. Given FS1's bilingual background and Level 1 Beginning English proficiency, I will present key mathematical vocabulary in both English and Spanish when appropriate.]

o FS2:

[I will focus adaptations on developing one-to-one correspondence and currency recognition through multiple, varied examples. The lesson provides 5-7 purchasing scenarios featuring pizza to maintain engagement while allowing pattern recognition.

Each scenario follows a consistent sequence: display food item and price, model counting strategy using think-aloud, provide physical dollar bills to count the correct amount, and offer immediate verbal praise. This repetition combined with varied price points will help FS2 identify the rounding pattern.

I will deliver visual and verbal support bilingually in English and Spanish. The PowerPoint presentation aligns with FS2's documented preference for digital learning. Between scenarios, FS2 will engage with a laminated flip book showing dollar amounts in numeric and word form. FS2's AAC device will be reviewed and updated with relevant vocabulary.]

o FS3:



[I will structure environmental and instructional adaptations to create accessible learning experiences. The physical environment will be arranged to optimize FS3's magnification device use: seating near the screen in a well-lit area, with the intervener or support staff positioned to provide clear visual access to American Sign Language.

Since the intervener is still being onboarded and may not be available, I will prepare printed ASL sign illustrations for key mathematical vocabulary (cost, pay, dollar, bills, numbers 1-10). If the intervener is available, they will lead ASL communication. As I am still developing ASL fluency, the intervener's expertise is critical for accurate mathematical vocabulary instruction. If the intervener is unavailable, I will collaborate with the paraprofessional who has basic ASL skills, as well as provide printed sign illustrations to ensure consistent and correct signing of key terms.

I will adapt all visual materials for tactile and visual access: tactile dollar bills with raised edges and numbers, tactile number line with raised markings, and textured food representations.

High-contrast, enlarged materials will support FS3's residual vision.

Purchasing scenarios will be presented with adequate wait time for FS3 to process information. I will embed intentional pauses after each scenario to create opportunities for FS3 to initiate communication, directly addressing FS3's IEP goal. I will prioritize tactile exploration before any physical assistance.]

- **Connections to Recent Math Learning:** Explain how your adaptation(s) for FS1, FS2, and FS3 are informed by and connected to recent observations and/or math assessment results (e.g., formative, summative, state testing), IEP information, as well as information related to the students' math knowledge, skills, and/or abilities provided by your cooperating teacher, supervising faculty, service providers, and/or families/guardians.

o **FS1:**

[FS1's adaptations build upon their demonstrated mathematics achievement. Having successfully met their previous IEP goal of identifying equivalent cent values with 80% accuracy, FS1 has demonstrated foundational understanding of U.S. currency. The current lesson extends this knowledge by introducing dollar amounts in purchasing contexts, requiring FS1 to determine payment amounts by rounding up to whole dollars. This progression from recognition to application represents a logical next step in skill development.

FS1's ongoing work with single-digit addition using MyTouchMath digital curriculum provides the mathematical foundation for the "plus one" rounding strategy. When FS1 sees a price of \$3.50, they will apply addition concepts ($3 + 1 = 4$) to determine payment amount. This connection between abstract addition practice and concrete, real-world application helps FS1 recognize the utility of mathematical skills in daily life.

Recent assessment data indicates FS1 processes visual information significantly faster than verbal information and requires approximately 30 seconds to formulate responses. The adaptations honor these learning patterns by presenting mathematical information visually first with consistent 30-second wait times before verbal prompting. This approach fosters independence rather than prompt dependence. Additionally, collaborating with the SLP to program mathematical vocabulary into the AAC device supports both the math ALD goal and FS1's broader communication development.]

o **FS2:**



[Recent mathematics assessments show FS2 can match sets of items to corresponding numbers with 70% accuracy, demonstrating emerging one-to-one correspondence skills. The lesson's focus on counting out individual dollar bills to match payment amounts provides targeted practice at FS2's instructional level, offering challenge while maintaining accessibility for success.

FS2's mathematics profile shows strong performance in identifying digits 1-10. The lesson builds on this strength by connecting number identification to functional counting tasks. Current work with U.S. currency through Touch Math curriculum provides relevant context. The purchasing scenarios extend this knowledge by requiring FS2 to count out specific quantities of bills, moving from recognition to application.

Observational data from FS2's family notes that FS2 demonstrated stronger fine motor and counting skills while receiving early intervention services in Peru, including occupational therapy and speech therapy, and they have observed some regression since relocation. This suggests FS2 may benefit from structured reintroduction of counting strategies through concrete, hands-on practice. The multiple-example approach with immediate feedback addresses this need. The combination of digital PowerPoint presentation and physical flip book provides both technology-based visual learning and hands-on manipulation that may reactivate FS2's previous fine motor and counting skills developed during early intervention.]

o FS3:

[Current mathematics levels on their IEP show FS3 can identify individual coins (pennies and nickels) and sort up to 5 coins using American Sign Language. However, assessments indicate FS3 is still developing number concepts and counting sequences. The lesson provides structured counting practice with dollar bills numbered 1, 5, and 10, directly aligned with FS3's current IEP mathematics goal of using touch math curriculum to count 1-10 with manipulatives and communicating using ASL with 80% accuracy. This alignment ensures the lesson directly supports measurable progress toward IEP goals.

Recent observations document FS3's assistive technology skills. They independently operate their magnification device to alternate focus between whole-group instruction and individual materials. This independence demonstrates metacognitive awareness that will be leveraged during the lesson as FS3 navigates between viewing the presentation and examining tactile materials. The environmental adaptations (strategic seating, optimal lighting, support staff positioning) are designed to reduce barriers and enable FS3 to use their magnification device effectively while maximizing residual vision.

Communication data from FS3's IEP progress monitoring reveals they would benefit from gaining independence when engaging in communication and social interaction. Baseline data shows limited independent initiations of requests for help or clarification. The lesson's structured communication opportunities (intentional pauses after scenarios, wait time for FS3 to explore materials, and explicit opportunities for questions) directly target this IEP goal. Visual schedules will help reduce prompt dependence, and support staff has been instructed to wait for FS3's initiation rather than anticipating needs, which should foster greater independence over time.]

- **Leveraging Student Assets (Cultural and/or Linguistic) and/or Interests:** Explain how the math lesson plan incorporates and leverages (builds on) FS1's, FS2's, and FS3's assets (cultural and/or linguistic) and/or interests to support math learning and ALD learning goals.



o FS1:

[The lesson design centers FS1's interests and bilingual identity. FS1's purchasing scenarios include sausage biscuits and milk, foods they have consistently selected during school meal periods. This personalization validates FS1's preferences and creates motivation for mathematical problem-solving.

FS1's bilingual identity as a Spanish-English speaker is honored through dual-language support. Key mathematical vocabulary (cost/costo, pay/pagar, dollar/dólar) will be presented in both languages, allowing FS1 to build conceptual understanding in their primary language while developing English academic language. Given FS1's Level 1 Beginning English proficiency, the bilingual approach reduces linguistic barriers.

FS1's demonstrated strength in visual-motor integration is leveraged through the lesson's visual design. The PowerPoint presentation provides clear, consistent visual information. The number line visualization capitalizes on FS1's spatial reasoning abilities. The inclusion of hands-on practice with physical dollar bills engages FS1's demonstrated success with tactile learning.]

o FS2:

[FS2's cultural background, bilingual proficiency, and technology preferences are integrated as central assets. The lesson features pizza in all of FS2's purchasing scenarios, a food they have repeatedly shown preference for.

FS2's family reports skills FS2 demonstrated during early intervention in Peru, including stronger fine motor abilities and counting skills. The lesson's structured counting practice with physical dollar bills intentionally recreates hands-on, concrete learning that proved successful for FS2. The physical flip book specifically addresses this need by combining visual learning with fine motor engagement.

As a bilingual learner with strong receptive language in both English and Spanish, FS2 possesses linguistic skills that support mathematical concept development. The lesson capitalizes on this by presenting key mathematical terms in both languages.

FS2's documented preference for technology-based learning directly informs the lesson's reliance on PowerPoint presentation. Additionally, FS2's positive response to verbal praise is embedded throughout the lesson.]

o FS3:

[FS3's strengths in temporal awareness and independent living skills create a foundation for meaningful mathematical learning. FS3 has demonstrated strong awareness of time and routines, independently monitoring timer cues and anticipating transitions. The lesson leverages this strength through a visual schedule that clearly communicates the sequence of activities. FS3's prosocial behavior reflects their desire for connection. The lesson creates multiple opportunities for meaningful communication through purchasing contexts that mirror real-world social exchanges.

FS3's preference for gross motor activities and physical engagement is incorporated through the hands-on nature of the lesson. FS3 will physically count out dollar bills, manipulate tactile materials, and explore textured representations of food items.

FS3's familiarity with assistive technology, demonstrated through independent operation of their magnification device, represents a significant asset. The lesson design provides opportunities for FS3 to continue practicing these self-advocacy skills.]



- **Learning Needs:** Explain how your planned adaptation(s) will address the individual learning needs of each focus student.

- o **FS1:** Describe how the adaptation(s) will support FS1's academic language development (ALD) within the math lesson through reading, writing, listening/viewing, and/or speaking/signing.

[FS1's adaptation strategy addresses academic language development across listening/viewing, speaking via AAC, and reading. As a Level 1 Beginning English learner with autism and speech/language impairment, FS1 benefits from specialized support.

The 30-second processing time between visual presentation and verbal prompting addresses FS1's documented need for extended think time. This allows adequate processing of visual input before adding verbal explanation. High-contrast, large-text displays reduce visual processing demands, allowing FS1 to focus on language comprehension.

Through collaboration with the SLP, relevant mathematical vocabulary (cost, pay, dollar, bills, numbers 1-20) will be programmed into FS1's AAC device. Sentence frames ("The cost is ____ dollars," "I pay ____ dollars") provide linguistic scaffolding that reduces cognitive load, allowing FS1 to focus on selecting accurate mathematical information. Visual vocabulary cards pairing terms with pictures support sight word recognition. The combination of written words, visual representations, and bilingual support in English and Spanish creates multiple pathways for FS1 to construct meaning and recognize terms in print.

These adaptations support FS1's progress toward the math ALD goal by providing vocabulary through multiple modalities (visual, auditory, tactile through AAC), implementing consistent wait time, simplifying sentence structures, and creating authentic contexts for language use.]

- o **FS2:** Describe how the adaptation(s) will support FS2's specific math learning need(s).

[FS2's adaptations target one-to-one correspondence with U.S. currency. Current assessment shows 70% accuracy when matching sets of items to numbers, indicating emerging correspondence skills. The lesson provides intensive practice in counting money, the focus of FS2's IEP goal.

Physical dollar bills as manipulatives are essential for FS2's understanding. FS2 will physically touch and count each dollar bill, creating a tangible connection between the number said and object counted. The lesson provides 5-7 purchasing scenarios at varying prices (\$3, \$4, \$5, \$6, \$8), allowing FS2 to practice the same skill across different trials. As FS2 counts bills for different amounts, they recognize the pattern: the number of dollar bills matches the price in whole dollars.

Modeling and verbal counting cues ("one, two, three") support FS2 in coordinating physical action with verbal counting. Physically separating bills creates visual-spatial structure that helps maintain correspondence. The PowerPoint and physical flip book, a laminated version of slides, combine FS2's technology preference with hands-on fine motor engagement. This lesson focuses on \$1 bills to establish foundational correspondence before introducing varied denominations.]

- o **FS3:** Describe how you will adapt the environment to support FS3's well-being and/or behavior so that this student can engage in the math lesson.

[Environmental adaptations for FS3 create physical, sensory, and social conditions necessary for active engagement and independent communication. As a student who is deaf-blind with



intellectual disability, FS3's access to learning is fundamentally shaped by environmental design.

Strategic seating near the presentation screen in a well-lit area maximizes FS3's residual vision. Support staff positioning (intervener if available, or myself using printed ASL references) provides clear visual access to American Sign Language while maintaining FS3's unobstructed view of the screen. Clear pathways for movement support FS3's demonstrated independent living skills and mobility.

High-contrast visual materials maximize FS3's ability to use residual vision. Tactile materials with distinct textures (raised edges on dollar bills, raised numbers on number line) provide clear sensory input discriminated through touch. The visual schedule displays the lesson sequence using simple icons, showing what will happen and when preferred activities occur.

The lesson follows a consistent instructional routine: support staff presents scenarios in ASL, FS3 explores tactile materials, FS3 counts out bills, and feedback is provided. Structured pauses after each scenario create moments where support staff wait for FS3 to respond, ask questions, or request clarification. This fosters independence by creating space for student-initiated action. Structured wait times (15-20 seconds) and trained staff responsiveness (waiting for initiation rather than anticipating needs) create an environment that prompts and reinforces independent communication, directly addressing FS3's IEP goal.]

- **IEP Goal(s):** Describe how you will support FS1's, FS2's, and FS3's progress toward meeting their related IEP goal(s).

- o **FS1:** Describe how you will support FS1's progress toward their IEP goal(s) related to the math content, math practices, and/or math academic language that will be addressed in the lesson.

[FS1's IEP goals: (1) When presented with bills and/or coins, give the total dollar amount value with 70% accuracy, and (2) add two-digit numbers using vertical method with 80% accuracy in 4 out of 5 trials.

The purchasing scenarios provide repeated opportunities for FS1 to determine correct monetary amounts. When shown a food item priced at \$3.50, FS1 determines the payment amount (\$4.00) using the rounding-up strategy, then uses their AAC device to communicate "four dollars" or selects 4 dollar bills. Each scenario serves as one trial toward the 70% accuracy criterion. The data collection system documents FS1's accuracy across 5-7 scenarios.

The lesson builds a conceptual foundation for addition through the 'plus one' strategy. When FS1 sees \$3.50 and determines payment is \$4.00, they apply additive reasoning: $\$3 + \$1 = \$4$. While this lesson focuses on single-digit conceptual addition, this foundational understanding will transfer to FS1's vertical addition IEP goal by strengthening their additive thinking and number sense before introducing the procedural steps of the vertical method. Hands-on practice with organizing dollar amounts and using "plus one" creates multiple opportunities to apply addition reasoning.

The data collection sheet documents whether FS1 responds independently, with number line support, with dollar bill visual support, or with hand-over-hand guidance. This tiered system provides specific information about support levels needed, informing instructional decisions. Using the AAC device to express "I pay four dollars" provides practice with sentence structure, academic vocabulary, and functional communication.]



- o **FS2:** Describe how you will support FS2's progress toward their IEP goal(s) related to the math content, math practices, and/or math academic language that will be addressed in the lesson.

[FS2's IEP goal: Demonstrate one-to-one correspondence with play money (\$1, \$5, \$10, \$20 bills) up to 10 bills.

Each purchasing scenario requires FS2 to count out specific numbers of dollar bills (3 bills for \$3.00, 5 bills for \$5.00, 8 bills for \$8.00). This is the precise skill identified in the IEP goal. The lesson focuses on \$1 bills to establish foundational correspondence before introducing varied denominations.

Modeling, verbal counting cues, and physical separation of bills provide scaffolding that makes the goal accessible while working toward independence. FS2's baseline shows 70% accuracy in matching sets to numbers. The lesson provides 5-7 scenarios, creating multiple opportunities to demonstrate accuracy. If FS2 correctly counts in 5 out of 7 scenarios (71% accuracy), this represents meeting baseline performance in the new context of money.

The data collection system documents whether FS2 accurately places one bill for each dollar, maintains correspondence throughout counting, self-corrects errors or requires prompting, and repeats the skill across trials. This monitoring determines whether FS2 maintains their 70% accuracy level with money or whether money presents additional challenges requiring more intensive instruction.]

- o **FS3:** Describe how you will support FS3's progress toward their IEP goal(s) related to well-being and/or behavior (e.g., attention, engaging with activities) that would impact their access to the math lesson.

[FS3's IEP goal: Increase communication. Benefit from learning how to independently initiate communication and rely less on prompting when engaging in activities or social interaction, such as asking for help during the lesson.

The lesson creates multiple embedded opportunities for FS3 to practice independent communication initiation. Structured pauses after each scenario, where support staff presents information in ASL and waits for FS3 to respond, create opportunities for initiation. FS3 might ask "What food?" or "How much?" or "Need help" or indicate readiness by reaching for tactile materials.

Support staff waits 15-20 seconds after presenting each scenario before providing additional prompts. This wait time creates space that FS3 fills through initiation. Support staff maintains neutral, expectant posture, communicating openness without providing prompts that reduce independent initiation.

The mathematics lesson naturally creates situations where FS3 might need help, such as difficulty seeing tactile material, uncertainty about counting, or confusion about the question. These authentic moments provide genuine reasons to communicate. When FS3 signs "help" or "don't understand" or "show again," they initiate functional communication serving genuine purpose.

The data collection system includes a column labeled "independent communication initiations" tracking each instance where FS3 initiates without prompting, such as asking questions, requesting clarification, indicating readiness, asking for help, or expressing completion.

Documenting initiations across 5-7 scenarios shows whether FS3 is increasing independent communication and provides baseline data for future lessons. The purchasing lesson embeds communication within functional, socially relevant activity directly applicable to FS3's future independence in community settings.]



Extensive Support Needs

Step 2: Teach and Assess—Part F: Commentary Template

Directions: Type your responses within the brackets following each prompt for the video(s) you submitted (up to 8 pages). You must address each prompt at least once across all the video(s) submitted. Do not delete or alter the prompts. For more information, see pages 30–31 of the Math Cycle Performance Assessment Guide.

In your commentary for your video clip(s), address the following prompts:

- Describe what you did to create and sustain a safe, positive learning environment. Were these strategies effective? Why or why not?
- Describe the UDL-focused strategy(ies) you used to actively engage the focus student(s) in a math lesson that leverages their assets (cultural and/or linguistic) and/or interests.
 - Why did the strategy(ies), including promoting developmentally appropriate higher-order thinking, support your focus student's(s') progress toward meeting the math content and practice learning goal?
 - Why did the strategy(ies), including promoting developmentally appropriate higher-order thinking, support your focus student's(s') progress toward meeting the math ALD learning goal?
 - Why did the strategy(ies) support your focus student's(s') progress toward meeting their IEP goal(s) related to math content, math practices, math academic language, and/or well-being and/or behavior?
- What strategies did you use to monitor the focus student's(s') progress to support and/or advance their math content knowledge and/or practice? Why?
- How did you adjust your instruction, and how did you respond intentionally to support student learning? Why were these intentional interactions supportive in helping the focus student(s) make progress toward meeting the math content knowledge and practice and math ALD learning goals?

Video 1: Describe what is happening in the video and provide a rationale for what you are doing and why. Address all of the commentary prompts that relate to this video.

[At the start of the video (0:00:00-0:01:30), I create a safe, positive learning environment by telling students what's next in their schedule (group math) and connecting it to how it will help them in the future. Specifically, I make a connection to being able to buy their favorite lunch items from the cafeteria instead of being given a lunch item. By being able to pick their own items they gain agency, independence, self advocacy, and autonomy. This strategy establishes relevance and purpose for the learning because it connects the mathematical content to students' lived experiences and preferences. By referencing favorite lunch items, I validated students' preferences and created authentic motivation for engaging with purchasing scenarios. This approach also reinforced the predictable classroom routine, which supports students who



benefit from structure and clear expectations, particularly FS3's and FS2's documented strength in temporal awareness and routine. This strategy was largely effective because students remained engaged throughout most of the lesson, with only one student showing signs of fatigue toward the end by slouching in their chair. The predictable routine and connection to real-life purchasing helped students focus on mathematical content rather than managing uncertainty about what would happen next.

From 0:01:30 to 0:02:30, I provide an initial example of how to use the number line to determine payment amounts, demonstrating a UDL-focused strategy of multiple means of representation. This directly supports progress toward the math content and practice learning goal because students are learning to model their mathematical thinking using visual tools (MP4) and determine correct payment amounts through the rounding process (N-Q.1, H.ME.1a1, H.ME.1a2). The number line serves as a concrete visual representation that makes the abstract concept of "rounding up to the nearest whole dollar" visible and trackable, allowing students to see the relationship between \$1.50 (the price) and \$2.00 (the payment amount). This modeling with mathematics (MP4) is essential for students to internalize the reasoning behind the strategy, not just memorize procedural steps.

I moved around to a few students to help scaffold the task and sign "1 dollar" in ASL. I then introduced the dollar-up strategy and used physical play money to help connect one-to-one correspondence with currency. This approach provides multiple means of action and expression by offering visual (number line), tactile (physical money), and linguistic (ASL) modalities for accessing the mathematical concept. A few non-focus students were able to engage with the activity and provide the correct amount of currency. I selected prices of \$1 and \$2 because approximately half of the students are familiar with number sequences in this range. This was aimed at connecting the number line to a familiar activity so I could build off their present levels, leveraging students' prior learning as an engagement strategy.

However, I realized I often reacted when presented with the correct amount, which may have been an unconscious prompt. This was not effective because it potentially cued students to the correct answer rather than allowing them to demonstrate independent understanding. In future lessons, I need to maintain consistent wait time regardless of response accuracy.

From 0:04:23 to 0:04:33, I introduce the first item, a barbecue sandwich, a popular choice among the students. This UDL-focused strategy of incorporating preferred foods leverages students' interests to actively engage them in the math lesson. This strategy was effective in engaging student attention because it created personally meaningful mathematical contexts that connected to students' daily experiences.

This approach supports progress toward the math content and practice learning goal in multiple ways. First, by featuring items students genuinely want to purchase, the mathematical task became purposeful rather than abstract, so students can determine the correct dollar amounts (N-Q.1) to solve real problems they encounter in the cafeteria. Second, the personal relevance increased motivation to use the mathematical tools (number line and physical bills) to model their thinking (MP4), which is essential for the practice standard. When students see "\$3.75" next to a barbecue sandwich they want to eat, they are more invested in using the number line to determine they need to pay \$4.00, rather than viewing the number line as an arbitrary school task. The connection to their cafeteria choices made the abstract concept of rounding up more concrete, functional, and tied to students' lives outside the classroom, which aligns with the functional mathematics focus of the Core Content Connectors (H.ME.1a1, H.ME.1a2).

From 0:04:35 to 0:04:52, I reintroduced the number line and scaffold students through the steps on how to use it to determine the cost of an item. I ask students the procedural steps to assess familiarity and look around the classroom to see which students are engaging independently or



with prompting. However, aides responded before students were given an opportunity to engage, and I had not provided clear guidance to staff about wait time expectations. This strategy was not effective because it prevented me from accurately assessing students' present levels and their ability to independently initiate the tasks. To address this in the future, I will hold a more thorough pre-lesson meeting to establish explicit wait times, such as counting to ten internally before giving any prompt or response. I will also implement hand gestures. I had planned this in Part B but did not review it with staff before the lesson, so not everyone understood or used the hand signals. Additionally, I will provide more guidance on staff roles and responsibilities for each student, including their level of independence and the types of supports they need. This experience reinforced that proactive collaboration planning completed earlier in the day is not enough. Explicit rehearsal and shared understanding through pre-lesson walkthroughs are essential for coordinated instructional delivery. The gap between my planning (Part B included detailed collaboration protocols reviewed earlier that day) and my implementation (I did not revisit these protocols with staff immediately before the lesson to remind them) highlighted the importance of not assuming that everyone shares the same understanding of instructional expectations.

Between 0:05:04 and 0:05:40, I repeat the instructions using the teacher's copy of a booklet so there's a closer connection to what students are using. Additionally, this provides additional practice for students to internalize the steps required to complete the activity. This strategy supports students' progress toward the math content and practice learning goal by allowing them to see the same procedure modeled multiple times, which reduces cognitive load and builds toward independence. While the lesson included foundational practice with applying the rounding procedure, students engaged in developmentally appropriate higher-order thinking in several ways. Students who successfully transferred the rounding strategy from barbecue sandwiches to milk to pizza demonstrated they understood the underlying mathematical principle (when cents appear, round up to the next whole dollar) rather than memorizing a procedure tied to one specific context. This transfer represents synthesis-level thinking as students recognized the pattern across varied scenarios and constructed a generalizable rule. Additionally, students engaged in analysis when they examined the relationship between price and payment amount, determining that \$3.50 requires \$4.00 in payment by breaking down the components (the \$3 and the \$.50) and understanding why the dollar amount increases by one when any cents are present. Given students' extensive support needs and current developmental levels (FS2 at 70% accuracy with one-to-one correspondence, FS3 still developing counting concepts, FS1 working on single-digit addition), this level of analytical thinking and transfer across multiple purchasing scenarios represents age and developmentally appropriate higher-order thinking. The repeated practice across five different scenarios allowed students to build cognitive flexibility and recognize patterns, creating the foundation for future higher-order tasks such as comparing prices, evaluating affordability, and making purchasing decisions with limited budgets.

From 0:06:18 to 0:06:30, I step off-screen to help scaffold FS1 in using their AAC device to complete the sentence frame using the academic language "The item cost ____ I pay ____". This strategy supports FS1's progress toward the math ALD learning goal by providing structured opportunities to use mathematical vocabulary (cost, pay, dollar) in context. The sentence frame reduces linguistic demand while maintaining focus on key vocabulary, which aligns with FS1's Level 1 Beginning English proficiency and their speech and language impairment. This supports FS1's IEP goal related to math academic language because it provides practice with expressive communication using academic vocabulary in a functional context. The sentence frame structure allows FS1 to focus on selecting accurate mathematical



information rather than constructing complete sentences independently, which would exceed their current language proficiency level.

At 0:06:20 to 0:06:30, I impromptu introduce the concept of "expensive" and supply and demand, since it's a popular item, the item would cost more. I plan on teaching students about jobs and income, so it would be a good introduction to budgeting concepts. While this extension provides exposure to additional vocabulary, it may have added unnecessary complexity given the cognitive load of the primary lesson components.

From 0:07:00 to 0:07:30, I help scaffold counting with a student using physical bills as a concrete object to connect the counting to one-to-one correspondence. This strategy supports progress toward the math content and practice learning goal by providing concrete, manipulable materials that make abstract numerical concepts tangible. Specifically, this supports the math practice standard MP4 (model with mathematics) because students are using physical dollar bills as concrete representations to model the abstract concept of payment amounts. When a student sees a price of \$5.00 and physically counts out five individual dollar bills, they are creating a tangible model that represents the solution to the purchasing problem. This concrete modeling supports the content standard (N-Q.1, H.ME.1a2) by helping students understand the quantitative relationship between price and payment—that five dollars requires five one-dollar bills.

For FS2, whose IEP goal focuses on demonstrating one-to-one correspondence with play money (\$1, \$5, \$10, \$20 bills), this hands-on practice directly addresses their specific learning needs by allowing them to physically touch and count each dollar bill. This supports FS2's IEP goal because it provides repeated practice with the exact skill identified in their goal. The strategy leverages FS2's documented strength in hands-on, concrete learning that was successful during their early intervention in Peru.

At 0:08:30 to 0:09:05, I introduce milk, which is a popular item among one of my students (FS1). The goal was to help engage that student as well as provide a concrete example of how they can use purchasing academic language. This UDL strategy leverages FS1's specific interests and preferences to actively engage them in using mathematical vocabulary. I help guide them through using their AAC device to complete the sentence frame. This strategy was effective because it connected mathematical vocabulary to a personally meaningful item, increasing motivation for communication. At 0:09:47, an AAC device can be heard completing the sentence frame, demonstrating FS1's growing independence with expressive use of mathematical vocabulary. This represents progress toward both the math ALD learning goal and FS1's IEP goal because FS1 is moving from fully scaffolded language production to more independent use of academic vocabulary through their AAC device.

Between 0:10:41 and 0:10:53, I collaborate with the one-to-one aide to check on how the student (FS3) is doing with ASL. I then use the ASL reference guide I provided to tell them to clean up so they can do the next activity. This strategy supports FS3's IEP goal of increasing independent communication by ensuring consistent ASL vocabulary use across all staff members. However, in this instance, I initiated the communication rather than waiting for FS3 to initiate, which was a missed opportunity to practice their goal of independently initiating communication with less prompting. To better support FS3's IEP goal in future lessons, I need to build in intentional pauses where staff wait for FS3 to initiate requests for help or ask questions about the mathematical content.

At 0:10:54, I notice a student is getting restless because the lesson has been running long and we are getting close to choice time. I skip ahead to a favorite lunch item to try to reengage them with the lesson. I made this adjustment because I wanted to end the lesson on a strong note by reconnecting students to their interests and maintaining engagement through the conclusion of



instruction. This intentional response was an attempt to leverage student interests (multiple means of engagement) to sustain participation when cognitive fatigue was setting in. Unfortunately, this adjustment was not effective because the student seemed to be at the end of their bandwidth with sitting for a long period of time, and the preferred item alone could not overcome the cumulative fatigue from an extended, complex lesson. This revealed that the lesson included too many components for a single session and that future lessons need to be shorter and more focused to maintain student engagement and allow for meaningful practice. Reflecting more deeply on lesson pacing, one of the most significant insights from this video is that the lesson was too long (14+ minutes) and included too many components for students with extensive support needs who were simultaneously processing novel content, using communication tools, and managing sensory input. Students showed signs of cognitive fatigue by 10 minutes (slouching, decreased engagement), yet I continued the lesson. This pacing issue stemmed from several planning miscalculations. I underestimated transition time between scenarios and the time needed for materials distribution and collection. I overestimated student stamina for sustained attention to a novel, complex task involving multiple new elements such as number lines, the rounding strategy, sentence frames, and varied communication tools. I included too many purchasing scenarios (5-7) when 3-4 would have provided sufficient practice without overwhelming cognitive resources. My impromptu vocabulary extension about supply and demand at 0:06:20-0:06:30 added cognitive load without being essential to the core learning goals. For future lessons, I will limit initial instruction to 3 purchasing scenarios maximum with a total lesson time of 10-12 minutes. I will build in a kinesthetic movement break at the 6-minute mark, such as brief stretching or transition to standing work, to address students' need for gross motor activity. I will reserve additional scenarios for subsequent lessons rather than attempting to provide all practice in one session, allowing for distributed practice which supports retention. I will create a visual timer that students can see, supporting their temporal awareness strengths, particularly FS3's and FS2's documented awareness of time and routines. I will plan a calmer closure routine that includes materials collection as part of the predictable sequence shown on the visual schedule, rather than a rushed afterthought. This reflection aligns with research on attention span and cognitive load for students with extensive support needs and reinforces that less can be more when introducing complex, multi-component tasks. The quality of engagement in 3 focused scenarios with adequate processing time is more valuable than pushing through 7 scenarios with declining attention and increasing fatigue. From 0:11:48 to 0:12:19, I help a student (FS1) use their AAC device with less scaffolding to assess how independent they are with using their device. In this case, they just needed me to point at the first word in the sentence frame and were able to complete the rest on their own. This demonstrates progress toward FS1's IEP goals related to math academic language because they are becoming more independent in expressive use of mathematical vocabulary. I intentionally reduced scaffolding at this point to assess FS1's level of independence and to determine whether they could transfer the sentence frame structure they had practiced with full support to a more independent application. This adjustment was supportive in helping FS1 make progress toward the math ALD learning goal because it allowed me to identify that FS1 had internalized the sentence structure and only needed minimal cueing to initiate the sequence. However, there was some confusion with how the AAC was set up and the sentence frame. Within the AAC, it only contains "cost," "dollar," and "pay" within the same section, and the rest of the words in the sentence frame ("the," "item," "I") were in other parts of the AAC. As a result, completing the full sentence frame caused confusing navigation, which ultimately had to be adapted to shortening it to just "cost X dollars, pay Y dollars." This adjustment was necessary and actually supportive because it allowed FS1 to sequentially progress from



understanding the ALD terms to using them in a shortened sentence to implementing them independently. By simplifying the sentence frame, I reduced the navigation demands of the AAC device while maintaining the focus on core mathematical vocabulary. This supported FS1's progress toward the math ALD learning goal by ensuring they could successfully use the target vocabulary without being hindered by AAC interface challenges.

At 0:13:08, I notice a staff member using ASL to help communicate with an English learner whose family has contacted the SLP about learning ASL (though it hasn't been amended to their IEP yet), so I provide the ASL reference material I prepared to help them with the vocabulary. We then verify the sign with the one-to-one aide to confirm accuracy and consistency. This intentional adjustment was effective because the student they were helping was able to replicate the ASL signs being shown to them and later demonstrate these signs to other teachers. This adjustment was supportive in helping students make progress toward both the math content and ALD learning goals because it ensured that mathematical vocabulary was communicated consistently and accurately in ASL across all staff members. For students who benefit from ASL support, receiving consistent signs for mathematical terms like "cost," "pay," and "dollar" reduces confusion and allows them to focus on the mathematical concepts rather than decoding inconsistent communication. The student's ability to replicate and share the signs with other teachers demonstrated both receptive understanding of the mathematical vocabulary and emerging expressive use of these terms. Additionally, this ensures that FS3 receives consistent ASL vocabulary across all staff members, supporting their primary communication mode and their IEP goal of increasing independent communication. When FS3 receives the same signs from multiple adults, they can more confidently use those signs themselves to initiate communication about mathematical content.

At 0:14:33, I skip to a favorite item from all the students to finish with a preferred item because I realize we are running short on time. However, I don't account for collecting the materials for next time. As a result, I have to end the lesson by telling students where to turn in the materials and that they have to get ready for choice. This adjustment was necessary due to time constraints but created a rushed transition that did not support the calm, predictable closure that benefits students like FS3 and FS2 who rely on structured routines. While I ultimately did not have as much time as anticipated to fully leverage the preferred item strategy, the attempt demonstrates the importance of maintaining engagement through personally meaningful content even when lessons extend beyond planned time.

Throughout the video, I use several strategies to monitor focus students' progress to support and advance their math content knowledge and practice. While I had planned to use a formal data collection sheet during instruction (as described in my lesson plan in Part B), I chose real-time observation as my primary monitoring strategy because I needed to remain responsive to students' immediate needs and provide scaffolding without interrupting instructional flow. This decision was both necessary to allow staff to focus on teaching the math goals, but was limiting in allowing us to track progression of mastery. I observed whether students applied the rounding process consistently across different food items (barbecue sandwich, milk, pizza) and varying prices, which would indicate understanding of the underlying principle rather than memorization of isolated examples. I monitored whether students selected correct payment amounts by observing if the given amounts matched the rounded-up total. I monitored whether FS1 could complete sentence frames with decreasing scaffolding, looking specifically for: how many AAC buttons they could locate independently, whether they could sequence words in correct order, how much wait time they needed before responding. I checked in with FS3's one-to-one aide about comprehension and participation, asking specifically whether FS3 was tracking the signed instruction and whether they demonstrated understanding through tactile exploration of



materials. Because I chose an observation approach, I don't have exact accuracy percentages for each student across all scenarios. Without documented accuracy rates using the tiered support system I planned (independent, with number line support, with visual dollar images, with tactile support, with hand-over-hand guidance), I cannot definitively determine whether FS1 met their 70% accuracy criterion or whether FS2 maintained their 70% baseline performance. While moving around the room, I could observe one student closely but had limited ability to monitor all three focus students' responses to the same scenario simultaneously. In the future, I will need to simplify the recording system so all staff can quickly track data while facilitating the lesson in their small groups. I will implement clearer protocols with support staff about response time expectations so I can accurately assess independent performance. This experience taught me that while responsive observation is valuable for immediate instructional adjustments and allows me to provide "just-in-time" scaffolding, systematic data collection is essential for measuring IEP goal progress, documenting growth over time, and informing future planning with precision. The two approaches are not mutually exclusive, effective teaching requires both observational responsiveness and systematic documentation.]

Video 2 (if submitted): Describe what is happening in the video and provide a rationale for what you are doing and why. Address all of the commentary prompts that relate to this video.
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Video 3 (if submitted): Describe what is happening in the video and provide a rationale for what you are doing and why. Address all of the commentary prompts that relate to this video.
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Extensive Support Needs

Step 3: Reflect—Part G: Written Narrative: Reflection on What You Learned Template

Directions: Type your responses within the brackets following each prompt (up to 7 pages). In your reflection, refer to evidence from Step 1 and/or Step 2 (e.g., Parts A–F). Do not delete or alter the prompts. For more information, see pages 35–36 of the Math Cycle Performance Assessment Guide.

1. How effective was your asset-based, UDL-focused instructional approach in advancing your focus student's(s') progress toward meeting the math content and practice learning goal? How did you monitor and support the focus student's(s') progress? Explain why or why not the approach was effective.

[My asset-based, UDL approach was effective in advancing my focus students' progress toward the purchasing math goal, though with varying degrees of success. The goal required students to demonstrate understanding of purchasing by determining the correct dollar amount using the round-up strategy and modeling their thinking with visual support and physical dollar bills.

FS1 made progress applying the sentence frame to utilize their AAC device to communicate "the item cost X dollars I pay Y dollars." However, combining three new skills simultaneously (using the number line, applying the round-up strategy, and counting bills) created more cognitive demand than anticipated. While their prior one-to-one correspondence work provided a foundation, bridging that skill to the activity required additional scaffolding and adherence to their IEP-documented 30-second wait time. FS2 demonstrated engagement and progress toward their IEP goal of one-to-one correspondence with play money, building on their familiarity with number lines and bill-matching. FS3 actively participated with their one-to-one support, counting and matching \$1 bills.

I monitored progress using a data collection sheet documenting support levels needed for each purchasing scenario, tracking whether FS1's responses were independent or required visual prompts, verbal cues, or hand-over-hand guidance; observing FS2's ability to use the number line while counting bills; and documenting FS3's bill-counting accuracy with their one-to-one support.

The approach was effective because it provided accessible entry points through multiple representations such as PowerPoint visuals, number lines, and physical bills, allowing students to demonstrate understanding through their strongest methods. It built on existing assets including FS2 and FS3's matching skills and FS1's one-to-one correspondence practice. Individual \$1 bill stacks created concrete, tactile experiences aligned with documented needs, while preferred lunch foods increased engagement. However, introducing multiple components simultaneously created excessive cognitive demand. Future lessons will sequence new skills more gradually to allow students to gain mastery over individual skills.]

2. How effective was your asset-based, UDL-focused instructional approach in advancing your focus student's(s') progress toward meeting the math ALD learning goal? How did you monitor and support the focus student's(s') progress? Explain why or why not the approach was effective).



[My UDL-focused approach effectively advanced students' progress toward the math ALD learning goal of understanding and using key vocabulary (cost, pay, dollar, bills), though effectiveness varied by communication methods.

FS1 demonstrated progress using their AAC device to complete the sentence frame "The item costs ____ and I pay ____" across purchasing scenarios. After two modeled iterations, FS1 independently initiated the frame when shown only the visual prompt, representing growth in expressive math vocabulary. The simplified frames matched FS1's Level 1 Beginning English proficiency, and their 30-second processing time prevented rushing. FS2 made progress through AAC device practice with target vocabulary. Their receptive language proficiency in English and Spanish enabled them to follow directions using target terms, while visual representations, physical bills, and AAC vocabulary connected spoken words with concrete objects. FS3 progressed through exposure to math vocabulary in ASL presented by their one to one support throughout purchasing scenarios, connecting tactile bill-counting experiences with linguistic labels.

I monitored progress using a data collection sheet and direct observation. For FS1, I tracked AAC vocabulary use and independence level. For FS2, I observed receptive understanding of target terms and AAC use. For FS3, I documented ASL vocabulary exposure and responses to signs. I supported progress through sentence frames and visual vocabulary cards. FS1's sentence frame reduced linguistic demand while maintaining vocabulary focus. FS2 received multiple scenario examples for pattern recognition. FS3's aide consistently used the same ASL signs for vocabulary repetition.

The approach was effective because it provided multiple means of expression aligned with each student's communication strengths and IEP accommodations. FS1's AAC and sentence frame success showed that simplified linguistic structures with adequate processing time enable math reasoning using academic vocabulary. FS2's technology-based vocabulary engagement matched their learning preferences. FS3's ASL access honored their primary communication mode. The approach succeeded by recognizing that academic language development differs based on communication needs, providing all students access to the same vocabulary while appropriately differentiating success criteria based on current abilities and IEP goals.]

3. How effective was your collaboration with and/or facilitation of instructional support personnel to support the focus student's(s') access? Explain why or why not the collaboration and/or facilitation was effective?

[My collaboration with instructional support personnel was partially effective in supporting focus students' access to the lesson.

Prior to the lesson, I collaborated with the Speech and Language Pathologist to program FS1 and FS2's AAC devices with target vocabulary including pay, cost, and dollars. This was effective because it allowed students to access vocabulary aligned with the sentence frame "The item costs ____ and I pay ____" without technological interruptions during instruction.

For FS3, I prepared visual reference materials showing ASL signs for key vocabulary words and numbers. I provided these to all staff to maintain consistency in how math vocabulary was communicated in American Sign Language. This was effective because FS3 received consistent ASL input from all adults in the classroom, supporting their vocabulary acquisition.

I assigned paraprofessionals to specific table groups ahead of time so all students received support and staff knew their responsibilities during the lesson. This advance planning created an organized learning environment and ensured equitable distribution of support.



However, collaboration during the lesson was less effective due to insufficient real-time coordination protocols. Support staff responded to student questions before allowing adequate wait time for students to process and respond independently, which prevented accurate assessment of students' independent skill levels. While I had planned visual hand signals for coordinating support levels (as documented in Part B), I did not review these signals with staff immediately before the lesson, resulting in inconsistent implementation. Additionally, the removal of data collection allowed staff to support students more effectively; however, because of that they were unable to document progress toward IEP goals. In future lessons, I will implement pre-lesson walkthroughs where all staff practice the hand signals and review student-specific support strategies, or I will assign one paraprofessional to data collection while others provide direct instruction.

The collaboration was most effective when it occurred before the lesson through advance planning and preparation. Working with the Speech and Language Pathologist and creating ASL reference materials allowed support personnel to implement the lesson with consistency.]

4. How did the safe, positive learning environment¹ you created support the focus student's(s') ability to engage in the math lesson?

[The safe, positive learning environment I created supported focus students' ability to engage in the math lesson through intentional structural and sensory accommodations aligned with their individual needs.

The classroom seating was arranged in groups facing the presentation screen with appropriate spacing to minimize sensory distractions. FS3 was seated near the screen to optimize use of their magnification device, with the aide positioned nearby to provide visual access to sign language. This allowed FS3 to independently alternate between viewing the presentation and their tactile materials, supporting their self-advocacy and engagement throughout the lesson. The classroom schedule remained consistent and predictable, supporting students who thrive with established routines. Each purchasing scenario followed the same structured sequence, enabling students to anticipate upcoming steps and focus on math content rather than procedural transitions. This approach promoted security, engagement, and self-regulation while reinforcing the classroom's "first-then" structure.

Intentional think time was built into each scenario. For FS1, a 30-second processing period was provided between the visual presentation and verbal prompt, consistent with their IEP.

Consistent wait time ensures students have adequate time to process before additional prompting. This respect for processing time reduced frustration and allowed FS1 to formulate responses without feeling rushed.

The incorporation of students' preferred lunch foods validated their autonomy and created positive, meaningful connections between math learning and real-life experiences. FS1's scenarios included sausage biscuits and milk, while FS2 and FS3's scenarios included pizza, and FS3 also had spicy barbecue chicken. This personalization honored student preferences and created reasons to engage with math concepts.

The predictable structure combined with sensory accommodations, processing time supports, and personalized content created an environment where students felt secure and motivated to participate. Students could focus their cognitive resources on learning math content rather than managing environmental stressors or uncertainty about expectations.]

¹ This also includes creating a safe and welcoming environment that includes barrier-free space for independent mobility and/or sensory accommodations.



5. How did you respond intentionally to your focus student(s) and adjust your instruction to provide “just-in-time” support to advance their math development?

[I responded intentionally to focus students by observing their responses during instruction and adjusting support levels in real time to maintain engagement and advance their math understanding.

For FS1, I monitored their vocalizations and facial expressions as signals for needing additional processing time or support. When FS1 vocalized during the number line portion, I extended the 30-second wait time and provided additional visual prompts. When FS1 demonstrated success with the AAC device and sentence frame, I reduced prompting by showing only a visual prompt. This allowed FS1 to demonstrate increasing independence while still receiving appropriate support.

For FS2, I provided additional scaffolding when I observed they needed more exposure to recognize the pattern across purchasing scenarios. Because FS2 was familiar with the number line from previous instruction, I leveraged this knowledge by referring back to the number line when FS2 hesitated during counting. I incorporated verbal counting cues from the paraprofessional when FS2 needed support maintaining one-to-one correspondence while physically counting bills.

For FS3, I coordinated with the aide to adjust the pacing of ASL vocabulary presentation based on FS3's responses. When FS3 demonstrated understanding by immediately beginning to count bills, the aide reduced prompting. When FS3 paused or appeared uncertain, the aide provided additional tactile guidance by redirecting FS3's attention to the number line or re-signing the question.

Across all students, I adjusted the lesson by recognizing when the simultaneous introduction of multiple skills created too much cognitive demand. Rather than continuing with the planned multi-step sequence for all scenarios, I simplified the task for some scenarios by focusing on one component at a time.

These intentional responses were effective because they were based on careful observation of student signals including vocalizations, body language, response time, and accuracy. By adjusting support levels in the moment rather than rigidly following the planned lesson sequence, I provided each student with the precise amount of support needed to experience success while continuing to build their math skills.]

6. How did the student information you provided in Part A (Written Narrative: Contextual Information) inform your math lesson planning and teaching?

a. Prior math learning

[The student information about prior math learning directly informed my lesson planning by ensuring the purchasing lesson built on established skills while introducing appropriate new challenges. FS1's prior work with single-digit addition and identifying equivalent cent values informed my decision to focus on dollar amounts and the round-up strategy, which extended their existing money skills into a functional purchasing context. FS1's experience with one-to-one correspondence through coloring activities prepared them for the physical task of counting bills, though the lesson revealed that transferring this skill to a new context with physical bills required more scaffolding.

FS2's prior work with matching \$1 and \$5 dollar bills and familiarity with the number line from previous instruction informed my decision to use the number line as a visual support in this lesson. Because FS2 was already familiar with the number line, I could leverage this existing



knowledge to introduce the round-up strategy. FS2's current work on one-to-one correspondence by matching sets of items to numbers aligned directly with the lesson's task of counting out individual \$1 bills to match payment amounts.

FS3's prior work with matching \$1 and \$5 dollar bills and their current goal of using touch math curriculum to add up 1-10 with manipulatives informed my selection of tactile dollar bills and focus on counting bills within the 1-10 range. This ensured FS3 could apply their existing counting skills within the purchasing context while working toward their IEP goal.]

b. Focus student's(s') assets (cultural and/or linguistic) and/or interests

[The student information about assets and interests shaped how I personalized the lesson content and structured communication supports. FS1's engagement in drawing and writing informed my decision to include visual support and multiple opportunities for expression through both AAC and written responses. The incorporation of milk as FS1's preferred food created personally meaningful contexts for math learning.

FS2's documented preference for technology-based learning directly informed the prominent use of the PowerPoint presentation and AAC device throughout the lesson. The incorporation of pizza as FS2's preferred food increased engagement and participation in purchasing scenarios. FS3's communication through American Sign Language at the single-word level informed my collaboration with the one-to-one aide by preparing ASL reference materials for all staff. FS3's strong temporal awareness informed the predictable lesson structure with clear transitions. FS3's independent use of their magnification device informed my seating arrangement that optimized lighting and positioning. The incorporation of pizza and spicy barbecue chicken as FS3's preferred foods created meaningful contexts for engagement.]

c. Focus student's(s') learning needs

[The students' information about learning needs informed specific instructional accommodations and support strategies throughout the lesson. FS1's need for 30-second processing time between prompts informed my instruction to provide visual cues first followed by verbal cues after a 30-second pause. FS1's documented tendency to vocalize frustration when re-prompted too soon informed my training of support personnel to internally count to 30 seconds and recognize vocalizations as communication about needing more time. FS1's use of an AAC device informed my collaboration with the Speech and Language Pathologist to pre-program relevant math vocabulary.

FS2's documented benefit from seeing multiple examples to identify patterns informed my decision to provide five purchasing scenarios with consistent structure so FS2 could recognize the pattern of the round-up strategy through repeated exposure. FS2's use of an AAC device informed the incorporation of technology-based vocabulary support throughout the lesson. FS3's primary disability of deaf-blindness informed the extensive sensory accommodations including tactile dollar bills, high-contrast and enlarged materials, and magnification device access. FS3's IEP goal of increasing independent communication informed the consistent opportunities for FS3 to respond using ASL and the one-to-one aide's support in facilitating communication throughout the lesson. FS3's need for one-on-one adult support during instructional activities informed the positioning and role of the one-to-one aide during the lesson.]



7. Analyze the effectiveness of the adaptation(s) used to support each focus student's learning needs.

- a. Did the adaptation(s) for Focus Student 1's language learning needs effectively support their progress toward the learning goals and their IEP goal(s) related to the math content, math practices, and/or math academic language that were addressed in the lesson? Why or why not?

[The adaptations for FS1's language learning needs were effective in supporting their progress toward the math academic language goal but less effective for the math content and practice goal. The pre-programmed AAC device with target vocabulary including cost, pay, and dollars allowed FS1 to access math language aligned with their Level 1 Beginning English proficiency. The simplified sentence frame "The item costs ____ and I pay ____" reduced linguistic demand while maintaining focus on key vocabulary. After two iterations with modeling, FS1 independently initiated the sentence frame when shown a visual prompt, demonstrating growth in use of math vocabulary. The 30-second processing time between visual and verbal prompts honored FS1's documented language processing needs and allowed them to formulate responses using their AAC device without rushing. These language-focused adaptations were effective because they provided structured, predictable linguistic patterns that FS1 could internalize and use independently; However, the adaptations were less effective in supporting FS1's progress toward their IEP goal of adding numbers using the vertical method. The number line and round-up strategy represented appropriate challenges aligned with this goal, but combining these with the language demands of the sentence frame and the physical task of counting bills from a stack created too much cognitive load. While the visual-first instructional approach aligned with FS1's strength in visual processing, the simultaneous introduction of multiple new skills required more scaffolding than the adaptations provided. FS1's vocalizations during the number line portion signaled frustration, indicating that the adaptations needed to be more carefully sequenced. Future adaptations should separate language development activities from new math concept introduction to allow FS1 to demonstrate their math reasoning without competing linguistic demands.]

- b. Did the adaptation(s) for Focus Student 2's specific math learning need(s) effectively support their progress toward the learning goals and their IEP goal(s) related to the math content, math practices, and/or math academic language that were addressed in the lesson? Why or why not?

[The adaptations for FS2's specific math learning needs were effective in supporting their progress toward the learning goals and their IEP goal of demonstrating one-to-one correspondence. The use of the number line, with which FS2 was already familiar from previous instruction, provided an accessible entry point for understanding the round-up strategy without requiring them to learn a new tool simultaneously. This adaptation leveraged FS2's existing knowledge and allowed them to focus cognitive resources on reinforcing the concept of rounding up using the number line. The task of counting out individual \$1 bills from a large stack to match the payment amount displayed on the board directly addressed FS2's IEP goal of demonstrating one-to-one correspondence. This adaptation provided concrete, hands-on practice with the specific skill FS2 is working to develop. The provision of multiple purchasing scenarios aligned with FS2's documented benefit from seeing multiple examples to identify patterns. After observing the pattern across a few scenarios, FS2 began anticipating the number of bills needed, demonstrating pattern recognition and predictive reasoning. The AAC device and



technology-based presentation through PowerPoint matched FS2's documented preference for technology-based learning and increased their sustained attention throughout the lesson. Using pizza as FS2's preferred food in the purchasing scenarios created motivation for engaging with the math content. However, the adaptations could have been strengthened by providing more explicit verbal counting cues earlier in the lesson. FS2 required consistent verbal counting support from the paraprofessional to maintain one-to-one correspondence when physically counting bills, indicating that this scaffolding should have been built into the initial instruction rather than added responsively. Overall, the adaptations were effective because they built directly on FS2's prior knowledge, provided concrete practice with their IEP goal skill, and matched their documented learning preferences.]

- c. Did the adaptation(s) to support Focus Student 3's well-being and/or behavior effectively support their progress toward the learning goals and their IEP goal(s) related to well-being and/or behavior² that could impact their access to the math lesson? Why or why not?

[The adaptations to support FS3's well-being and behavior were effective in supporting their progress toward the learning goals and their IEP goal of increasing independent communication. The environmental adaptations including seating FS3 near the screen in a well-lit area optimized their use of the magnification device and allowed them to independently alternate visual focus between the instructor and their tactile materials. This positioning supported FS3's documented adaptive technology proficiency and self-advocacy skills. The predictable lesson structure with each purchasing scenario following the same sequence reduced uncertainty and supported FS3's documented strong temporal awareness. The visual schedule displaying the sequence of activities, including preferred activities following the lesson, reinforced the classroom's "first-then" structure and promoted self-regulation.

The provision of tactile dollar bills, high-contrast and enlarged materials, and the magnification device ensured FS3 could access the math content through their preferred sensory modalities. The one-to-one aide's consistent positioning nearby to provide visual access to sign language supported FS3's communication needs as a deaf-blind student. These adaptations were effective because they removed barriers to access and allowed FS3 to focus on math learning rather than managing environmental challenges.

Most significantly, the adaptations supported FS3's IEP goal of increasing independent communication. Although at the time of the lesson FS3 did not have an assigned intervener, I was able to mediate that by providing ASL reference material to paraprofessionals in the classroom that would rotate as their dedicated one-to-one aide. The consistent presentation of math vocabulary in American Sign Language by the aide combined with the preparation of ASL reference materials for all staff provided FS3 with multiple opportunities to engage in communication throughout the lesson. The predictable structure created safe opportunities for FS3 to initiate communication, and the aide's responsive support honored FS3's communication attempts while encouraging greater independence. The incorporation of pizza and spicy barbecue chicken as FS3's preferred foods created meaningful contexts for communication and increased motivation to participate. The one-on-one support from the aide allowed for individualized pacing and immediate responsiveness to FS3's communication and behavioral cues, which was essential given FS3's documented need for one-on-one adult support during instructional activities.]

² For example, attention, engaging with activities



Extensive Support Needs

Step 4: Apply—Part H: Narrative: Application of What You Learned Template

Directions: Type your responses within the brackets following each prompt (up to 4 pages). Refer to evidence from Step 1, Step 2, and/or Step 3 (e.g., Parts A–G) to support your responses. Do not delete or alter the prompts. For more information, see page 39 of the Math Cycle Performance Assessment Guide.

1. Based on what you learned from the math lesson you taught during this cycle, do you need to re-teach the focus student(s) any part of the lesson in the next math lesson you plan to teach? Explain why or why not.

[I will re-teach portions of this lesson to all focus students. Introducing multiple new skills simultaneously created confusion, requiring a more sequenced approach.

For FS1, the sentence frame "The item costs ____ and I pay ____" with the AAC device demonstrated progression. However, the number line and round-up strategy needed more time to develop and will need to be re-taught separately. Future lessons will focus on the number line and round-up concept separately instead of combining them with language or physical bill manipulation tasks.

For FS2, the one-to-one correspondence skill of counting out \$1 bills needs additional practice with verbal counting support. While FS2 demonstrated engagement and pattern recognition, they benefited from verbal counting cues to maintain accuracy. Future lessons will explicitly incorporate verbal counting cues to scaffold pattern recognition.

For FS3, the ASL mathematical vocabulary and counting of bills with tactile materials were introduced; however, FS3 is still developing number recognition and independent initiation of communication using ASL. Additional repetition will build fluency and support progress toward their IEP goals.

The lesson attempted to integrate too many components simultaneously. Students made progress toward academic language goals but needed additional scaffolding in mastering math skills. Breaking down the lesson into smaller, targeted sequences will allow students to develop mastery before integrating multiple skills into complex tasks.]

2. How will you continue to use UDL to engage the focus student(s) in math learning (content and practice)?

[I will continue using UDL by providing multiple means of representation, engagement, and action and expression that build on students' strengths.

For multiple means of engagement, I will continue incorporating content that connects to students' preferences and interests. The incorporation of preferred foods demonstrated the effectiveness of personalization for maintaining attention. Future lessons will feature personally meaningful contexts, such as incorporating preferences or familiar activities.

For multiple means of representation, I will continue providing visual, tactile, and technology-based support. Since introducing multiple novel representations simultaneously was ineffective, future lessons will introduce them sequentially, practicing the number line alone, then



counting bills alone, before combining both. During whole group activities, I'll assign students their preferred representations based on present levels, while small group instruction allows easier integration of multiple means. This maintains UDL while managing cognitive load. For multiple means of action and expression, I will continue allowing students to demonstrate understanding through their preferred communication methods including AAC devices, ASL, physical manipulation, and written responses. FS1's success with the AAC sentence frame, FS2's engagement with technology, and FS3's use of ASL showed that differentiated expression supports are essential for assessment.

I will continue leveraging students' prior learning as an engagement strategy. Building on established skills, like FS2's number line familiarity, created entry points for new learning. Future lessons will explicitly connect new content to previously mastered skills, which reduces cognitive demand and increases confidence.]

3. What additional age and/or developmentally appropriate higher-order thinking skill(s) will you engage the focus student(s) in to advance their math content and practice?

[Future lessons will engage students in analysis, evaluation, and application tasks that build on foundational purchasing skills.

Once students develop mastery over basic purchasing, I will engage them in evaluation tasks where they determine whether a given amount is sufficient for a purchase. For example, students will be shown four dollars and asked "Can you buy this item that costs five dollars?" This requires comparing quantities, analyzing the relationship between available money and cost, and evaluating whether a transaction is possible.

Future lessons will engage students in synthesis by connecting purchasing to classroom budgeting. Students will earn classroom dollars through jobs to purchase preferred items, synthesizing information about earnings, costs, and affordability. For example, FS1 earning three dollars but needing five must analyze the gap and create a plan to earn more.

Future lessons will also engage students in applying the purchasing strategy to novel contexts including the school cafeteria, school store, and community-based outings at local businesses. Application requires transferring skills to new, less predictable situations.

I will engage students in comparison tasks where they compare costs of different items and determine which is more expensive or which they can afford. These higher-order thinking tasks maintain the functional focus while deepening mathematical reasoning and preparing students for greater independence.]

4. How will you continue to advance the focus student's(s') math ALD?

[Students will build on the vocabulary and sentence structures from this lesson to participate in future vocational and financial mathematics activities that expand their academic language. Students will be introduced to expanded mathematical vocabulary related to earning income through a future classroom job system. The sentence frame structure will be extended to new contexts. For example, students will learn "I did ___ job, I earned ___ dollars." For FS1, this builds on their success with the purchasing sentence frame while introducing new vocabulary including job, earned, and income. FS1's and FS2's AAC devices will be pre-programmed with these terms. For FS3, these terms will be consistently presented in ASL by the one-to-one aide. As students master purchasing and earning vocabulary, I'll introduce financial management terms (save, spend, earn, afford) using the same multimodal approach: visual cards, AAC programming, and consistent ASL presentation.]



I will continue using simplified sentence frames matched to each student's language proficiency level. For FS1, who is at Level 1 Beginning English proficiency, sentence frames will remain short and predictable with visual support. For FS2, exposure to mathematical vocabulary in both English and Spanish (and icons) will honor their bilingual background. The academic language development will be embedded in functional contexts that prepare students for post-secondary life after they complete their educational program, developing communication skills necessary for supported employment, independent living, and financial self-advocacy.]

5. In the future, how will you collaborate with and/or facilitate instructional support personnel to support the focus student's(s') access?

[I will continue collaborating with the Speech and Language Pathologist to program AAC devices with expanded mathematical vocabulary as the curriculum advances. As new terms are introduced, such as vocabulary related to earning income, budgeting, and financial management, I will meet with the SLP in advance to ensure FS1 and FS2's devices are pre-programmed. I will also continue providing all staff with ASL reference materials, verified by the one-to-one aide (or intervener once assigned), for key mathematical vocabulary to ensure FS3 receives consistent communication support.

I will collaborate with the Occupational Therapist to create goals and activities that reinforce math goals in varied and realistic contexts. Additionally, I will work with paraprofessionals to incorporate purchasing activities during lunch routines. Paraprofessionals can facilitate purchasing scenarios during these routines, where students apply mathematical reasoning about costs and payments. For example, when students select an item, paraprofessionals can present the cost and scaffold students through determining the payment amount using the dollar-up strategy. This embeds mathematical learning into a functional daily routine and supports skill generalization.

I will continue holding pre-lesson planning sessions with all staff to review lesson objectives, student learning goals, and staff responsibilities. These sessions will ensure staff understand how to support students with AAC devices, ASL vocabulary, and tactile materials. This practice will ensure all staff can implement future lessons while maintaining consistency in how each student's unique learning needs are supported. Additionally, staff can provide input on what ASL terms to include in materials.]

6. How will you continue to leverage the focus student's(s') assets (cultural and/or linguistic) and/or interests related to their math learning?

[I will continue leveraging students' assets and interests by personalizing content to reflect their preferences and honoring their communication strengths.

For FS1, I will incorporate preferred items into math scenarios. FS1's strength in visual processing will guide instruction, with visual support presented first followed by verbal instruction after 30-second processing time. I will build on FS1's strength in creative expression by providing opportunities to express understanding through AAC devices and written responses, while honoring their Level 1 Beginning English proficiency through simplified language structures.

For FS2, I will incorporate preferred items into math lessons and honor their bilingual proficiency by presenting vocabulary in both English and Spanish when appropriate with support from



multilingual staff. FS2's preference for technology-based learning will guide selection of materials, including PowerPoint presentations and AAC devices.

For FS3, I will incorporate preferred items into math scenarios and honor their communication through ASL by ensuring all vocabulary is presented in ASL. I will support the one-to-one aide and all staff with ASL reference materials. I will leverage FS3's temporal awareness by maintaining consistent lesson structures with clear transitions and visual schedules.

I will connect mathematical learning to students' daily experiences. The lunch selection routine provides a familiar context where students engage with an embedded daily activity. Embedding mathematical activities into existing routines leverages students' familiarity and interest to create functional learning opportunities.

Future lessons will build on students' strengths in their preferred communication modalities: AAC devices with pre-programmed vocabulary for FS1 and FS2, and ASL with tactile materials for FS3. Leveraging these assets creates learning environments where students demonstrate mathematical knowledge through their strongest modalities.]

7. How will you continue progress toward the focus student's(s') IEP goal(s) related to:

- a. the math content, math practices, and/or math academic language that were addressed in the lesson

and/or

- b. well-being and/or behavior (e.g., attention, engaging with activities) that impacts their access to math?

[For FS1, I will continue progress toward their IEP goal of adding two-digit numbers by breaking down skills into smaller, sequential components. Future lessons will focus on the number line and dollar-up concept in isolation before integrating with physical bill manipulation. Once FS1 demonstrates mastery with the number line, I will gradually combine it with counting bills, then apply both to purchasing scenarios. I will support FS1's math academic language by maintaining the sentence frame structure and expanding vocabulary to include terms related to earning income and budgeting.

For FS2, I will continue progress toward their IEP goal of one-to-one correspondence by utilizing play money and providing explicit verbal counting scaffolds. Future lessons will incorporate built-in verbal counting cues that FS2 can internalize and fade toward independence. I will provide multiple scenarios with consistent structure to continue developing pattern recognition and will build on FS2's number line familiarity to reinforce understanding of currency values and one-to-one correspondence.

For FS3, I will continue progress toward FS3's IEP goals by: (1) using touch math curriculum to add up 1-10 with manipulatives to provide additional repetition with dollar bills and counting activities, and (2) increasing independent communication initiation by creating structured opportunities during lessons where FS3 can request help, ask for clarification, or express preferences using ASL.

Future lessons will build fluency with counting sequences in ASL using tactile materials and expand mathematical vocabulary in ASL to support both math ALD and communication goals. I'll embed intentional pauses where staff wait for FS3 to initiate interactions, supporting independent communication.]