

Subject(s): Math
Grade: Kindergarten
Lesson Time Allotment: 45-60 mins

TPE Target Skills:

1. Monitor student learning and adjust instruction while teaching so that students continue to be actively engaged in learning. (TPE 1.8)
2. Use knowledge about students and learning goals to organize the curriculum to facilitate student understanding of subject matter, and make accommodations and/or modifications as needed to promote student access to the curriculum. (TPE 3.2)
3. Reflect on their own teaching practice and level of subject matter and pedagogical knowledge to plan and implement instruction that can improve student learning. (TPE 6.1)

Part I – Goals and Standards TPE 1.4, 1.5, 1.6, 2.2, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5
1. Common Core Learning Standard(s) (CCSS) Addressed: (TPE: 3.1, 3.2, 3.3, 4.4) Math, ELA (or the other subjects when they are related to ELA) K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
2. State Content Standard Addressed: (TPE 3.1, 3.2, 3.3, 4.4) History/Social Science, Science, Physical Education, Visual and Performing Arts
3. ELD Standard Addressed: All Content Areas (TPE 1.1, 1.6, 3.5, 4.4) Part 1: Interacting in Meaningful Ways: A. Collaborative, B. Interpretive, C. Productive Collaborative- 3. Offering opinions Offer opinions in conversations using an expanded set of learned phrases (e.g., I think/don't think X. I agree with X), as well as open responses, in order to gain and/or hold the floor. Part 2: Learning How English Works: A. Structuring Cohesive Texts, B. Expanding and Enriching Ideas, C. Connecting and Condensing Ideas Structuring Cohesive Texts- 2. Understanding cohesion Apply basic understanding of how ideas, events, or reasons are linked throughout a text using more everyday connecting words or phrases (e.g., one time, then) to comprehending texts and composing texts in shared language activities guided by the teacher, with peers, and sometimes independently.
4. Learning Objective: What will students have mastered in terms of knowledge and/or skill as a result of this lesson? (TPE 2.2, 2.6, 3.2)

Students will be able to add up to the number 10 using visual representations of numbers.
Students will master the ability to use numbers 1 to 9 and add to 10.
Students will demonstrate the ability to use visual representations to solve an addition equation.

ELD Goal/Objective:

Students will verbally explain/express their math equation in whole group, paired, and one-on-one with a teacher (ex: First I chose 7 pink fish and then added 3 yellow fish to make 10).
Students will offer opinions of agreement or disagreement verbally in class (ex: I agree that 5 plus 5 equals 10).

Student-Friendly Translation: (Write this out as if you were explaining the objective of the lesson to your students in their language: "Today, we are going to master the concept of...by creating...")
Today, we are going to do some fun addition! I know you can all add up to the number 5, but now I want to see if you guys can add to the number 10. We are going to use some fun visuals like fishy's to help us add and count our numbers!

5. Relevance/Rationale: Based on what is best to teach from prior lessons and formative assessments with your students, why is this the right lesson for your students to learn right now in your class? **OR** Why are your learning objectives essential for future learning? **OR** Why are the outcomes of this lesson important in the real world? (TPE 1.3, 2.6, 3.2)

The class is already familiar with the ability to add numbers and using visual representations to help them add/count. Now they will be following my example to add to ten using $5 + 5$, but I want them to explore their knowledge of the other numbers to find other equations that also equal the number 10. By demonstrating their mastery of adding to 10, the students are showing that they are ready to move up to learn the next lesson of adding numbers to make 11-20.

Student-Friendly Translation:

My friends, you have already learned about adding numbers. You have practiced adding to 5 and even higher, but now I want to see how many of you remember what numbers can be added to equal 10. I am going to show you what two numbers I think can be added together to make 10, but then I want you to choose two different numbers and add them to make 10! I know you guys can do this, but if you need any help you can always raise your hand and remember you should try you *they respond with BEST*.

6. Essential Questions: (TPE 1.5)

What numbers can be put together to equal 10? How can we add to 10? How many different ways are there to add to 10?

7. Academic Vocabulary: (TPE 1.4, 1.6, 3.1, 3.2, 3.3, 3.5)

Addition, numbers, ten, equal

Other General Classroom Considerations

Student Assets and Funds of Knowledge (Including general cultural and linguistic background of students' home and family) (TPE 1.1)

- Students come diverse backgrounds and can learn a lot from each other
- They are active participants in class
- Always willing to help another classmate
- Very funny and playful bunch of kids
- Willing to listen and learn

Health considerations or physical development factors (if any)
None

Social-emotional developmental (SEL) factors that may influence instruction in this academic area or that could be addressed in this academic area (TPE 2.1)

- Sometimes they can be easily distracted by what others are doing/pay attention to the wrong doings of others instead of focusing on themselves
- They are so friendly, that the smallest disagreement between some kids can cause some class drama

Interests and/or aspirations in the class (relevant to this academic area) (TPE 1.3)

Many are interested in sports, coloring, food, and among us. Some activities can be focused around examples relating to student's areas of interests.

Opportunities to address challenges (such as misunderstandings or misconceptions) related to the learning objective and lesson (using Growth Mindset Language): This section is the bridge between the concerns for individual students identified in Section 7 and how this will play out in the context of the actual classroom setting and the lesson plans you are currently preparing.

Based on the information above, what difficulties may students have with the content? Specify anticipated difficulties for English language learners, students with special needs, or students with unique needs. Work to connect your information based on the student's IEP, behavioral plan, and/or observations by the teacher and teaching candidate. (TPE 1.4, 1.6, 2.1, 3.5, 4.4)

The students I have chosen to focus on tend to be more confident with their math skills and perform better when using manipulatives. For my lesson, I made sure to include manipulatives and plenty of visuals to help them better grasp the material being taught. Using these tools and giving repetitive and explicit directions will help the EL students as well. When they are doing individual work, I will make sure to do check ins with each student to get a better feel for their understanding and if necessary, I will reexplain the directions and model another example for them so that they feel better prepared.

Part III – Universal Access Lesson Adaptations TPE 1.4, 3.5, 3.6, 4.1, 4.4, 4.5, 5.7, 5.8 SSP-ELD

9. Modifications / Accommodations: What specific modifications/accommodations will be made based on the anticipated challenges for this set of students for this specific lesson? (TPE 1.4,

ELL / SDAIE Strategies: (TPE 1.6, 3.5, 4.4)

- What are at least three general SDIAE strategies you will engage?
 - Using simple language and avoiding complex phrases/words that can confuse the students
 - Providing as much oral instruction as possible with the assistance of visuals
 - Assessing/monitoring student progress as they work and doing individual check ins to see where they are at with the lesson and what their understanding is
- How will you address the CA ELD Standards you identified at the beginning of this lesson plan?

- During the lesson, students will have an opportunity to share their opinions about which two numbers they do think add to 10 or share why they do not think two numbers can be added to make 10.
- They will also be given the opportunity to critically analyze how their basic understanding of ideas (ketchup and mustard) can connect to this lesson. They will use shared language in the class to help them formulate their answers and compose their written text example.

Differentiation for Special Needs: Tie it to the specific needs of your students. (TPE 3.5, 4.4)

- The students who struggle with speech will be participating in the discussion so encouraging them to try their best when talking and giving them simple prompts to orally respond to will help
- For those who struggle with time management and emotional regulation, I will make a general class statement (so they do not feel singled out) about taking their time and trying their best, and that it is okay if they need more time. We can always arrange for that to happen.
- Because of the speech needs and IEP modifications, I will be repeating instructions and providing many visuals along with written text. I will also do one on one instruction with these students to clarify the expectations and walk them through the activity to ensure they have full understanding of what needs to be done.

Social-emotional Learning Support: <https://casel.org/what-is-sel/> (TPE 2.1)

- Identify a specific SEL competency(ies) that you will focus on for the whole class (Self-awareness, Self-management, Social awareness, Relationship Skills, Responsible Decision-making):
 - Self-management and responsible decision making
- Specific strategy that you will use to inculcate that competency:
 - Students who are being good models of self-management have the opportunity to receive a "love note" which is a way to reward the student for working hard and meeting the class expectations. Once they receive 20 love notes, then they can pick a treasure from the treasure box.
 - Verbal acknowledgement as students work (ex "Student is doing a great job working quietly and following directions")
 - Those who are not on task and do not complete the activity will lose recess time because they will have to stay in and finish their work.

Universal Design for Learning (whole class) Support: <http://udlguidelines.cast.org> (TPE 1.4, 4.4, 4.7)

- Multiple Means of Engagement:
 - develop self-assessment and reflection (9.3): Students will be able to assess their work as they complete the activity by referring back to the model and they will also be able to complete a self-assessment at the end of the lesson.
- Multiple Means of Representation:
 - Activate or supply background knowledge (3.1)- Students will be reminded of their ketchup and mustard math tools and they will be activating their prior knowledge of numbers and how to add them to get 10.
- Multiple Means of Action and Expression:
 - Use multiple tools for construction and composition (5.2): Students will be given math manipulatives to assist them when doing their math activity.
 - Enhance capacity for monitoring progress (6.4): Students will be able to have a template/model to refer to as they complete their own work. They will be encouraged to look

at the model to assess if their work is meeting the expectations and if they are following instructions. They will also complete a self-assessment at the end of the lesson.

Higher Order Thinking Strategies (Bloom's, Depth of Knowledge, Hess' Cognitive Matrix, G.A.T.E. Strategies, Graphic Organizers, etc.). What **three levels** of Bloom's will you address in this lesson to enhance the depth with which your students will engage the lesson objective? (Remember, Understand, Apply, Analyze, Evaluate, Create) (TPE: 1.4, 4.4)
Students will be expected to **remember** the ketchup and mustard adding/subtracting method to help them throughout this lesson. They will then **analyze** the many ways to add two numbers to get 10. After analyzing, they will **create** their own math equation including two numbers that can be added to correctly make 10.

10. Implementation of Strategies for Enhancing Lessons:

(Please address each of these only if you plan to use them, they are NOT mandatory)

<u>21st Century Skills:</u> Circle all that are applicable and describe how each will be observed during the lesson (TPE 1.5, 3.3, 4.7) Communication The students will be expected to participate in communication with me and Mrs. Fish throughout the lesson. Whether they need help or just want to share ideas. Collaboration Students will collaborate when thinking of what numbers can be added together to make 10. Creativity Critical Thinking They have to use critical thinking skills to analyze the problem and decide what numbers other than 5+5 can be added together to make 10.	<u>Technology:</u> How will technology be incorporated into the lesson? (TPE 1.2, 1.4, 3.6, 3.7, 3.8, 4.4, 4.8 4.9, 5.4)	<u>Visual and Performing Arts:</u> How will the students be provided with opportunities to access the curriculum by incorporating the visual and performing arts? (TPE 1.4, 1.7, 3.3, 3.6, 4.4) Students will be using visual arts and tools such as manipulatives and colored fish to help them count and add. There will also be plenty of visuals (videos, books, models) provided for students throughout the lesson.
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Part IV – Assessment of Student Learning

TPE 1.5,1.8, 4.4, 5.1, 5.3, 5.5

11. Assessment Criteria for Success: How will the teacher and the student know if each of the specific objectives identified above have been successfully met?

Formative Assessments: At least two formative assessments total, at least one with a rubric (attach rubric to this template) (TPE 1.8, 2.5, 5.1, 5.5)

Formative Assessment 1:

A check for understanding will be conducted multiple times throughout the lesson. Students will be asked to give a thumbs up as I assess their understanding of the instructions. They will be assessed as I walk around the classroom and watch their progress throughout the assignment. I will do one-on-one check ins as well.

Formative Assessment 2: Dr. Suess Fishbowl Activity

The activity completed in class will be the main assessment as it allows me to see if the students were able to find two numbers between 1-9 and add them correctly to make 10. I can also use it to assess their ability to use visual representations of numbers to add. I will use a rubric to grade their activities. **Rubric attached to assignment in a separate doc.

Peer and Self-Assessment: How will all students be involved in self-assessment and reflection on their learning goals and progress? If working in teams, how will they peer-assess each other and the group? Must include a rubric for either self-assessment or team assessment (TPE 1.5, 5.3) Students will have a self-assessment checklist to assess their own work. It will ask them the following:

Did I add to 10?

Did I color my fish in two different colors to help me add two numbers?

Did I use two different numbers, other than 5+5 to make 10?

**Rubric attached to assignment in a separate doc.

Part V – Instructional Procedure

TPE 1.4, 1.8, 2.1, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3, 3.5, 3.6, 4.4, 4.7

12. Instructional Method: (TPE 1.4, 2.1, 3.5, 3.6, 4.4, 4.7) Circle all that apply–

Direct Instruction

Cooperative Learning

Collaborative (Inquiry-Based) Learning

Students will be taught through direct instruction as I will be providing explicit directions and set clear expectations for their learning outcomes and work efforts. We will have a collaborative discussion and share ideas, but they will not be keeping account of each other's success for this specific lesson. They will be focusing on their own work and self-management. They will complete a given assignment after being walked through how to do the work and meet expectations. We will also be doing a self-assessment and students will be able to try and explain/analyze their own work with a rubric.

13. Prior Teaching, Prior Student Knowledge from Assessments or Student Funds of Knowledge:

The students have been taught how to add and subtract using the ketchup and mustard method. They are also knowledgeable with numbers and already know how to count as high as 10. With these funds of knowledge and prior learning, the students are well prepared to add to 10. They may need some reminders about adding and what numbers make 10 which is why I have structured those reminders into the lesson plan naturally.

14. Resources / Materials: What texts, digital resources and materials will be used in this lesson?

Students will need the following supplies:

-Manipulatives, math blocks

-Pencil

-Scissors

-Glue

-Coloring supplies (markers, crayons, colored pencils)

-Dr. Suess Addition Activity papers (Fishbowl, mini fish, written response sheet, construction paper)

15. Procedure: Provide a detailed procedure that includes estimated times and intended questions.

Lesson Explanation: How will the lesson objectives be explained to the students? How will you communicate how it relates to prior learning? How will you communicate your expectations for

learning and behavior? How will you establish a positive and safe learning environment? (TPE 2.2, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3)

Open –

Anticipatory Set: For engaging in initial problem solving and recruiting interest

To open, I would ask the students about ketchup and mustard. This is a addition and subtraction tool that they have been taught by Mrs. Fish. By asking about what does ketchup mean (add more) and what does mustard mean (wipe away), the students would engage in recall of prior teaching. We would discuss the meaning and do a few example problems of adding more ketchup and taking away mustard with our fingers.

A mini script example:

“Alright friends, do you remember using ketchup and mustard to learn math? Raise your hand if you know what ketchup means. *Pick on a student and have them answer, if they’re correct reinforce their answer, if wrong reinforce effort and call on another student for right answer* Good job, so ketchup means were adding more. What does mustard mean? *Pick on a student and have them answer, if they’re correct reinforce their answer, if wrong reinforce effort and call on another student for right answer* Awesome, mustard means we’re wiping it away. I want you guys to raise 5 fingers and we’re going to take away 2 fingers. So we wipe the mustard away *wipe motion and put two fingers down* How much do we have left? *answer 3* Yes! We have 3 fingers left. Now we’re going to add so think of ketchup, we want more. Let’s hold up 5 fingers again and add 3 more. Put on more ketchup. How many fingers do we have now? *answer 8* You guys are amazing! Today we’re going to focusing on ketchup so we want to add more. We’re going to add all the way up to 10!

Body –

The Seven Step Lesson Plan would suggest these stages: Teach and/or Model, Check for Understanding, Guided Practice, Independent Practice (TPE 1.8)

- Transition class from opening to reading one fish two fish, red fish blue fish by Dr. Suess and then go into watching a short Jack Hartmann YouTube video about addition to 10 https://www.youtube.com/watch?v=YBkpC29_Gal
- Use the video to transition into modeling of adding to 10 in an I do, we do format. I will first ask the class to take out their small math block manipulatives to help them count and add. When doing so, I will set the expectation that students are only using manipulatives for addition purposes, not to fool around with and that they are only supposed to touch their own, not anyone else’s. Once they have their manipulatives out, I will show them my own example of adding 2 blocks (one color) and 3 blocks (different color) to make 5. Then we will do it together taking 5 blocks (one color) and 5 blocks (different color) together to make 10. I will tell them to give me a thumbs up once they have made 10 by adding 5 blocks and 5 more blocks.
- After doing one examples with the blocks, I will bring out the felt board with the Velcro fish to show them how we are adding fish of different colors to make 10. I will model adding 5 and 5 together to make 10 again, then ask the kids to give me other numbers that make 10. We will add and count them together to make sure they add to 10. As I do this on the felt board, the students can use their blocks. I will continue using the thumbs up to check their understanding.
- Once we finish a few examples together, I will bring out the papers necessary for the fishbowl activity. I will walk the students through the activity step by step before sending them off to do it themselves. First, I will show them the written activity paper sheet. I will read what it says and explain to them that they have to fill in the blanks with numbers (and colors) they choose that can be added together to make 10. I will write my example of 5 red fish plus 5 blue fish make 10 fish. I will check for understanding with thumbs up. Then I will grab my sheet of fish and color 5 red, 5 blue. I will say we are cutting the fish out and gluing them onto our fishbowl

(show them fishbowl cutout). Then I will say we glue our fishbowl and our written paper onto the construction paper. Thumbs up check. I will show them my completed example for reference. Before sending them off to work independently I will remind them of the class expectations and tell them that they are supposed to choose 2 numbers that add up to 10. BUT they are not allowed to use 5 plus 5 because I used that in my example, so they must come up with two different numbers. Thumbs up check for understanding. Because we went through many examples earlier and they saw the YouTube video they should be able to come up with 2 numbers.

- The students will work independently to create their own fishbowl equation. As they do this, I will walk around the room and assess their understanding. During this time, I will remind the students to refer to my model. I will do individual check ins with the students to gauge their understanding and assist those who need it.

Close –

To close out this lesson, I will have the students complete a self-assessment prior to turning in their work. We will do the self-assessment together. Each student will be given an assessment paper which includes the following three questions:

- Did I add to 10?
- Did I color my fish in two different colors to help me add two numbers?
- Did I use two different numbers, other than $5+5$ to make 10?

I will read each question and then ask the students to reflect on their work. If they think they did what the question asked then they can draw a smiley face, if they did not do what the question asked then they will draw a sad face. When doing this I will remind them that it is okay to make mistakes and we are doing this so that next time we can be thinking of these types of questions during the lesson. Once they are finished, they will turn in their papers and assessments before exiting for snack.

Next Steps: How will next steps be communicated to the students about continuing to learn this topic after the lesson?

I will first thank the students for being such great listeners and reinforce their effort by giving them verbal praise. Then I will let them know that we are going to keep using our ketchup and mustard skills to help us add and subtract, but now were going to begin using bigger numbers during the next lesson.