**Why Can't I Remember? (🧠 A Cognitive Health Story)**
**(3rd Grade – 8-9 yrs.)**
**Think, Pair, Share: Real-World Problem Solving**

### 🧠 STORY CONNECTION – SLIDE 8 (Approx Time: 15-20 mins)

So, let us now think about math. What is math? It is learning about how to use numbers. There are LOTS of ways to use numbers…not just in the classroom. You can use numbers to figure out how much money you need to buy something you want like a new toy, or how many points you need to score to win a game, or how much gas you need to get to place you want to go, or how to fit a piece furniture through a door to put it into a room.  Or how many slices of pizza to cut so you get REALLY big pieces. It is ALL MATH!!! Instead of just memorizing formulas to use, trying to make sense of why you are learning how to use numbers will make it easier. You can also work with others, which can also make learning math more FUN.

**Materials needed:**

- Board or chart paper
- Math problems (5 included below- optional)

**Preparation needed:**

- Determine student grouping (5 problems equals 5 groups total)

**Instructions:**

1. In this activity, student(s) will work together to solve real-world math problems using strategies they think of, not those they have been taught. The problems are purposely a bit above grade level, so they must think and use what they already know to solve the problem.
2. Ask student(s) to brainstorm some of the strategies they use to solve math problems. Record them on the board or on chart paper. They might say some of the following:
   - Read the problem aloud
   - Draw a picture or diagram
   - Act it out
   - Look for patterns
   - Guess and check
   - Work backwards
   - Use a formula
   - Eliminate the wrong answers
   - Solve a simpler problem
   - Apply to everyday life

3. Next, tell the student(s) that they are going to get a math problem to solve. Their job is to read the problem first and then think about how they might go about solving it. They do not necessarily need to solve it at this point. They are just going to think about it and jot down some notes.

    *\*\*NOTE: The included math problems are a bit above 3rd grade level on purpose. Please use what is best for your student(s) based on their academic needs and abilities.\*\**

4. Pass out the problems (based on how you want student grouped) and give the student(s) several minutes to think about it and write down their ideas.

5. Once student(s) have had time to jot down their ideas and thoughts about solving this problem, pair or group them with the other student(s) who have the same problem. They are numbered 1-5.

6. When student(s) are in their like-problem groups, they are going to discuss their ideas for solving the problem with each other. They are then going to work as a team to solve the problem in the area indicated on the recording sheet. Remind them they might need to take ideas from each other to solve the problem. They need to work as a team and help each other.

7. After everyone has had the chance to solve their problems, have a representative from each problem group read the problem and tell the rest of the class how they worked together to solve the problem.

    *\*\*NOTE: You can decide to tell the student(s) or not that these problems are based on a higher-grade level's standards. \*\**

8. In closing, remind them that these problems are all examples of things they might have to solve in real life someday. By working together, making learning fun, and relating problems to things they already know, math makes more sense and becomes easier over time. Realizing that there are a lot of ways to solve problems makes it fun and when they have fun learning, they remember what they learned.

**Math Problems**

Name:

Problem #1

You are eating lunch with three of your friends. You have enough money to order three pizzas. How much pizza will each of you get to have for lunch? Use words, pictures, numbers, etc. to solve the problem.

Write down your ideas for solving this problem below.

Work with your partners to solve the problem.

What is the answer to the problem?

Name:

Problem #2

The school ordered 500 pencils to give out to teachers to use in their classrooms. Each teacher needs to get the same amount. If there are 25 teachers in the school, how many pencils will each teacher get? Use words, pictures, numbers, etc. to solve the problem.

Write down your ideas for solving this problem below.

Work with your partners to solve the problem.

What is the answer to the problem?

Name:

Problem #3

The hotel has seven floors. The lobby, restaurant, and gym are on the ground floor. Guest rooms are on the 1st-6th floors. There are 35 guest rooms on each floor. How many guest rooms are in the hotel? If each guest room can accommodate two guests, what is the maximum number of guests that can stay in the hotel? Use words, pictures, numbers, etc. to solve the problem.

Write down your ideas for solving this problem below.

Work with your partners to solve the problem.

What is the answer to the problem?

Name:

Problem #4

Sam was 4 feet 10 inches last year. Over the summer, Sam grew 6 inches. What is Sam's height in feet and inches now? Use words, pictures, numbers, etc. to solve the problem.

Write down your ideas for solving this problem below.

Work with your partners to solve the problem.

What is the answer to the problem?

Name:

Problem #5

You started working on your homework at 3:25 pm. You decided to take a break after you had been working for 45 minutes. What time did you take your break? Use words, pictures, numbers, etc. to solve the problem.

Write down your ideas for solving this problem below.

Work with your partners to solve the problem.

What is the answer to the problem?