## Multiplication Game - Create Products within 100 via playing cards

Subject: Mathematics
Grade: Third

## Content Objective:

Creating multiplication problems with products within 100 via Chinese playing cards

## Behavior Objective:

During whole group instruction at their desks and on the rug, students are expected to have their eyes on the teacher or whomever is speaking. They are also expected to be listening, paying attention, and engaged. If they become distracted, I will pull them back to the lesson by using a guided call or thank other students who are on task in hopes to trigger them back to the lesson.

When students are working in small groups, they may raise their hand if they have a question or form an O over their head if they are finished with their task.

## Standards:

## CCSS.MATH.CONTENT.3.OA.A. 1

Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$.

## CCSS.MATH.CONTENT.3.OA.B. 5

Apply properties of operations as strategies to multiply and divide. 2 Examples: If $6 \times 4=24$ is known, then $4 \times 6=24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5=15$, then $15 \times 2=30$, or by $5 \times 2=10$, then $3 \times 10=30$. (Associative property of multiplication.) Knowing that $8 \times 5=40$ and $8 \times 2=16$, one can find $8 \times 7$ as $8 \times(5$ $+2)=(8 \times 5)+(8 \times 2)=40+16=56$. (Distributive property.)

## Materials:

- Playing cards
- Scratch paper
- Pencil / Eraser


## Previous Knowledge:

Students have been introduced to multiplication with three weeks of previous lessons. They are familiar with multiplying numbers but have not hit the point of mastery yet when it refers to
numbers within the range of $1 \times 1$ to $10 \times 10$.

## Duration:

## Warm-up - 10-15 minutes

Choral counting by 6's to practice student fluency practice. Students will be skip count with me as I write numbers on the board. One student will pick sticks for who will comment on what they notice about the numbers and it will be documented on the side. We will continue with this warm-up the following day as well.

## Lesson:

After the warm-up, I will state the purpose of the lesson: Creating a game to come up with products within 100 via Chinese playing cards (we created yesterday in Social Studies.) I will bring this up a handful of times throughout the lesson to ensure students are aware of why we are practicing this skill today.

## Guided Practice:

Once the lesson's purpose has been stated, I will ask students to leave their individual desks and partner them off to work in groups of 2 . We will start by looking back at the Chinese playing cards we created the day before in Social Studies. I will ask them questions about the reasons they decorated the cards the way they did and reiterate the symbolism behind the examples I showed them the day before.

We will then focus on placing cards in a $3 \times 3$ array face up. I will ask them to come up with different multiplication equations to come up with various products. Once they do this, they will remove those cards, and create a new equation with the remaining cards. They will take turns practicing this and ultimately; whomever has the highest amount of products wins the game.

While students are discussing their strategies on how to implement the highest product for their round, I will be walking around taking note of who solved which way so I can call students up to the board later on to share their work. Once I have had a handful of kids share their strategies and thinking behind them, I will start a discussion to further engage the content and push students critical thinking within multiplication facts.

## Debrief:

After students have had some time to work on their problem sets, I will collect their sheets and open up the discussion about today's lesson. I will ask them various engagement questions about today's lesson (what did they learn, what ways did they break up their problem, what parts stuck out, etc.) After our discussion, I will repeat the content objective to really drive home the purpose of today's lesson: Multiplying within 100 via playing cards.

