

Facilitation Guide



Digital Guide



Secret Handshake

ROUTINE OVERVIEW

In this activity, students work with a partner to create a “secret handshake” that represents a given multiplication equation. Each pair choreographs a sequence of unique movements based on the first factor, then repeats the sequence according to the second factor. Pairs perform their handshakes while classmates listen, count the movements and repetitions, and try to identify the secret multiplication equation.

Maryland Standards

MARYLAND STATE MATH STANDARDS

- **3.NOS.B.2** – Represent and interpret multiplication of two factors (0–10) as equal groups or as a composed unit that can be repeated/iterated. Explain the relationship between the factors and products.
- **3.NOS.E.9** – Recall or quickly derive multiplication and division facts within 100 (e.g., factors less than or equal to 10 and quotients less than or equal to 10).

MARYLAND ARTS STANDARDS

- **DA.AS1.I:3–5:1** – Demonstrate the ability to create and perform dance through guided and self-exploration of a variety of stimuli.
- **DA.AS8.E:3–5:1** – Interact effectively with others and discuss possible meanings and choreographic intent of an observed dance.



Not in MD? View [National Standards in the Digital Guide](#)

Getting Ready ★ **REVEAL MATH: 3rd Grade: Unit 3**

ARTS INTEGRATED LEARNING OBJECTIVE:

SWBAT choreograph and repeat a secret handshake movement sequence to represent a given multiplication equation, using the first factor as the number of movements and the second factor as the number of sequence repetitions.

MATH DOMAIN:

Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division	Understanding multiplication as equal groups
		Connecting repeated addition to multiplication
		Building fluency with multiplication facts within 100

WHAT'S BEFORE: Explore equal groups, skip counting, and repeated addition using concrete models and drawings.

WHAT'S NEXT: Represent multiplication with arrays, models, equations. Apply multiplication strategies and properties. Solve real-world problems.

MATERIALS:

- [Slides](#)
- Open space for students to work with a partner
- [Multiplication or number cards](#)
- Whiteboard or chart paper
- Markers
- Whiteboards or recording sheets (optional)
- Movement cards (optional)

MATH SKILL: Identify and represent multiplication as equal groups.

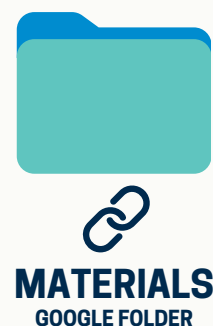
ART SKILL: Create movement phrases.

TEACH

Facilitation Steps

1. **Hook & Introduce:** Explain that students will represent multiplication equations by creating a "secret handshake" with a partner.
2. **Pair Up:** Assign or allow students to select partners.
3. **Assign Equations:** Give each pair a multiplication card.
 - a. *Example:* $4 \times 2 = 8$
4. **Define the Parameters:** Explain the movement rules clearly:
 - a. **First factor** = Number of unique movements (1 movement per count).
 - b. **Second factor** = Number of times to repeat that sequence.
 - c. **Product** = The total number of counts performed.
5. **Model:** Physically demonstrate the example with a student helper:
 - a. *Example:* $4 \times 2 = 8$
 - b. Show 4 distinct movements (clap, high-five, fist-bump, snap) done at a 1-count pace, then repeat the whole sequence a second time to equal 8 total counts.
 - c. Optional: In slides utilize the Fresh Prince of Bel-Air clip which has 2 movements that are played numerous times. Pause the video at different moments and have students create the equations. Ability to create numerous equations based on when the video is paused in the repetition sequence.
6. **Choreograph (2 Mins):** Start a 2-minute timer for pairs to collaborate and practice their handshakes.
7. **Perform & Guess:** Select 2 pairs to perform. Instruct the audience to silently count the movements and total counts to guess the performing pair's equation.

***Note:** Remind the class to celebrate each group's unique choreographic interpretation with applause.



Assessment & Reflection

Throughout the activity, the teacher will observe each pair's secret handshake to determine whether the choreography accurately represents the assigned multiplication equation. During the performance portion, students will demonstrate their understanding by identifying the equation represented by their classmates' movements. The teacher will use questioning to check that students can explain:

- How the **first factor** represents the number of unique movements.
- How the **second factor** represents the number of times the sequence is repeated.
- How the **product** represents the total number of counts performed.

TEACH

Assessment & Reflection

Students' ability to correctly create, perform, and identify multiplication equations through movement will serve as evidence of their understanding of multiplication as repeated groups.

Following the activity, students will discuss how movement helped them make sense of multiplication. They will reflect on how repeating a sequence of movements is similar to repeating equal groups in a multiplication equation. Students may respond to prompts such as:

- How did creating a secret handshake help you understand multiplication?
- How did the repeated movement sequence represent the multiplication equation?
- How did counting the movements help you find the product?
- How could you represent the same multiplication equation using different movements?

Differentiation

Accommodations

- Provide picture cards or movement icons for students who benefit from visual supports.
- Pair students strategically to provide peer modeling and assistance.
- Offer movement choices that can be completed standing, seated, or using upper-body movements only, ensuring all students can participate regardless of physical ability.
- Reduce the number of unique movements (e.g., 2×3 instead of 4×5) for students who need additional support.
- Allow students to rehearse with teacher guidance or use verbal counting while performing.

Small Group Instruction

- Work with a teacher or intervention group using simpler multiplication facts (0s, 1s, 2s, 5s, and 10s).
- Provide immediate feedback as students build and perform their handshakes.