

# Salute

Salute is a classic math game that can be used to develop computational fluency and algebraic thinking for students in grades 1-9.

**Original sources:** Power of Ten by Trevor Calkins and Box Cars and One-Eyed Jacks resources by Jane Felling and Joanne Currah

## Materials needed:

- 1) Deck of cards (jacks, queens, kings removed) with Ace = 1
- 2) three players

## Instructions:

- 1) Choose addition or multiplication focus.
- 2) Two players stand facing each other and the third player stands between them.
- 3) The two facing players are each given half a deck of cards and keep them face down in their hands in front of them.
- 4) The third player calls "salute!" and the two players take the top card from their stack and place it facing out on their forehead without looking at it.
- 5) The third player calculates the sum or product and calls it out. The other two players have to figure out what number they have on their forehead.
- 6) Time is provided for each player to come to an answer and then each player explains their answer. (Can choose to not have them orally explain their reasoning every time).
- 7) If you want to have a "game" element, you can add the condition that whoever gets their answer first and explains their reasoning so that it makes sense to their classmates, wins the cards for that round.

*Example addition game play:*

*Player Three says "Salute!"*

*Player One turns up a 5.*

*Player Two turns up a 8.*

*Player Three says "The sum is 13."*

*Player Two says "8!" and waits for Player One.*

*Player One count on fingers and says "5!"*

*Player Two explains, "I know its 8 because I thought 'what plus 5 equals 15 and I knew 5+5 is 10 and I needed three more so its 8 (5 and 3)"*

*Player One explains, "I know its 5 because I say they had 9 and the answer is 13 so I counted on – 9, 10, 11, 12, 13 on my fingers and that was five fingers."*

After a game, the teacher can ask questions to promote thinking, computational fluency and flexibility and reflection such as:

- a. If these two numbers came up, what different strategies could I use to add or multiply them?
- b. If I needed to figure out  $8 + ? = 13$ , what strategies could I use? What do you know already that could help you with this?
- c. How does knowing about addition help you think about subtraction?
- d. How does knowing about multiplication help you think about division?

Note: Model and practice not using mathematical vocabulary during the game. The “sum” is, the “product” is, the two factors when multiplied make... etc.

### **BC Mathematics Curricular Content and Competencies:**

- computational fluency develops from a strong sense of number
- addition facts to 20
- relationship between addition and subtraction
- multiplication facts to 100
- relationship between multiplication and division
- missing part/variable equations – algebraic thinking
- develop mental math strategies
- develop, demonstrate and apply mathematical understanding through play
- use mathematical vocabulary and language
- explain and justify mathematical ideas and decisions
- connect mathematical concepts to each other

### **Different ways to play:**

The game can be adapted for students developing their fluency in addition by using ten frame cards or by limiting the range of cards to 1-5. For students with developing fluency in multiplication, the range of cards can be limited to 1-5. For students in grades 8 and 9, a fraction deck of cards could be created to use. In grades 6-9, students can practice operations with integers by having the black cards be positive integers and the red cards be negative integers.