How Much? How Many?

Purpose: Specify what math skill(s) the interactive game/activity is designed to practice
Grade Level/TEKS Reference: Identify the grade level(s) for the interactive game, and specify the math TEKS that are practiced by playing the game

**Grade 1:**
(3) Number and operations. The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. The student is expected to:
(A) use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99;
(B) use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as $2 + 4 = [ ]$; $3 + [ ] = 7$; and $5 = [ ] - 3$;
(C) compose 10 with two or more addends with and without concrete objects;
(D) apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10

**Grade 2:**
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:
(C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and

**Grade 3:**
(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:
(E) represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting;

Length of time necessary for game or activity: A minimum of 15 minutes is recommended.

Number of Participants: One student per game.

Source for Game or Activity: https://gregtangmath.com/howmany

Procedure:
There are 6 levels in this game. The student will answer the questions on the screen and move to a new question if they get the answer correct.
Level 1: Compare to 5. - Students are given a tens frame with different items, and they will answer the word problem on the screen.
Level 2: Count to 10- Students are given a tens frame with different items, and they will answer the word problems and equations on the screen.
Level 3: Make 10 and 20- Students are given 2 tens frames and are asked to make 10 and 20 with the items in the frames. Students will answer the questions on the screen.
Level 4: Group to 10- Students answer the equations using the pictures on the screen.
Level 5: Nested Arrays- Students are given an array and are encouraged to use a method, such as skip counting, to find the correct answer.
Level 6: Series and Tricks- This is combination of levels 1-5.
Students can use hints to figure out how to solve the problem. Students are timed, so they must solve the questions quickly.
There are multiple rounds in each level. The teacher can decide the level the students start on. Students can start at the first level, or the level the teacher finds most appropriate.
The teacher may want to play as a whole group at the Smart board to introduce the game to students.
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