Million Dollar Games from Dollar Store Dreams

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Why Should You Incorporate Games in Your Classroom?

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NCTM's Why?

When played repeatedly, games support students' development of computational fluency.

04

NCTM's Why? Games present opportunities for

practice, often without the need for teachers to provide the problems. Teachers can then observe or assess students and work with individuals or small groups of students.

U5 NCTM's Why?

Games have the potential to allow students to develop familiarity with the number system and with "benchmark numbers" (such as 10s, 100s, and 1000s) and engage in computation practice, building a deeper understanding of operations.

Carole's Whys?

game!

02

NCTM's Why?

Playing games encourages

different strategies for

deepen their understand-

- Games create a community.
 Games level the playing field and give reluctant learners a
- comfortable place to jump in. 4. Games encourage kids to speak MATH! 5. Keeps students
 - ENGAGED!

06 NCTM's Why?

Games support a school-to-home connection. Parents can learn about their children's mathematical thinking by playing games with them at home.

#2-6 Source: http://www.nctm.org/publications/teaching-children-mathematics/blog/why-play-math-games_/





Some of the items to start watching for:

Other ideas:







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Mathematician_____

Game_____

Game Talk

What skill/concept did the game you played help you practice?

What strategy did you find that really worked?

What strategy did you see a classmate use that you think you'll try next time?

Tell us about something you noticed yourself getting better at as you played.

If you could recreate this game, what changes would you make?

What great game idea do you have that could help us practice this same skill/concept?







Mathematician_

Date__

Brain Page

.....







Materials cupcake box (or a muffin tin)





coinsplastic or real



paper wad

Variations of this game can support:

K.4(A) identify U.S. coins by name, including pennies, nickels, dimes, and quarters 1.4(A) identify U.S. coins including pennies, nickels, dimes, and quarters by value and describe the relationships between them 1.4(B) write a number with the cent symbol to describe the value of a coin 2.5(A) determine the value of a collection of coins up to one dollar 2.5(B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins 3.4(C) determine the value of a collection of coins and bills 4.2(E) represent decimals, including tenths and hundredths, using concrete and visual models and money 4.2(F) compare and order decimals using concrete and visual models to the 4.3(G) represent fractions and decimals to the tenths or hundredths as distances from zero on a number line hundredths 4.4(A) add and subtract whole numbers and decimals to the 5.2(A) represent the value of the digit in decimals through the thousandths using expanded notation and numerals 5.2(C) round decimals to tenths or hundredths 5.3(E) solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers 5.3(G) solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm 5.3(D) represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models 5.3(F) represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models 5.9(A) represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots

1. Using a half-dozen or dozen cupcake box (classroom parties can pay off), glue different amounts of coins in each cupcake spot.

2. Place 1-2 marbles in the cupcake container.

3. Decide which skill your students will practice and print the corresponding Think Sheet.

(Options includes: Comparing (1 marble), Ordering (3-5 marbles) Addition, Subtraction, Multiplication (2 marbles)

See game options and instructions on next page.



Shake Rattle Roll

Comparing (1 Marble)

- Play in pairs.
- Player 1 shakes the container.
- Count the value of the coins where the marble lands.
- Write the total on the Think Sheet.
- Player 2 repeats process. Players compare the 2 values. Shake it up!

4th & 5th Grade- Have students write the totals as fractions and decimals!

Addition (2-3 Marbles)

(best for 4th-5th grades)

- Place 2 or 3 marbles in the container.
- Player 1 shakes, counts the 2 or 3 totals and writes them on the Think Sheet.
- Player 1 adds the amounts.
- Player 2 repeats this process. Player with the biggest sum wins this round.

Ordering (3-5 Marbles)

(best for 4-5th grades)

- Can be played in pairs, as a group or individually
- Choose how many decimals you want you mathematicians to compare.
- Place that number of marbles in the container.
- Shake the container.
- Students will count the values of the coins under each marble and write them in the specified order on their Think Sheet.

Subtraction (2 Marbles)

(best for 4th-5th grades)

- Place 2 or 3 marbles in the container.
- Player 1 shakes, counts the 2 or 3 totals and writes them on the Think Sheet.
- Player 1 finds the difference of the two coin totals.
- Player 2 repeats this process. Player with the smallest difference wins this round.

Coin Recognition (1 Marble)

(best for Kindergarten -2nd grade)

• Place 1 marble in the container.

Player 1 shakes the marble (or toss the paper wad)

Name each coin in the cupcake
Player 2 now repeats the process

(For 1st & 2nd grade- have students write the value of each coin)

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Player 1	Comparison Symbol <=>	Player2
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Shake Rattle Roll Ordering-Greatest to Least

3 Marbles	4 Marbles	5 Marbles
1.	1.	1.
2.	2.	2. 3.
3.	4.	4. 5.
1.	1.	1.
2.	2. StarLeans	2. 3.
3.	4	4. 5.
1.	1.	1.
2.	2.	3.
3.	4.	4. 5.
1.	1.	1.
2.	2.	3.
3.	4.	4. 5.
1.	1.	1.
2.	2.	3.
3.	4.	4. 5.











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🕲 Lone Star Learning.com © 2020 Lone Star Learning, Ltd.								Problem Maker! Write a problem solving situation to go with the equation you rolled.
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Domino Coordinates



The Domino Effect

	Player 1 Product	<=>	Player 2 Product	
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Fidget Math

moterneral

Supports:

3.4(F) recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts

4.2(C) compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or = 4.4(A) add and subtract whole numbers and decimals to the hundredths place using the standard algorithm

5.2(B) compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or = 5.2(C) round decimals to tenths or hundredths

Fidget Facts

Materials:

Buy or have kids bring their spinners! Fact page

Instructions:

Using a fidget spinner and the Fidget Facts page, place your spinner inside the circle. Give it a big spin and record as many facts you can solve before the spinner stops!

Fidget Decimals

Materials:

Buy or have kds bring their spinners! Decimal Spinner Page Spinner arrow Generic Brain Page

Instructions:

Cut the arrow/triangle at the bottom of this page and tape it to the spinner. Players will spin on the colored spinner first and the the gray spinner to determine what they will do. Using the generic Brian Page in this set they will record their work.

Fidget Arrow





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19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	one Star Learning™
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My Coordinate Hits









