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Math File Folder Games

A mathematical game is a fun and challenging context in which students interact cooperatively or competitively to achieve a defined goal within a specified set of circumstances while learning or practising math skills.

Math games are a great tool to involve parents, guardians, siblings and other important people in the child's life. It is a great way to facilitate the home and school connection.

Benefits of Math Games:

- 1. Allows students to apply what they know
- 2. Creates a positive mathematical environment.
- 3. Shared experience as we get to know each other, reduces prejudice toward other students.
- 4. Are highly motivational.
- 5. Provides practice in specific skills.
- 6. Utilizes student problem solving competence.
- 7. Increases ability to communicate. (Because the game uses math vocabulary)
- 8. Increases ability to reason mathematically, strategically.
- 9. Enhances students perception of the value of mathematics.
- 10. Develops self-confidence.

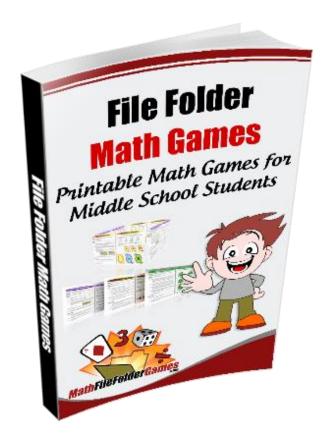
Games:

- People of all ages enjoy games
- All games reinforce and review concepts
- Help students recall ideas
- REVIEW

Enjoy!

www.mathfilefoldergames.com





Math File Folder Games also offer teachers another benefit. They align to the **US Common Core Standards** and **Common Core Mathematical Practices**. AND most of these math games can be modified and used with different grade levels.

Learn More Here:

http://www.mathfilefoldergames.com/middleschool-math-games/ Printable Middle School Math Games - Math Teachers, Look No Further!

42 printable math games for upper elementary and middles school students, easy-to-setup for any math class, when laminated these can be made into math board games for middle school that can be used over and over again.

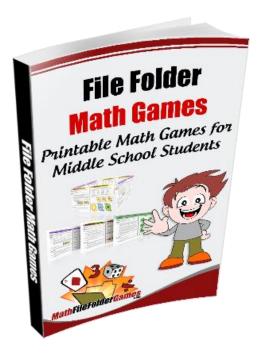
WHAT IS A MATH FILE FOLDER GAME?

A Math File Folder Game fits in a folder making it easy to use and ready at a moment's notice. Very few other items are required. You'll need to construct or reproduce the included game boards and have playing cards and dice handy. A few games use other types of geometric manipulatives that are standard items in most elementary and middle school classrooms.

This value-packed book contains 42 math games that will give your students so much fun they'll forget they're actually learning mathematics! But don't be fooled. Just because games are exciting doesn't mean that they're not built upon solid educational benefits.

Students will learn basic skills, problem solving, and critical thinking across a wide variety of mathematical topics: measurement, arithmetic, algebra, and geometry.





Put us to the test! Use these math games for up to 90 days, risk-free. If for any reason you or your students are not completely satisfied, return the product for a full refund.

Just <u>drop me a line</u> to take advantage of our 90-Day Money-Back Guarantee.

*Order your Copy here <u>on my website</u>
WITH a Full 90 Day Guarantee for you to
decide if you want to keep it!
http://www.mathfilefoldergames.com/middle-school-math-games/
(OR Buy it on TPT)

"How did I every teach without these! Thanks for creating games that make my students smile when they practice their math skills." - DONDRA P.

"This is a great resource. I was able to find games that supported both my 7th and 8th grade math classes!" - Emily D.

"My kids loved the few games I purchased so much, I decided to just get the lot. I gave out copies to pairs of kids and they rated which ones they wanted to do first. We now have File Folder Friday" - Susan M.

"I love this, I'm always looking for games that reinforce skills for my struggling learners. I use them for stations. Thanks!" - Karen C.

"This is a great assortment of games that are fast and two the point and provide conversation between students about the topic." — tejackson

"EXCELLENT resource! Each game is quick and easy- can be done as a anticipatory activity and/or closing activity. Thank you!" - Karen Vallone

"Students really enjoyed using these games. Have only used a few but the overall response was 100% positive." - Brianna B

"I have only used three of the games from this pack and my kids ask for more. So much fun and learning wrapped into one product! Well done and thank you!" - Teachercynzg



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Entrapment

This visually challenging game helps students understand congruence through translation (slides), rotations (turns), or reflections (flips). At the beginning, when the board is completely open and no squares have been filled in the game doesn't appear to be too difficult. After all, we're just filling in patterns of squares, right? Well, as players keep filling in the board, it's more and more challenging to find ways to slide, turn, and flip the available shapes to fit the remaining blank squares. Some of the most mind-bending are the rotations. They're not obvious at all and it sometimes takes quite a bit of mental gymnastics to figure out if something really will fit.

Don't rearrange the four different patterns! You can slide them, flip them, or turn them but you're not allowed to take them apart. Another way to play this game is to give each player a color pencil and when the game board is as filled in with shapes as possible the player with the most individual squares filled in wins.

Another way to play this game is to use color construction paper or tiles. Just because a player has placed a tile on a square doesn't mean a second player couldn't place a different-colored tile there as well. For this game, every move that's made has to cover at least one blank square that has not been covered before.

Remaining squares for that particular move can be covered more than once. This extends game play and it can be quite interesting to see which squares are covered numerous times.



It might also be interesting to pose some other questions to students when using this in a classroom setting. Can they see any way to fill the entire board so that there are no white squares left at all? How many of each of the patterns are used on the board? In other words, how many of #1, #2, #3, and #4 have been used? It might be fun to compare different finished games as well to see if there are any patterns from game to game or let two teams of two players each compete to see who can fill in the boards the fastest.

There are so many fun ways to play this game. Students will understand simple transformations better than ever after practicing with "Entrapment."

With 2 players, I recommend cutting the board down to 2/3 or even 1/2 the original size. This keeps the time played, on average, about the same as a 3 player game on your size game board. Also, shrinking it down right away makes placement critical and forces the students to call/write out the harder movements, like reflection and rotation clockwise or.. counter clockwise 90 degrees.

Common Core Mathematical Standards

- Verify experimentally the properties of rotations, reflections, and translations.
- 2.Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
- Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

ENTRAPMENT

Objective: Recognize motion as a slide (translation), turn (rotation) or a

flip (reflection) [5.SS(T).20].

Materials: Entrapment game board, one 6-sided die, pencil crayons.

Players: 2 or 3 players.

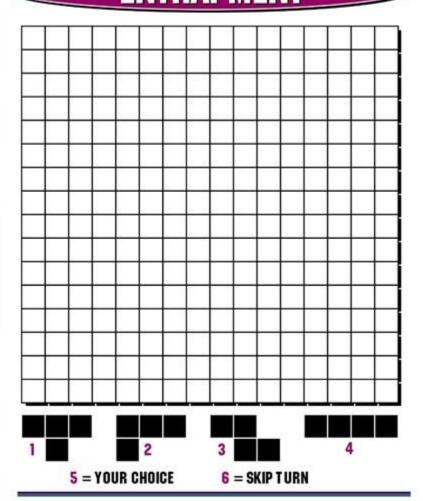
Rules:

- The objective of this game is to be the last player to draw a given shape on the game board.
- [2] The youngest player starts. On a turn a player rolls the die to determine the shape which he or she must add to the game board. If the player rolls a 5 s/he can add any of the four shapes s/he wishes. If the player rolls a 6, s/he skips the turn and will not add a shape.
- [3] The player will draw and color his/her shape at any available location on the game board.
- [4] If a player needs to add a shape for which there is no appropriate space left on the game board, s/he takes a strike. Three strikes and the player is out of the game.
- [5] When a player chooses a location for his or her shape, s/he must specify whether the shape needs to be rotated, slid, or reflected to fit that space (that is, in comparison to the blackened shapes at the bottom of the game board).

Adaptations:

- Play as a solitaire game. Roll the die to determine which shape must be added. See how many you can add before you roll a shape that you cannot add.
- [2] Allow each player to shade 5 spaces with a black crayon before starting the game. These spaces cannot be used when placing a shape.
- [3] Use a scoring system in the game. Each time you add a shape, score 3 points if it is a rotation of a shape already in place, 2 points if it is a reflection, and 1 point if it is a translation. High score wins.

ENTRAPMENT







5 = YOUR CHOICE 5 = YOUR CHOICE 6 = SKIP TURN 6 = SKIP TURN ST RIKES ST RIKES ST RIKES ST RIKES ST RIKES **STRIKES MathFileFolderGames**

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Entrapment Score Card

(Mark on each round whether you <u>translated</u>, <u>rotated</u>, or <u>reflected</u> the object)

Round			Skip Turned
1			
2			
3			
4			
5			
6			
7			

Round			Skip Turned
1			
2			
3			
4			
5			
6			
7		8	

Entrapment Score Card

(Mark on each round whether you translated, rotated, or reflected the object)

Round			Skip Turned
1			
2			
3			
4			
5			
6			
7			

Round			Skip Turned
1			
3 4			
3			
4			
5			
6			
7			