

# **Math File Folder Games**

## ***Fifth Grade Math Games: Entrapment***

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:**

1. People of all ages enjoy games
2. All games reinforce and review concepts
3. Help students recall ideas
4. REVIEW

**Enjoy!**

# Entrapment

**Objective:** Recognize motion as a slide (translation), turn (rotation) or a flip (reflection).

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

**Players:** 2 or 3 players.

## Rules:

[1] 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).

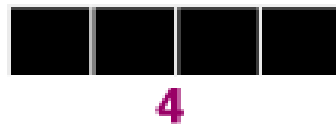
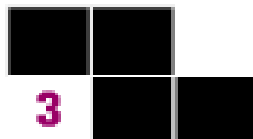
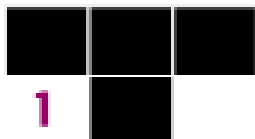
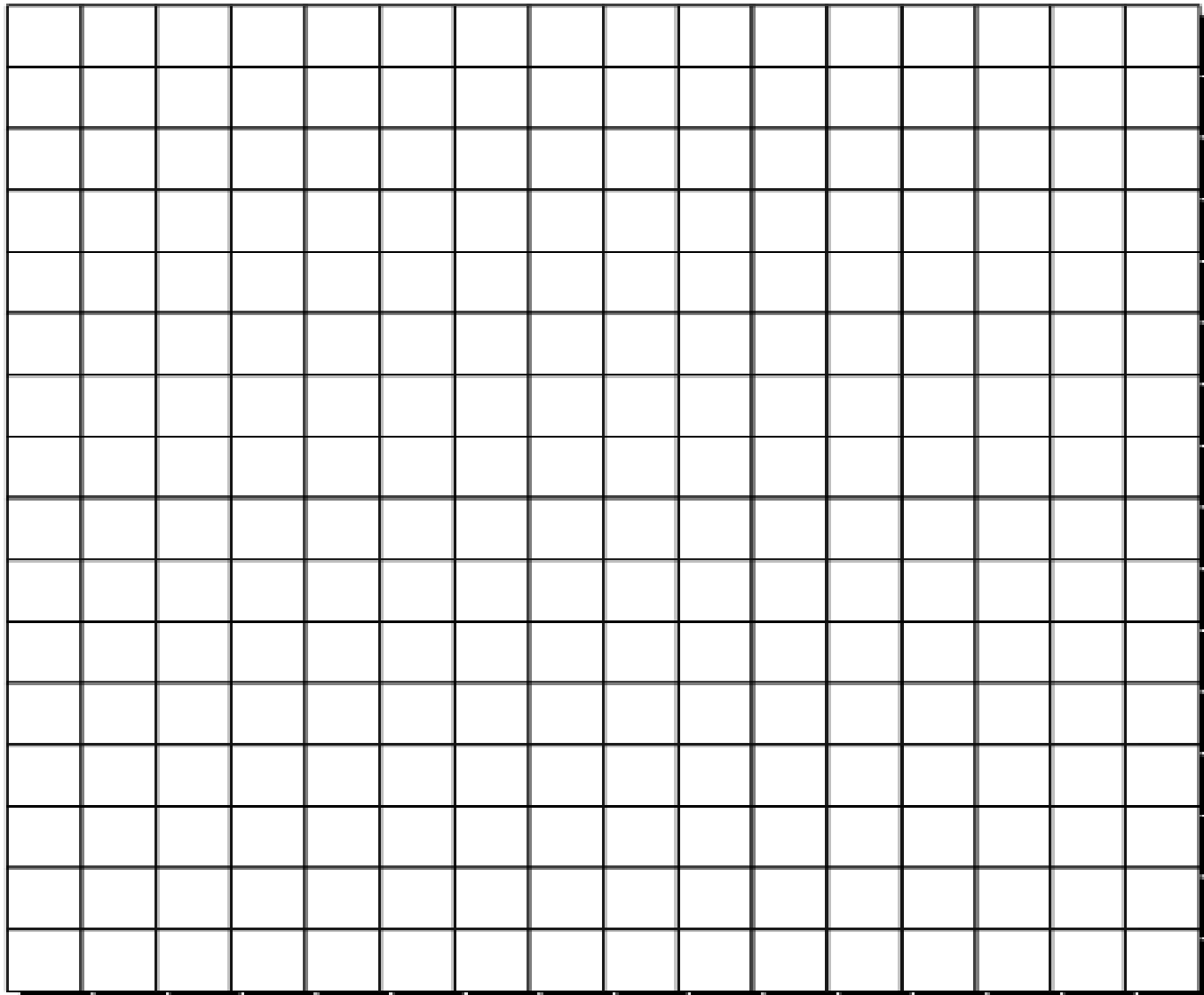
## Adaptations:

[1] 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.

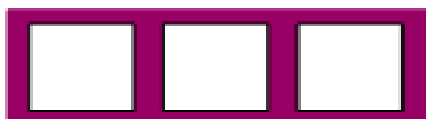
# ENTRAPMENT



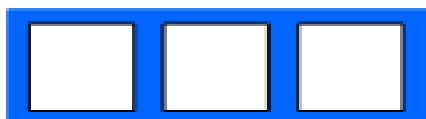
**5 = YOUR CHOICE**

**6 = SKIP TURN**

**STRIKES**



**STRIKES**



**STRIKES**

