TETRIS

1. Basic game info
   - Number of players
     Single player
   - Time to play
     5 minutes and up
   - Suggested ages
     8 and up
   - Description (goal and core mechanic in first line)
     Tetris is a game in which players rotate falling shapes with the goal of creating a horizontal line of blocks without gaps.

     When such a line is created, it disappears, and the blocks above (if any) fall. As the game progresses, the shapes fall faster, and the game ends when the player "tops out", that is, when the stack of blocks reaches the top of the playing field and no new shapes are able to enter.
   - Genre/ Platform
     Arcade style/ Console, Web
   - Links to forums, reviews, pictures
     http://www.gamespot.com/nes/puzzle/tetris/forum.html

2. What is the core learning activity of the game?
   Players learn about how shapes fit into one another.

3. What integrated domains does this game align with? What pedagogy does it suggest?
   Integrated domain - 'The Way Things Work'.
   Pedagogy - 'Games as simulations: MANIPULATING

SYSTEMS'

4. Does this game have a level editor?
   No.

5. What kinds of social interaction does this game create? What are the qualities of that interaction?
   No social interaction during play. High score leader board, strategy and level reached might create after game social interaction between friends.

6. What are the 6th grade math curriculum standards that this game aligns with? (include full path)
   - Problem Solving
     - Students will apply and adapt a variety of appropriate strategies to solve problems.
       - Students translate from a picture/diagram to a number or symbolic expression.
       - Students model problems with pictures/diagrams or physical objects.
     - Students will apply and adapt a variety of appropriate strategies to solve problems.
       - Students analyze problems by observing patterns.

     (e.g. Players are being asked to solve the problem of fitting shapes into others in order to create a line and score points for it.)
   - Reasoning and Proof
     - Students will select and use various types of reasoning and methods of proof.
       - Students support an argument through examples/counterexamples and special cases.
         (e.g. Students may be asked to think aloud for 10-15 moves as they play in order to explain what their strategy was to form a line or lines)
   - Communications

➢ Representations
  o Students will select, apply, and translate among mathematical representations to solve problems.
    ▪ Students use representations to explore problem situations.
      (e.g. Students may be asked to print their game when it ends and point out where errors were made)
➢ Geometry

7. Is the game simulating or modeling something? (real scenario, imagined scenario, predictive scenario, system)
Box stacking simulation.

8. What are the data sets that can be gathered through play of this game?
- Number of shapes/ blocks within a level
- Speed of the falling blocks in each level

9. How can these data sets be analyzed and manipulated?
- **Grow quest:** goal is to increase the number of resources in a system
  (e.g. increasing number of blocks in a level or increasing number of blocks of one particular shape)
- **Shrink quest:** goal is to decrease the number of resources in a system
  (e.g. decreasing number of blocks in a level or decreasing number of blocks of one particular shape)
- **Spy or Scout quest:** goal is to observe and gather information and report back
  (e.g. observe a person playing level 1 of tetris 5 times and report back on score change along with strategy used each time)

10.Tags
   math, arcade, shape, speed