

Mini Review

Número Friendly Board Games

Designed by Pratima Patil

Reviewed by Sneha Titus

Just imagine, in a routine mathematics class a teacher enters the class room with a colorful board game. Instead of instructing students to take out their math textbooks/note books and setting work for them, he just opens the game board and allows students to play the game. The eyes of the students sparkle and they enjoy playing. Even the back benchers (who generally do not get involved in class room work) come forward to play and give a neck to neck fight to the scholars in the class. While playing the games, children get familiar with numbers and their interesting properties such as factors, multiples, square numbers, prime numbers and so on.

These are the words of the creator (Pratima Patil from Navi Mumbai) of Número Friendly Board Games which I had the opportunity to review recently. I saw Squares & Primes and Dido – you may guess that the first is modeled on Snakes & Ladders and the second on that eternal favourite, Ludo. Pratima has used the fact that numbers can be arranged in different ways to exhibit interesting properties and sequences. For example, in Squares & Primes, the numbers from 1 to 100 are arranged spirally in a 10×10 grid - all the square numbers fall on either one of two diagonals and all the prime numbers on slanted lines. The climb up the ladders is from a smaller prime to a larger prime. And the slide down the snake is from a perfect square to its square root. The objective of course, is to start at 1 (at the centre of the board) and to end by going past 100 in the smallest number of moves. During the course of which, students encounter prime and composite numbers, perfect squares and their square roots, the concept of chance and fair play and of engaging with mathematics naturally and without fear. Many math games have some element

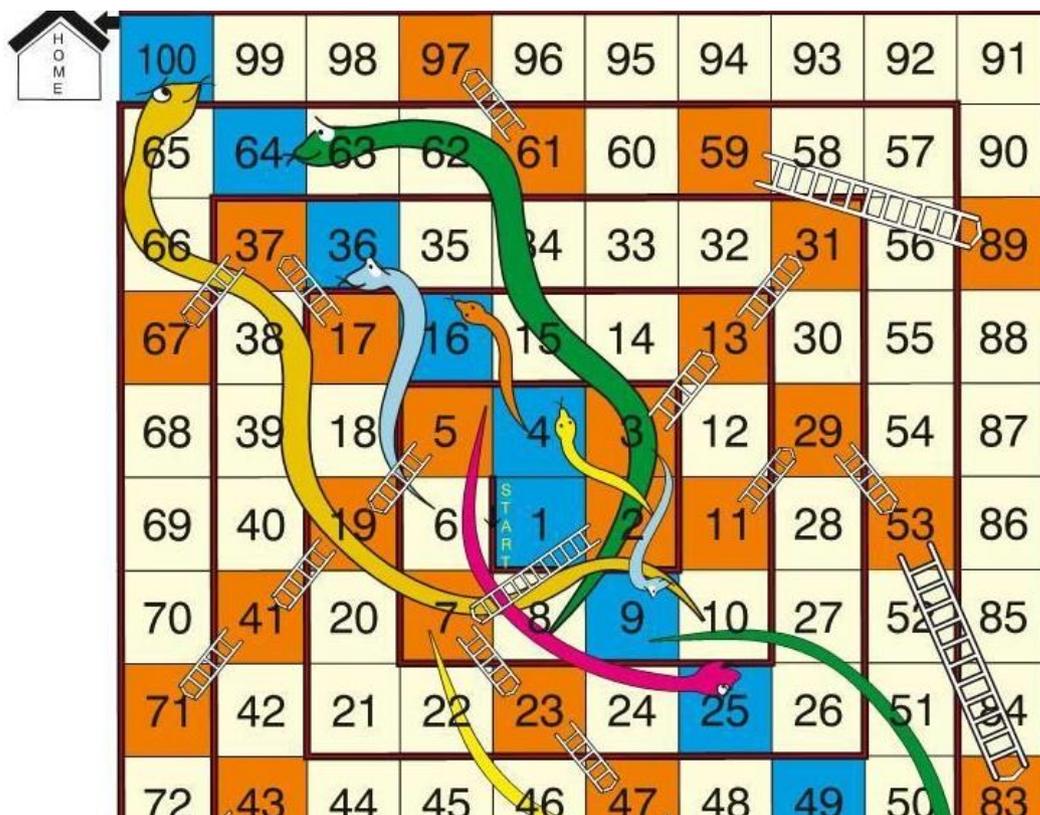
Keywords: Board game, chance, fair play, squares, primes, multiples, factors

of ‘testing knowledge’ but here, students play without needing to know the right answer to get ahead. I find that incredibly liberating. Of course, careful facilitation can help students absorb new definitions and relationships (what if you had landed on 1, could you climb a ladder, how many primes between 1 and 100, how many possible snakes, these are just a few questions that come to my mind). Even more interesting, students may be motivated to create their own boards with different arrangements and different rules- this would be constructivism in the math classroom!

Dido helps students practise Factors and Multiples with a board that has four separate tracks for four players and a dice that bears the first six primes on the 6 faces. Forward movement is allowed only if the number on the track in front of the player’s piece is divisible completely by the number on the face of the dice just rolled. The destination at the centre of the board carries the number 30030, you can guess how it’s related to the numbers on the dice. The game gives

players an opportunity to document their moves on flashcards and I find that an extremely useful device for students to reflect on outcomes and their implication. Dido can be played at several levels – the creator has also created a colour code that relates factors to multiples but in my opinion, the first level becomes too simple with the colour coding and the second level may end up being confusing unless all rules are clearly spelt out. However, students will certainly be interested enough to try the game and set ground rules at their comfort level. One concern that I have is that the windmill shape of the Dido board may make it difficult to store or to use often without bending. Also, if the board is too small, the higher levels of the game may not be feasible. I’ve been told that these factors will be redressed soon.

But these are minor quibbles; if students engage joyously in innovative math games then more power to such creators!



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PRATIMA PATIL has just received copy right for the game boards as well as for the literary work based on these games. Also she has applied for the patent at the Patent Office. She has demonstrated the games with good response from schools and teacher training institutes. The game app is under process and all these products will soon be available under the name NUMERO FRIENDLY. I'm certainly looking forward to having these board games available commercially, meanwhile for those who can't wait, Pratima Patil may be contacted at pratimap0309@gmail.com or mobile +917715952612 / +91 9892351862. Pratima is very keen that she tests the games with children from different schools, so do contact her if you would like to run a trial.