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Game 601

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The Number Guessing Game

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Description:

       This number guessing game lets players using mathematics to against each other. The one using less mathematical questions to get the correct number win the game.

Steps and Rules:

1. Player 1 thing of a number between 1 and 100.

2. Player 2 ask mathematical questions to Player 1, and Player 1 can only response Yes or No.

3. The same type of mathematical question can only be used once. For example, Player 1 asks, "Is the number could be divided by 2?" Then he/she cannot ask questions like "Is the number multiple of 4? (or any other numbers)" And also one particular question which lead to finish the term such as "Is the number 55?" can also be used once, which means, this game only has one chance to guess the number. So, players should ask and think more to ensure the number.

4. After Player 1 successfully gets the correct number, count the number of the question he/she asked. If he/she fails, then fail.

5. Then the game starts over with Player 2 thing of a number and Player 1 guess.

6. After Player 2 finish, if both Player 1 and Player 2 get the correct number, compare the count of questions they use, the less one wins the game, it could be a tie. If only one success, then the one win. And, if both fail, which is also a tie.

7. Consider players may choose prime number include in the question, the game will provide all of the prime numbers between 1 to 100 on the board at the beginning of the game to help those unfamiliar with prime numbers.

At the beginning of the design, each of us considers a fun way of playing the number game, and we select the better one, or the one all of us recognized. Then we start thinking of the rules and how people could play this game. Whatever group member thinks will be added to the rules and gameplays, and some of the rules will be removed after someone throw out a problem that it is broken. We start playing the game when finishing rules and gameplays, and many unexpected or expected problem appears. We begin to fix those problems. For example, the range of number we set up first is 1 to 50, but it makes the time of the game too short, it's easier to guess the game than 1 to 100. Another issue is that we first design to ask one question and guess one number then ask another question and guess another number, however, when we play it we always forget to guess the number after a question, so we decide to remove that guessing parts between the questions, and also makes the game much harder. There were many other difficulties we met, and finally, we finished up with this version that satisfied all of us.