

## BIGGER OR SMALLER

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| <b>Level</b>                               | 1 (Age group 6 – 7)   |
| <b>Resources Required</b>                  | Deck of numbered cards<br>“>” cards (1 per student)<br>Counters (for each student, 1 for each student in the game; e.g. 25 if there are 5 students playing the game)  |
| <b>Alternate Options for the Resources</b> | <p>For a deck of numbered cards, remove all of the face cards and aces from a standard deck of cards. Alternatively, you can make your own following these instructions:</p> <ol style="list-style-type: none"> <li>1. Take a piece of card or paper and cut a rectangle the size of your palm</li> <li>2. On one side of the card, write the number ‘2’ and draw 2 hearts using a red pencil (or any color)</li> <li>3. Repeat this for the numbers 2-10, each time drawing the same number of hearts as the number you wrote (the number 3 card has 3 hearts drawn etc.)</li> <li>4. When one set of 2-10 is complete, then repeat this for a set of diamonds (use a red pencil for this OR the same color pencil as used for the heart), clubs (using a lead pencil) and spades (using a lead pencil).</li> <li>5. Once you have completed this, you should have 4 sets of 2-10 (36 cards in total) with each set having a different symbol. Diamonds and hearts sets should be in one color and spades and clubs should be in another color.</li> <li>6. Refer to the images section to make sure the cards are made right</li> </ol> <p>If you make your own cards, you can choose to include numbers other than 2-10. We recommend trying the numbers 1-40.</p> <p>To make the “&gt;” cards</p> <ol style="list-style-type: none"> <li>1. Take a piece of card or paper and cut a rectangle the size of your palm.</li> <li>2. One each card, draw the “&gt;” symbol.</li> </ol> <p>Instead of counters, you can use rocks, coins, or any other small objects you can use to track successes throughout the game.</p> |
| <b>Strand Covered</b>                      | Numbers and Operations  |
| <b>Targeted Skills</b>                     | Arranging numbers 0-100 in ascending and descending order.  |
| <b>Inspired by</b>                         | <a href="#">Board game designer, Gordon Hamilton</a>  |
| <b>Time Required</b>                       | Set up time 10 minutes<br>Game time 20 minutes  |



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| <b>Previous Learning Required</b> | Knowledge of numbers 1-40<br>Understanding two-digit greater than (>), equal to (=) and less than (<) statements. |
| <b>Support Required</b>           | Low supervision   |

Rules of the Game:

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| <b>Goal</b>  | The student with the largest number of counters (i.e. the largest number of correct guesses) at the end of the game wins.   |
| <b>Rules</b> | Students may look at their own card but should not be able to see other students' cards.  |
| <b>Steps</b> | <p>Step 1: Students sit in a circle.</p> <p>Step 2: The teacher gives each student a "&gt;" card.</p> <p>Step 3: The teacher looks at the top card in the deck and places it face down in the middle of the students so that none of the students sees this card. The teacher is going to need to remember what number is on this card. The teacher can write down the secret number on a piece of paper to help them remember.</p> <p>Step 4: From the remaining deck, the teacher passes out one card face down to each of the students.</p> <p>Step 5: The teacher chooses one student to go first.</p> <p>Step 6: This student either points the open side of their "&gt;" card towards the secret card in the middle or away from the card in the middle. If the mouth of their "&gt;" card points towards the secret card in the middle, the student is communicating that they think the secret card is "greater" than their card. Otherwise, the student is communicating that they think the secret card is "less" than their card. See the Images/Illustrations section for an example of this.</p> <p>Step 7: If the student's guess is correct, the teacher places a counter on the student's "&gt;" card. Otherwise, it is the next student's turn to guess.</p> <p>Step 8: Repeat Steps 6-7 moving in a clockwise direction until every student has taken a turn.</p> |



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|                                | <p>Step 9: After every student has taken a turn, the secret card is revealed. Students who guessed correctly get to keep the counter that the teacher placed on their "&gt;" card.</p> <p>Step 10: The teacher chooses a new student to go first. To make things simple, the teacher can choose the student who went last in the previous round to go first in the new round.</p> <p>Step 11: The game ends once every student has gotten a chance to go first. The student with the largest number of counters at the end wins.</p> |
| <b>Images or Illustrations</b> | <p>[Left image] Starting with the 15 player and going clockwise, five students guessed correctly and received a token. The 71 player has to choose if her card is greater or less than the center card. [Right image] She unfortunately guessed wrongly.</p>   |
| <b>Enrichment</b>              | <p>There is no way for the student to know for certain if they are right, but they can make an educated guess based on the card they were given. For example, if a student has a 1, it is likely that the secret card will be greater than their card.</p>   |
| <b>Simplification</b>          | <ul style="list-style-type: none"><li>• Use only small numbers.</li><li>• Allow students to see the numbers on the cards of all of the other students (the secret card in the middle is still left face down).</li><li>• For an even simpler game, allow students to also see the secret card before making a guess. In this game, students will be able to always guess correctly. This allows students to focus on the math.</li></ul>   |