

JUMP FOR PRIME

Level	3 (Age group 11-14)
Resources Required	Notecards with numbers on it
Alternate Options for the Resources	<p>Players can make 30 notecards the size of their palm with the following numbers listed:</p> <ol style="list-style-type: none"> 15 Prime numbers (pick from 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89 and 97) 15 composite numbers (any number from 4-100 excluding the numbers listed above)
Strand Covered	Numbers & Operations
Targeted Skills	Factorize composite numbers
Inspired by	Study.com
Time Required	15 minutes for the game 10 minutes to make the cards
Previous Learning Required	Prime numbers
Support Required	Medium support

Rules of the Game:

Goal	The team that has the most points at the end of the game, wins
Rules	<p>Jump up then sit down if the number called is a prime number</p> <p>Keep standing if the number called is composite (not prime). Of the players standing, one person is called out to list the prime factors of the composite number</p> <p>Once a player chooses to sit down, they cannot change their mind</p> <p>Players in a team cannot discuss if they should be sitting or standing</p> <p>Once a player is chosen to call out the prime factors, if they do not know the answer, no points are given to the team. A player can call out the prime factors after this, but no points are given.</p> <p>Points: 1 point for every correct action in the team. For example, if the number is prime and 2 out of 3 players are seated after jumping, the team gets 2 points. If the correct prime factors are called out, the team gets 1 extra point</p>
Steps	Step 1: Players divide themselves into two groups

	<p>Step 2: The notecards are placed in the middle of the two groups</p> <p>Step 3: Player 1 from group A picks one card from the pile and reads it out to group B. For example, “63”</p> <p>Step 4: Those in group B perform the action they individually think is correct. The correct response here would be to keep standing (because 63 is composite). For every standing player in group B, 1 point is given to group B</p> <p>Step 5: Player 1 from group A picks one standing player from group B to list the prime factors of 63 ($7 \times 3 \times 3$). One point is given if the factorization is correct</p> <p>Step 6: The player who called out the factorization from group B then picks a card to read out to group A and the steps repeat</p> <p>Step 7: The game ends when all the players playing have read a card at least once. The team with the most points at the end, wins.</p>
<p>Variations of the Game</p>	<ol style="list-style-type: none"> 1. Players in each group face away from each other whilst standing in a semi-circle. This allows a more independent decision to be made by each player 2. The number range could be increased to 4-150 instead of 4-100 3. Points are lost for every incorrect action in the team and for every incorrect factorization called out
<p>Simplification</p>	<ol style="list-style-type: none"> 1. The group makes a collective decision as to the action they should perform 2. Numbers used are from 4-50 instead of 4-100