

CHALLENGE ACTIVITIES

1. Choose a strategy at the start of the game and share it with your opponents. Players must stick to the strategy they have chosen during game play.

How did doing this change the game? Did your strategy work? Why or why not.

2. If you could control all your opponents moves in a four player game, (apart from forcing them to use the same number as an opponent during a round) what is the highest score you could get?
3. Prove that something is wrong with the end scores shown in Diagram 3 below.

Diagram 3: End of game. All numbers have been covered with tiles, scores shown in middle.

| | | | | | | | | | |
|----|----|----|--|----|----|----|----|----|----|
| 20 | 19 | 18 | 17 | 16 | 15 | 14 | 6 | 13 | 20 |
| 13 | 12 | 11 | 10 | 9 | 8 | 7 | 5 | 12 | 19 |
| 6 | 5 | 4 | 3 | 2 | 1 | 0 | 4 | 11 | 18 |
| 14 | 7 | 0 | <div style="text-align: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; padding: 2px; background-color: #c8e6c9;">+3</div> <div style="border: 1px solid black; padding: 2px; background-color: #e0e0e0;"> </div> <div style="border: 1px solid black; padding: 2px; background-color: #e0e0e0;">-3</div> </div> <div style="border: 1px solid black; padding: 2px; background-color: #e0e0e0;">+1</div> </div> </div> | | | | 3 | 10 | 17 |
| 15 | 8 | 1 | | | | | 2 | 9 | 16 |
| 16 | 9 | 2 | | | | | 1 | 8 | 15 |
| 17 | 10 | 3 | | | | | 0 | 7 | 14 |
| 18 | 11 | 4 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| 19 | 12 | 5 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 20 | 13 | 6 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |