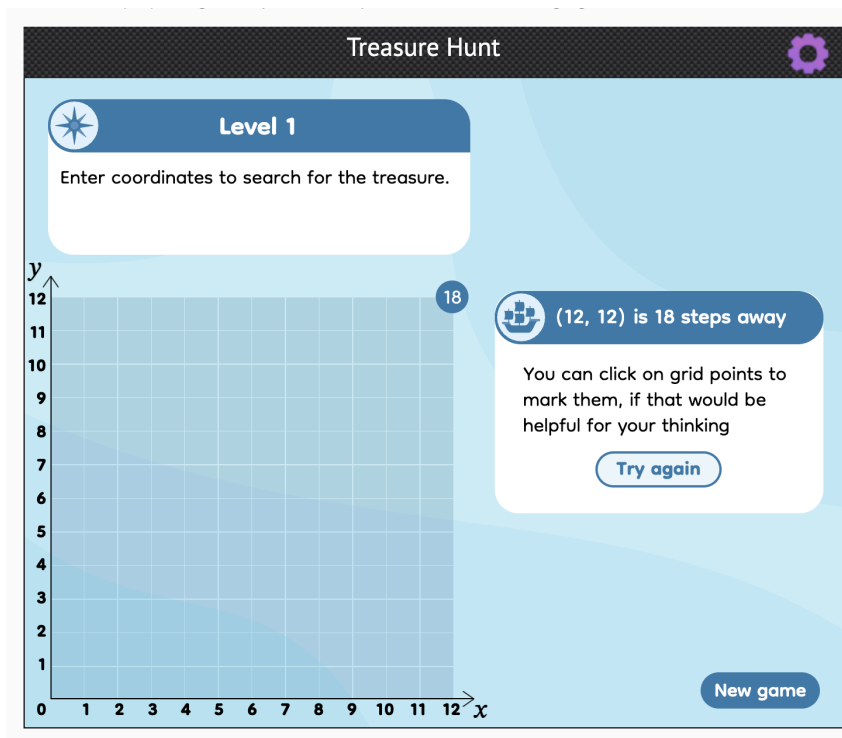


TREASURE HUNT ASSIGNMENT (NRICH LIVE PROBLEM)

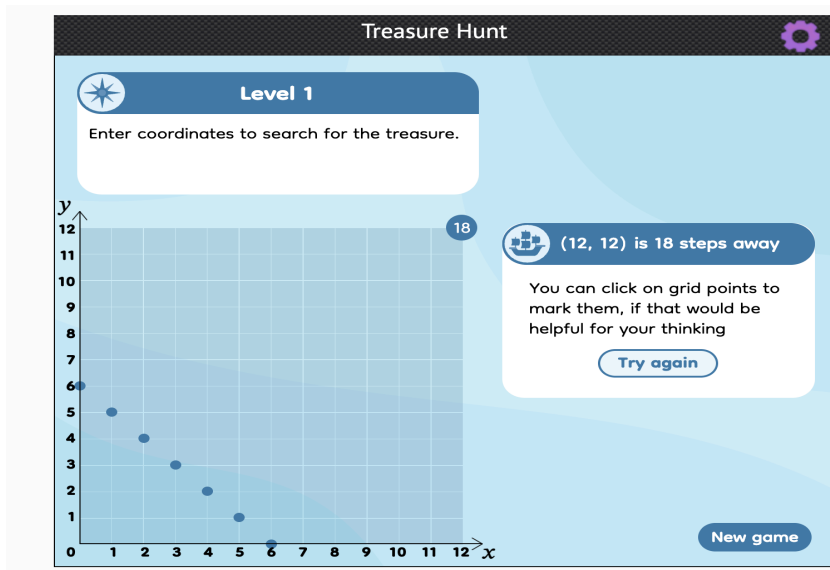
Q1

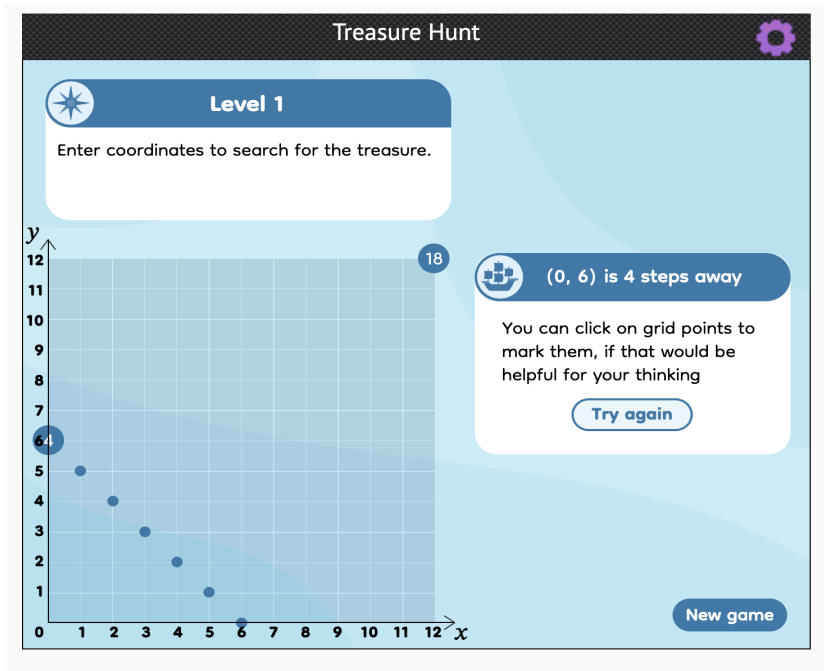
Ans - Here is a reliable strategy for choosing coordinates that will locate the treasure in the minimum number of guesses.

Step 1 : Choose a corner from the grid- $(0,12)$, $(12,12)$, $(0,0)$, $(12,0)$ are the corners. $12,12$ is selected here and the treasure is 18 steps away



Step 2 : Step Count till the number in the previous guess and mark the grid points diagonally. Choose one of the corners in the grid





Step 3: Choose a coordinate where both the numbers in step1 and step 2 meet.

