

Investigation Guide- 13 Away (Task 59)

This investigation assumes that you are familiar with the task and have played it a few times.

Challenge:

Instead of 13 Away, what happens if you **Make 13**?

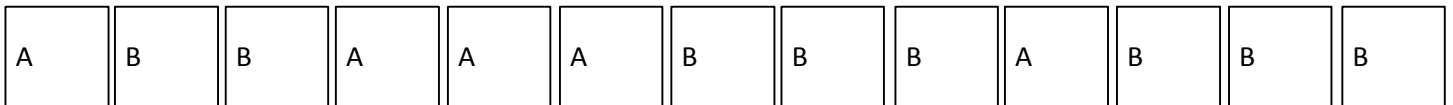
Rules:

- Take turns to place either 1, 2 or 3 counters until you have made 13.
- The winner is the person who places the last counter.

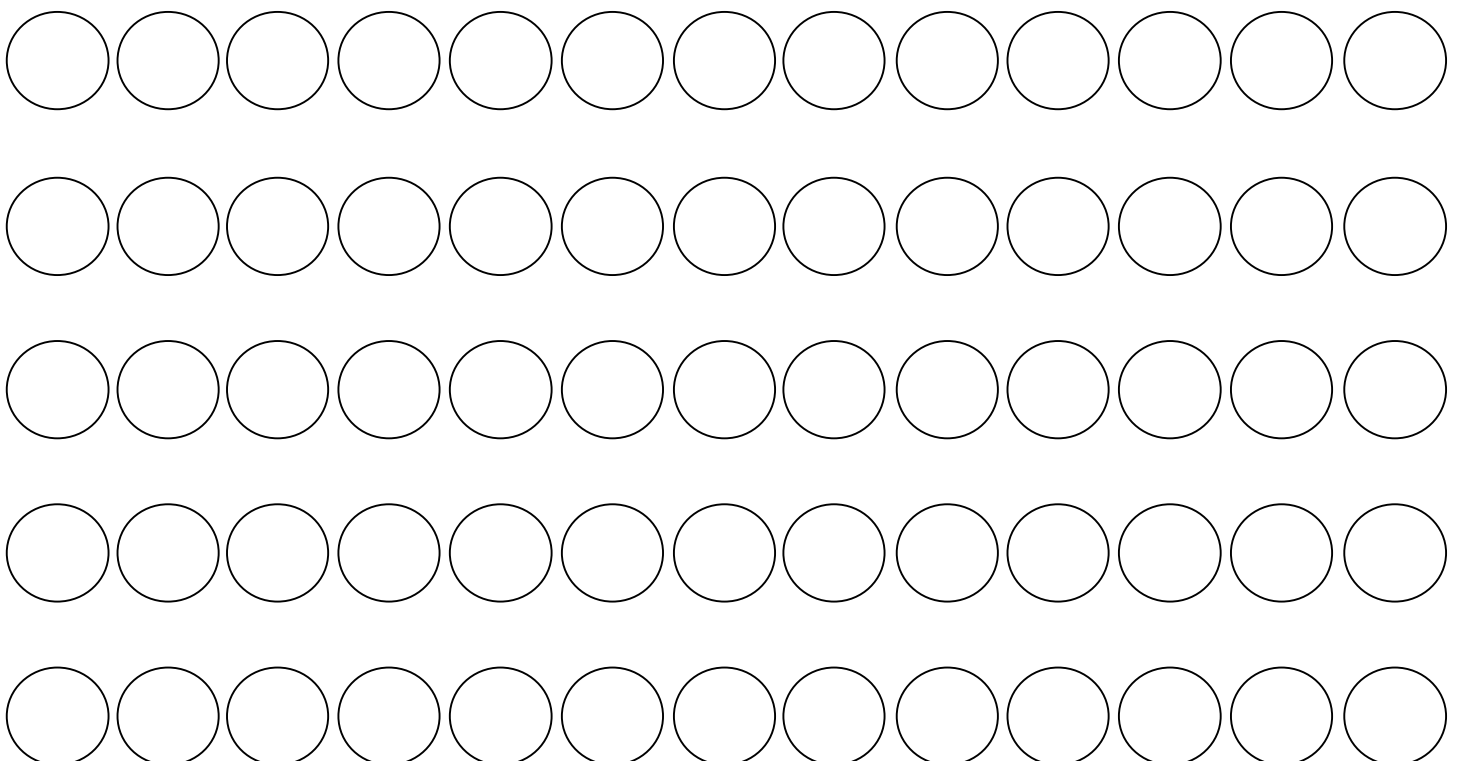
Your Task:

1. Play and record a few games.
2. Try to work out a winning strategy.
3. Record and discuss your strategies below.

Example Recording:



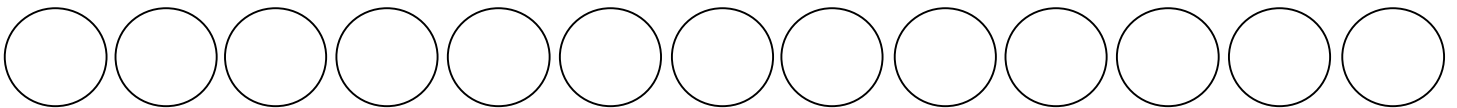
Therefore Player B is the winner because they placed the last counter.



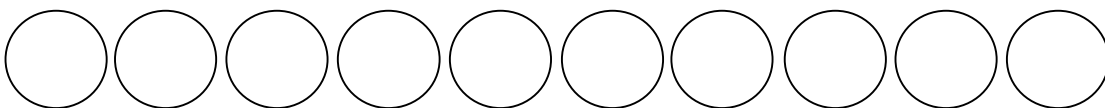
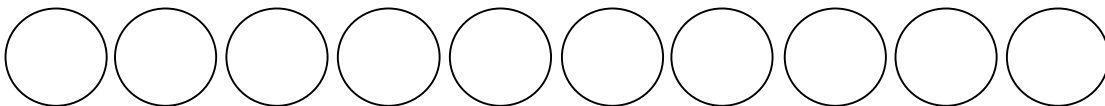
Discuss the following with your partner:

1. What strategy did you use to win?
2. Is there more than one winning strategy?
3. At what point in the game, did you know you were going to win?
4. Is there a way of winning from the first go?

Test your winning strategy against a new opponent. Record the game below.

**Challenge:**

What happens if you make 20 instead of 13?



Do your strategies change because you are making an even number?

What happens if you are allowed to place 1,2,3,4 or 5 counters down?

Can you come up with a challenge to test on a friend?