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**Introduction:**

To play this game, you must know your geometry!

You want to sink your opponents’ polygons before

they sink yours. Answer all the questions correctly

for a greater chance to win.

**Materials Needed:**

* Double game board
* Polygon playing pieces
* Paper and pencil for work

**Directions and Rules:**

* There will be four sets of game boards being played at one time, each set up with two teams.
* You will have five polygons to place on your side of the board, while your opposing team will do the same.
* The board is set up as a grid with an x-axis and a y-axis. You and your opponents will take turns calling out coordinates, and they will tell you if it is a “hit” or a “miss”, depending on whether a polygon sits on that coordinate.
* You will keep track of what coordinates you have called out on your vertical board, and you will mark the coordinates they called for you on your horizontal board.
* Before each round, both teams will be asked a geometry-based question. If you are not correct, your turn will be skipped.
* When one team sinks a polygon of the opposing team, the opponents must yell, “you sunk my polygon!”, but you must tell them which polygon it was. If you are correct, you get an extra coordinate call. (So it is important to keep track of those coordinates that you call out yourself.)
* There will be a timer set for ten minutes to play the game.
* When the time ends, the team with the most hits is the winner. There will also be a grand prize at the end of the night for the team that got the most hits overall. If it comes to a tie, the team who sank the polygons the quickest will win.

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| 1. What is the volume of this shoe box?  box.ggb.png  10 in.  6 in.  8 in. | 2. How many triangles are in the following design?  triangle design.ggb.png |
| 3. If the radius of Aron’s circular clock is 28 cm, what would an estimate of the circumference of the clock be?  28 cm | 4. The following triangle has the dimensions shown. What is the area of the triangle?  6 cm  8 cm  10 cm |
| 5. If A is the center of this circle, which line is a chord?  circle with chord.png | 6. ΔABC and ΔLMN are similar.  If AB = 15m, BC = 18m and LM = 25m,  what is MN?  similar triangles.ggb.png  25m  18m  15m |
| 7. If a cereal box is 12 inches high, 2 inches wide, and has a volume of 192 inches3, what is the length of the box?  box.ggb.png  2 in.  12 in. | 8. Name the following figure: |

