

Puzzle title: The Radio Detectors

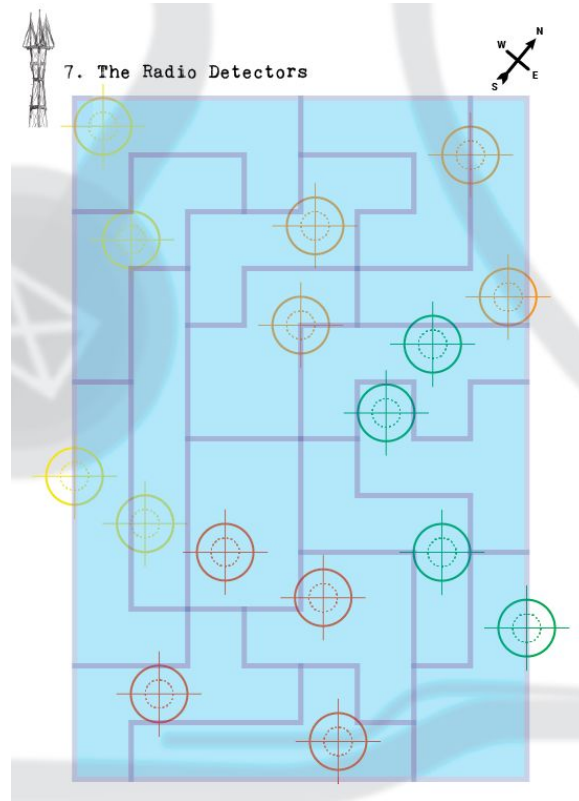
Location: Gateway Park, playground.

Set-up: Display the sign. Put the 16 targets at the correct locations relative to each other in the playground area.



When the team shows you the green screen, hand them one sheet *per player*. (i.e., give 5 sheets to a team of 5.) You could also point them to a stack of papers and ask them to take as many as they want, but no more than one per player.

Interaction. When a team shows you the correct arrangement of 16 tiles on the page (see below), give them the codeword “KABOOM”. Warning: while there is only one way to make a rectangle of this shape with the correct pieces, there are many ways to make a rectangle of the correct size using wrong pieces.



When a team gives you the codewords “FREQUENCY”, show them whatever data they would like from the cheatsheet labeled “FREQUENCY”. You can even give them the whole sheet if they seem to need it.

CK Hint/Partial Data [squares = minutes, hexes = points]:

- | | | |
|--|--|--|
| <p>6 It may help to actually place hexominoes on your sheet.

If you think you have a suitable arrangement of 16 hexominoes, you may show it to a staffer to advance your hint clock.</p> | | <p>23 pts KABOOM
Good job on finding the correct arrangement.</p> |
| <p>13 Position the hexominoes on one sheet so that their orientation and center location match the crosshairs on the sheet.</p> | | <p>0 pts FREQUENCY
Silly, you have to tell that to a staffer to get help. I'm just an automated app.</p> |
| <p>21 If you haven't found a suitable arrangement of 16 hexominoes yet, you may now tell a staffer the secret message "frequency" to be told the shape, orientation, and positioning of any location. The later hints won't make sense until you have that arrangement.</p> | | <p>30 pts FGOK, FKGO, ... (22 permutations)
Those are the correct letters, but not in the correct order.</p> |
| <p>27 The locations are in four groups of four different colors. What happens if you only look at the shapes for one color at a time?</p> | | <p>32 pts FGKO
Those are the correct letters, but you'll need to find a sort key other than "alphabetical."</p> |
| <p>33 For each color, the four shapes make a large double-sized shape that matches one of the same four shapes, with the crosshairs in the same location. What are the letters corresponding to the double-sized shapes?</p> | | <p>34 pts 104.5, 97.7
You don't need the frequency; just enter the four-letter call sign.</p> |
| <p>36 Perhaps "Roy G." could help you with determining the correct order of the letters.</p> | | <p>35 pts KFOG
(correct answer)</p> |

Solution walk-through:

- Teams walk around collecting shapes, along with associated letters.
- Teams assemble the 16 tiles into the correct arrangement on one of their maps. The crosshairs on their maps have matching colors, a compass rose in the upper-right helps with alignment, and the two center rings of the crosshairs give the appropriate scale.
- Each tile has a crosshair with a color in it.
- The four tiles with red crosshairs makes a big copy of a tile with red crosshairs and letter K.
- The four tiles with orange crosshairs makes a big copy of a tile with orange crosshairs and letter F.
- The four tiles with yellow crosshairs makes a big copy of a tile with yellow crosshairs and letter O.
- The four tiles with green crosshairs makes a big copy of a tile with green crosshairs and letter G.
- Order them in rainbow order to get KFOG.
- (bonus trivia) Each crosshair for KFOG is actually in the recursive location (i.e., same location for the big or small version).

