## Iwenty-Iwenty Game Description 2019-2020



The Game: Twenty-Twenty, a robotics competition for students in $6^{\text {th }}$ grade and younger, is played on the field shown above which is approximately $8^{\prime} \times 8$ '. Alliances, made up of four randomly paired teams, collaborate to score as many points as possible. Matches are 90 seconds in length. The controller of the robot must be passed from one driver to the other between thirty and sixty seconds within a match.

The object of the competition is to attain a higher combined score than all the other teams. Points are scored by performing reconstructive surgery on a world renowned scientist using your miniaturized surgical robots (no larger than 14 " x 14 " x 14 " to start).
This includes:

- Reconstruct both pupils, so they are in the proper place in each eye.
- Reconstruct the iris of each eye.
- Replace/reconstruct her nose.
- Reconstruct all the teeth of her mouth and return a smile to her face.
- Finish in less than 90 seconds and then move quickly to one of the two inner ears.

| Object | Scoring Task | Points |
| :---: | :---: | :---: |
| Shrapnel | Removed from the field. | 2 points each |
| Shrapnel bonus | All 6 shrapnel pieces removed. | 10 |
| Pupil | Placed in center of eye socket. | 5 points each |
| Iris | Within eye socket. | 1 point each |
| Iris | Surrounding the pupil. | 2 points each |
| 1st eye bonus | 9 iris balls surrounding first pupil. | 15 |
| 2nd eye bonus | 9 iris balls surrounding second pupil. | 25 |
| Nose | On nose holder. | 25 |
| Smile puck | On metal mouth. | 1 point each |
| Smile puck | On smile tab. | 2 points each |
| Smile bonus | All 12 pucks are touching at least one smile tab. | 10 |
| Robots parked in inner ear | $\begin{gathered} \text { 1st } \\ \text { 2nd } \\ \text { 3rd } \\ \text { 4th } \end{gathered}$ | $\begin{gathered} 2 \\ 3 \\ 5 \\ 10 \end{gathered}$ |

