GREEN GLOBS - a graphing game for $2-4$ players.
The play begins with a $X, Y$ coordinate grid.


Players take turns rolling the 12 sided dice to generate $\mathrm{X}, \mathrm{Y}$ coordinates to plot on the GREEN GLOBS GRID.

Players plot 14 GLOBS on the GREEN GLOBS GRID. See below $(5,3),(1,4),(8,0)$, $(7,1),(3,2),(7,-3),(3,-2),(3,-6),(1,-7),(-3,4),(-7,2),(-5,6),(-9,3)$. The player plotting the points can choose the coordinate to be negative or positive. BUT there can be no more than 5 GLOBS in a quadrant.

The Globs Game \#2


A player's turn consists of graphing a function on the GREEN GLOBS GRID, so that the function intersects as many of the GLOBS on the grid. Any kind of function can be plotted.

The example game below uses the equations:
$\mathrm{Y}=\mathrm{C}$ a line parallel to the X -axis passing through the point $(0, \mathrm{C})$.
$\mathrm{X}=\mathrm{C}$ a line parallel to the Y -axis passing through the point $(\mathrm{C}, 0)$


The scoring is 1 point for 1 GLOB, doubling with each additional GLOB hit by the function. As in: 2 points for 2 GLOBS, 4 points for 3 GLOBS, 8 points for 4 GLOBS.

The scoring for the above game looks like:

| Equation | Globs | Points |
| :---: | :---: | :---: |
| $\mathrm{Y}=7$ | 2 | 3 |
| $\mathrm{Y}=3$ | 1 | 1 |
| $\mathrm{Y}=-1$ | 2 | 3 |
| $\mathrm{Y}=-4$ | 2 | 3 |
| $\mathrm{Y}=-6$ | 1 | 1 |
| $\mathrm{Y}=-7$ | 1 | 1 |
| $\mathrm{X}=-9$ | 1 | 1 |
| $\mathrm{X}=2$ | 1 | 1 |
| $\mathrm{X}=9$ | 1 | 1 |
| $\mathrm{X}=6$ | 1 | 1 |
| Total | 13 | 16 |

A more complex game might include something like


Your Shot: $Y=-1+(X+1)^{2 / B+. B /(X+8)}$

Equations that could be useful:
The standard form of a lines, circles and parabolas, are generally expressed:
LINES: $\mathrm{Y}=\mathrm{MX}+\mathrm{B}$, where B is the Y intercept and M is the slope of the line.
CIRCLES: $\mathrm{X}^{2}+\mathrm{Y}^{2}=\mathrm{r}^{2}$ where r is the radius

## PARABOLAS:

$$
\begin{aligned}
& y=a x^{2}+b x+c \\
& \text { The role of 'a' } \\
& \text { If } a>0 \text {, the parabola opens upwards } \\
& \text { if } a<0 \text {, it opens downwards. } \\
& \text { The axis of symmetry } \\
& \text { The axis of symmetry is the line } x=-b / 2 a
\end{aligned}
$$

