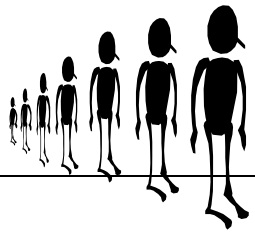
The Human Population Game



Object: The object is to make a sustainable civilization.

Set up: A "civilization" can be managed by one person, or by a team of two. Each civilization needs a chart as shown below. Civilizations begin at generation 1, with a population of 15 (10 of whom are of "fertile" age). Natural resources begin at 85.

Play: A civilization decides what its birth rate should be, and carries out calculations or actions as shown in the table. (Remember to round births and deaths to nearest whole number.)
Ending the game: The game ends after 10 generations, or when either "final population" or "final resources" falls to 0 or negative. (A population that exhausts its resources is not sustainable.)

Generation	1	2	3	4	5	6	7	8	9	10
Initial population = final population from previous generation	15									
Initial resources = final resources from previous generation	85									
Fertile population = new children from previous generation	10									
Birth rate per fertile person (choose birth rate of 0.5, 1, 1.5, 2, 2.5, or 3)										
New births = fertile population × birth rate										
Child mortality rate (roll die: 1 or 2: 0.0; 3 or 4: 0.1; 5 or 6: 0.2)										
Child deaths = new births × child mortality rate										
New children = new births − child deaths										
New population = initial population + new children										
Adult mortality rate (roll die: 1 or 2: 0.2; 3 or 4: 0.3; 5 or 6: 0.4)										
Adult deaths = new population × adult mortality rate										
Final population = new population − adult deaths										
Final resources = 100 − final population										