The Survival Game
A game of strategy for 3-5 players.

- There is an outbreak of a new, potentially fatal virus.
- Each player is responsible for the health of 12 people, all initially susceptible to the virus, for a period of 5 years.
- The illness can be treated with Plaguestop (PS) or, more successfully, with Virakill (VK). If a person recovers, they are then immune to the virus.
- The winner is the player who keeps the most people alive and in good health without going over budget.

Equipment required
- Each player: a copy of the Survival Grid
- Per group: a copy of the Treatment Table and Outcomes Diagrams and a die.

Rules
- Each player has a budget of 100 sims to cover the whole of the 5 year period.
- The Treatment Table shows the cost in sims of treating people with PS, VK, or not offering them any treatment. The cost is greater if people get very sick and die during the year, because they then need hospital care.
- For each of the 12 people, you will need to throw the die to determine their state of health for the next year. At the start of the game, everyone is healthy.
- The Outcome Diagrams tell you how to interpret the number on the die. Initially, use the ‘Previously Healthy’ diagram. If a person becomes ill, decide which treatment you are going to offer them and use the appropriate table to find the cost.

Getting started
- Throw the die for Anna. Use the ‘Previously Healthy’ Outcome Diagram to see if becomes ill. If she does, each player should record what treatment they want to offer her, and the cost, on the first row of their Survival Grid.
- Repeat for each of the other 11 people on the Survival Grid.
- Add up the total cost for the year, and record it at the bottom of the costs column, together with the amount left in your budget.

Years 2-5:
- For each person who has not become ill, continue as above.
- For people who have become ill, use the Outcome Diagram corresponding to the treatment they are receiving to see whether they recover or not.
  - If a person recovers, they no longer need treatment and are now immune. You do not need to record anything else for them.
  - If a person remains ill, you may continue treatment if you still have funds to do so, but you cannot continue treating patients once you have spent your budget of 100 sims.
  - If a person dies, remember to pay the higher cost to cover their hospital treatment. This needs to be paid even if you have run out of money (giving a negative balance on your budget).

Who wins?
When you have completed Year 5, fill in the final column and the overall results.
The winner is the player who kept the greatest number of people alive over the 5 year period.
In the event of a tie, the winner is the player with the greatest number of healthy, rather than sick, survivors.

The Economics of Health: How do we decide?

The Economics of Health: The Survival Game - Rules

https://motivate.maths.org/content/MathsHealth/HealthEconomics
**Treatment Table**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Cost (sims) if person survives the year</th>
<th>Cost (sims) if person dies during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>VK</td>
<td>8</td>
<td>n/a</td>
</tr>
<tr>
<td>None</td>
<td>n/a</td>
<td>2</td>
</tr>
</tbody>
</table>

**Outcome Diagrams**

- Choose the appropriate diagram for the person’s state of health and existing treatment.
- Throw the die.
- Use the diagram to determine what this means for the person, record the outcome on the Survival Grid, together with the cost of any treatment.