**Infinifactory**

Problem:

Create a production line that outputs a certain creation

Core Game Loop

* Place machines and conveyer belts, etc, to create production line
* Test
* Iterate and change
* Successful production line
* Move onto next level

Challenge(s) of the game

The one and main challenge of the game is completing each level.

A player is limited only by space and so sometimes may need to condense and re-organise their production line.

A player is not limited by resources of costs of any kind, however at the end of each level they are rated on their efficiency and use of materials.

Game mechanics

* Placing blocks/machines which make up the production line.

The players only mechanic is the ability to place blocks and machines to make up the production line. The player can start and stop the production line at any point to test it.

The materials come into the level from determined inputs (e.g., materials come out of a hole in the wall). The player must use conveyer belts or any other means of transporting the materials and use machines such as welders or drills to create their desired output.

The output must then be transported to the drop-off area.

**Constraints**

The players only constraint is physical space. Sometimes the player must build a construction line in a very tight area and so must be efficient with their space.

By not constraining the player by providing them with limited resources or have costs associated with each resource, players are free to prototype and create anything they can think of with no penalty; this fuels each players creation being unique as opposed to players creating the same answers to every level due to having access to only a few resources which guide the player to a certain answer.

**Conclusion**

Players are left to decide how they wish to complete each level. Players are shown how the machines work and nothing more. This means its very common for players to approach each problem different and lots of unique solutions to each level exist.

How this fits our game:

By giving the player a number of resources with no cost, players are left to choose how they want to tackle the level. This means that many unique solutions are found. Whilst there is often a “most efficient” method, there is not one single correct method, a level can be completed in many ways.