**Poly Bridge**

Problem:

Get (a) vehicle(s) over a river by building a bridge.

Core Game Loop

* Build bridge
* Test
* Iterate and change
* Move onto next level

Challenge(s) of the game

The first and most apparent challenge of each level is to get all vehicles from one side of the river to another; this is done by constructing a bridge.

* Players must construct a bridge capable of getting all vehicles across.
* Players can be limited to the variety resources they have access to.
* Players must keep within a certain budget (each resource has a cost associated with it)

Game mechanics

* Placing parts of the bridge
* Linking parts together

The main mechanics of the game involve placing building materials and connecting them.

The game itself teaches you a few basic techniques/ways to correctly structure a bridge to give it the most structural integrity, using real world engineering practices that are used to build bridges. This means it is now up to the player to decide what techniques they want to use and when they want to use them. Alternatively, many players often create their own alternative structures.

Example: when building a long bridge, some people use wooden supports in a triangle formation and use underneath legs to support the bridge, whereas some players choose to use steel beams and rope to support the bridge.

**Constraints**

Money. Each piece of material costs money and you only have a certain amount per level. This forces the player to decide what they want to spend their resources on, and this also influences which building technique the player decides to do.

Some levels also restrict you from using a certain material. For example, a level may restrict you from using steel beams, and this causes the players to get more creative with the materials they are allowed to use.

**Conclusion**

The players are left to decide how they want to build the bridge (sometimes influenced by the constraints and available resources), many players even come up with their own unique designs which are not shown to the player during the tutorial.

How this fits our game:

By giving the player a number of different resources, the players are left to choose how they want to tackle the level. Different players often go for different techniques to get the car across the river, and whilst there is often a “most efficient” method, there is not one single correct method. There are many different ways each level can be completed.