

Background Design

Like I have explained before GCSE Science is split into three different categories, these being biology, chemistry and physics. As all the levels fall into one of these categories, then each one would need its own background to set its own scene.

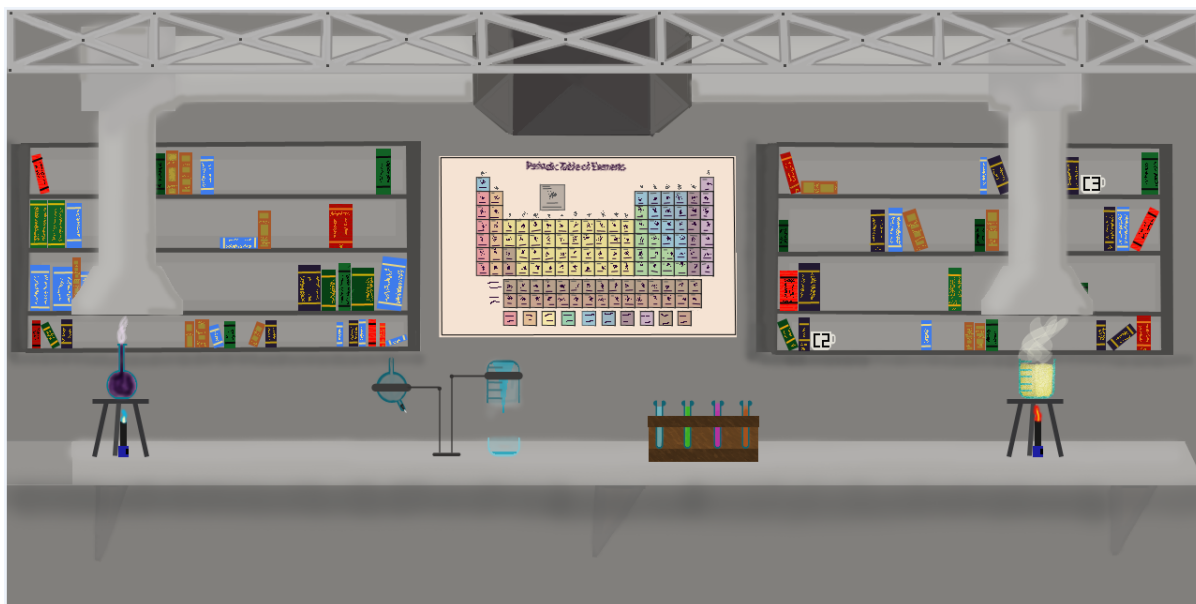
There are four background in total- the first being a neutral factory setting that sets the theme for the tiles. Each background shares the same dimensions as the code written will automatically find the background and set the level size to the dimensions. I choose the format of PNG as it is supported by java and an alternative than GIF or JPG for high colour lossless images and supports translucency. This does mean that these backgrounds cannot support animations, but with such detailed stills, I feel like the end results compensates for it. Finally, I chose Adobe Photoshop as a programme I am familiar with and supports the creation of PNG files.

The first background:

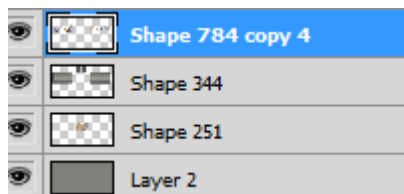


This background is used in the first two levels of the game, serving as an introduction to the game. As I want the exposure to each subject to be equal, therefore this area was needed. The background itself is designed from a factory. The dark design comes from the theme of collecting batteries, hence the factory itself would be still and have only emergency lighting. As this is only the introduction, it uses a simpler design with few objects in the background.

The second background:



This is the chemistry background; it will be the first background of subjects the player will see. As it is a subject background, it boasts a lot more detail:

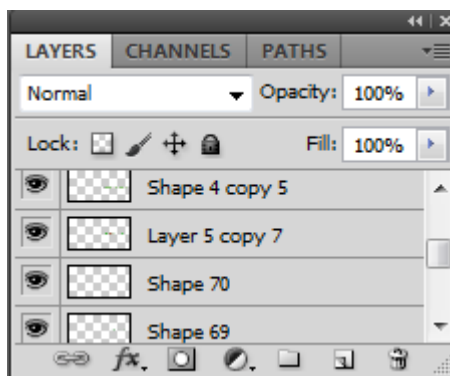


This background features over 1000 shapes, with about 150 unique assets. It is based on a chemistry classroom- featuring lightly populated bookcase. The colours used are a lot lighter than the previous background. I wanted to make sure that the subject in the background was clear, but there are not many visual representatives for chemistry, so I took a minimalistic approach, but made sure that the things that were included were not rushed.

The third background:



This is the biology background, unlike the chemistry background, it features a lot more painted assets rather than objects.



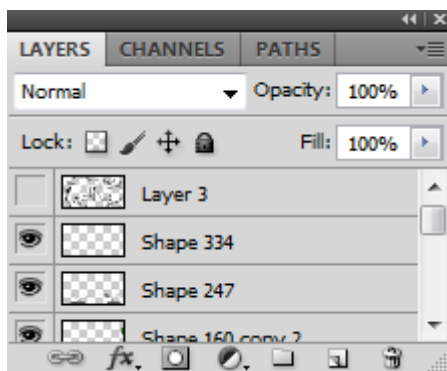
The brightest background so far, it draws its roots from the science of hydroponics, growing plants in an artificial environment without soil, just water. In the background the lab has been overgrown, contrasting the minimalistic nature of chemistry with an overwhelming abundance of plants, by removing some of the plants, you can catch a glimpse of what it was like before everything went to ruin:



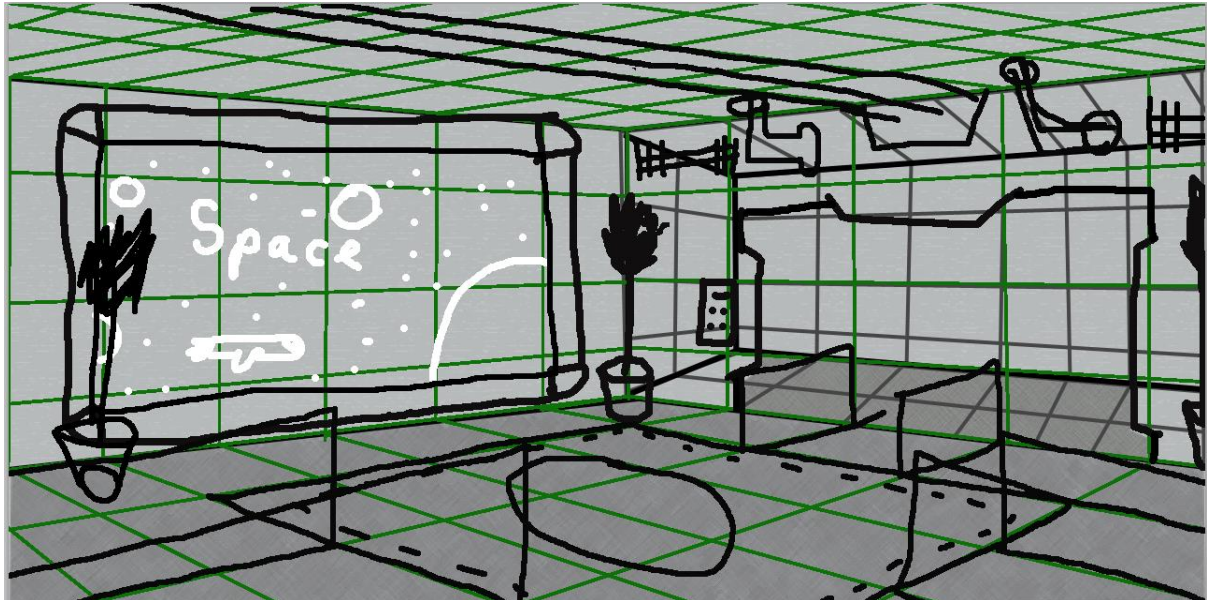
The last background:



Boasting a 3-dimensional background, the avoiding robotics as much as possible as the theme for the physics background, the next option was space.



Set in a space station, the physics level gives a clean feeling, as while the background may look simple on the first glance, the second reveals greater detail in the few objects that decorate the station. Great planning was used to allow the room to be made in 3 dimensions, each part had a grid made and plans drawn on to the grid:



The background was then coloured to separate the walls, ceiling and floor, followed by each plan created.