Inspiration

The greatest source of inspiration for this sketch was Jarred Tarbell’s *Pond Ripple Animation* (http://www.levitated.net/bones/hiddenPower/examples/ripples.html) due to the use of coloured circles which radiate outwards from a central point, whilst simultaneously overlapping to create a layered effect. There is also an implied third dimension due to the expanding and contracting motion of the circles. Although it was a requirement that my own image be static, I still feel movement was implied due to the radial arrangement of the visual elements.

Damien Hirst’s plate artworks were also part of the inspiration for this project.

![Image of Damien Hirst's plate artwork](Round (From In a Spin, the Action of the World on Things, Volume 1)
2002
Plate engraved using etching tools)

His use of radial patterns with interrupting lines and bright colours embraces pop art, giving the work a vibrant feel, which is what I aimed to accomplish within my own sketch using random colours and bright gradient backgrounds.
Experimental Sketches

Atomic Spaghetti

This is the first sketch which I created during the experimentation process. The aim was to experiment with creating lines to form motion in a static environment. The sketch is created by first drawing a straight line from left to right and then drawing a random Bezier curve at the ending point of the line. The biggest problem with this sketch is that the end result will quite frequently just look like a tangle of lines rather than a collection of intricate curves, which turned me towards trying a more structured pattern with larger objects.

Paint Splats

In this sketch I experimented with overlapping elements to create a more layered image. By using circles of random sizes the sketch appears more dynamic and impulsive. The program ensures that both larger and smaller circles are drawn to add to the variation of each sketch by using 2 separate variables to calculate circle size (one with a larger range of 30 to 80 and one with a smaller range of 10 to 30). However, the overall pattern I felt was too simple and a series of generated sketches would all look too similar.
I felt that previous sketches did not relate the individual elements of the image to each other strongly enough. In *Chains* I placed the circles closely together so they appear linked. This was achieved by utilising rules which determine where the circle should be drawn based on the radius of the previous circle. I felt that this means of linking elements was too simple to be visually attractive.

**Thread Tunnels**

Previous sketches were very much anchored within a 2D space. This sketch explores creating a simulated 3D structure by overlapping circles very close to each other. I appreciate how this sketch creates direction and a sense of “ordered chaos”. However, the problem which occurred here was that the use of so many coloured circles caused the tunnels to look very similar to each other, with only size as the discriminating factor. I also felt that I did not incorporate enough elements, as the only shape drawn is the circle, causing the sketch to feel repetitive through successive generations.
Molecules: Structure

This sketch incorporates lines and circles to create a more unique and dynamic shape. The goal of this sketch was to mimic the molecular structure of proteins. The visual elements relate more closely to each other as they are all linked by lines. The main issue with this sketch is that the crossing over lines causes the image to become too “busy” and I felt adding a colour background would cause the visual space to become polluted with colour. What I did like about this sketch is the ability of the lines to draw the audience’s attention to a point.
Final Sketch and Design Concept

**Molecules: Starburst**

This is the final development of the sketch. The design draws partially from molecular structure models, as with *Molecules: Structure* and partially from models of the solar system, where smaller objects orbit around larger objects.

The main idea behind the design is to have a definite focal point with random-size lines and circles radiating from its center to give the illusion that they are “bursting” out of it and thus implying a third dimension and a sense of action.

The largest change I made was to add a randomly-generated background gradient, as the altered pattern of the circles and lines made the visual space much less crowded. The background colours which are generated all have minimum red and blue values of 100, ensuring that the background colour is always bright, keeping with the “solar system” theme.

The image is drawn in sets of 2 circles and 1 line connecting them:

- First, the starting circle is drawn at a random location, of random colour and random size (between 10 and 80 for the first five circle, then between 10 and 40 for the remaining circles).
- Secondly, a line of random length is drawn from the center of the circle to a random point on the image (between 0 and 600 for the x-axis and between 0 and 200 for the y-axis).
- Lastly, another random circle is drawn at the ending point of the line.

Because the starting position of the first circle is generated outside of the loop, the first circle of each set is always drawn in the same position, causing them to overlap. This is what gives the focal circle a “ripple” effect.