Jazzing up your graph
Visual representations

10 marks

a. *(5 marks)* Write out all of the values that appear in the diagram that are categorical and say how they are encoded in the diagram.

   Time of the processes is categorical and encoded as the height of the cone (or the volume of the cone). Different processes of a program are categorical and encoded as the horizontal position of on the bottom surface. Different programs are categorical and encoded as the vertical position on the bottom surface (or colours for program C).

b. *(3 marks)* Based on Cleveland and McGill's ordering of elementary tasks, think about how the values of `Time for Programs to Start Up` encoded in the above chart. To that end:

   - Identify which elementary tasks are used in the encoding of these values?
     Position along a common aligned scale, volume and colour saturation are used in the encoding of these values.

   - Which elementary tasks are most likely to be used in decoding the values by the reader? Comment on the likely accuracy of this decoding.
     Position along a common aligned scale is most likely yo be used in decoding values by the reader as people can easily distinguish different categories from the graph.

c. *(2 marks)* Critically assess the contribution of the scales appearing at the left and back of the plot.

   Lines at the left and at the back are giving spacial sense of how high is the cone or how large is the volume of the cone. Numbers aligned with each line can be easily read and decoded by readers so that they are able to approximate the time interval.