## Data Visualization Sheet 3 | Matthew Kurnia

- 1. (Source code)
- 2. (Source code)
- (Source code) 3.
- Marks and channels
  - a) Pizza
- Area mark for various pizza parts
- ii. Color channel for differing pizza parts
- US Insurance rates
  - i. Area mark for US states
  - ii. Line mark for legend(?)
  - iii. Color channel for decrease in monthly insurance price
  - iv. Horizontal position channel for ages
  - v. Vertical position channel for income groups(?)
- US stimulus
  - i. Point mark for household groups
  - ii. Horizontal position channel for average aid given
  - iii. Vertical position channel for different bills
  - iv. Size channel for the number of households in each group
- d) Kobe Bryant's shots
  - i. Point mark for Kobe's shots
  - ii. Position channel for location of shot on the basketball field
  - iii. Color channel for whether the shot got in(?)
- Daily routines
  - i. Line mark for activities
  - ii. Vertical position channel for different people
  - iii. Horizontal position channel for time of activity
  - iv. Color channel for marking different activities
- Bob Ross
  - i. Point mark for the appearance of subject matters on Bob Ross paintings
  - ii. Horizontal position channel for seasons
  - iii. Vertical position channel for different subject matters
  - iv. Color channel for appearance percentage(?)



## 5. Water usage

- We can see the population and per-capita water use nicely, but we cannot easily see (and compare) the total water use of each country just by looking at the area because the height of each rectangle is not consistent, that is, we have two degrees of freedom of changing the shape of the rectangles, so we cannot compare just the heights or just the widths.
- We can no longer see the absolute per-capita usage of water, and so the total water use cannot be seen/obtained from any source.
- We can see clearly the total amount of water used per country and their populations, but we now cannot discern the water used per-capita of each country because we need to do a complicated back-and-forth comparison of the population and the total water used