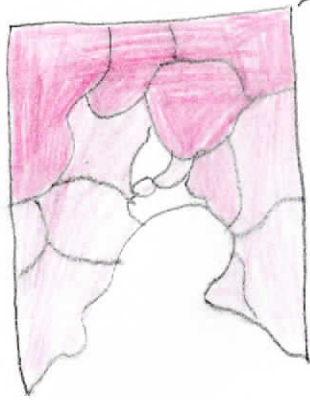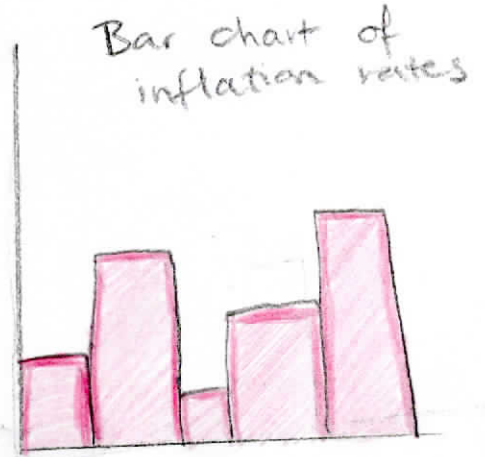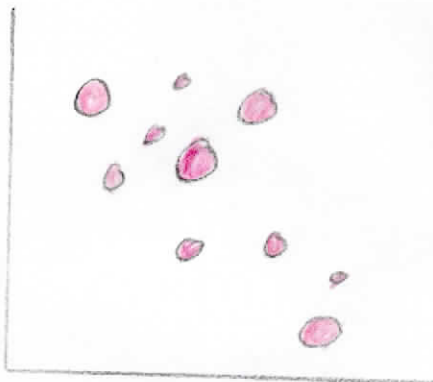# IDEAS
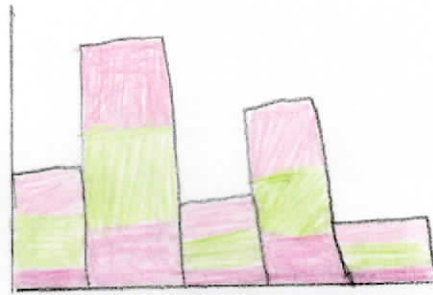

chloropleth map of fertility rates

Bar chart of inflation rates

Scatter plot of Fertility Rates

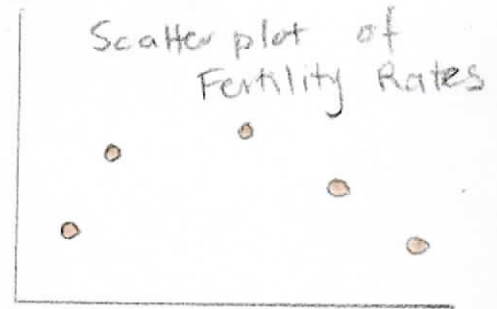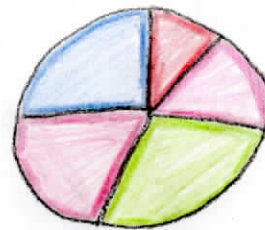Stacked Bar chart of Births

Bubble plot of rent prices & Fertility

Pie chart of Births

FILTER

Don't need 2 visuals for births
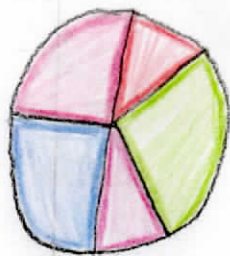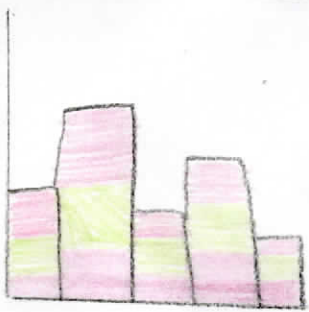
CATEGORISE
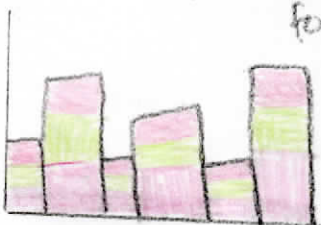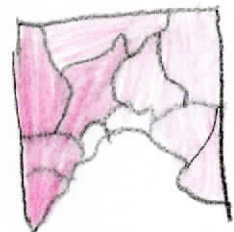
MAPS

CHARTS

COMBINE

QUESTION

- Correlate cost-of-living to fertility
- Use rent to highlight prices

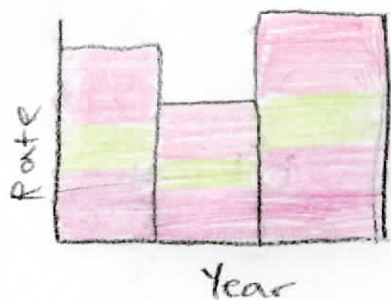Line & scatter plot to show correlation
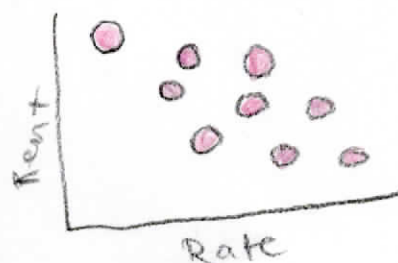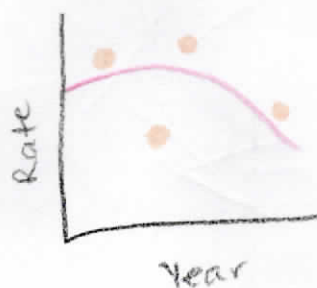
Include rent on map with fertility

IMPACT OF COST-OF-LIVING ON FERTILITY

BIRTHS

INFLATION

Rate / Year

Rate / Year

Rent / Rate

CONCLUSIONS

LAYOUT
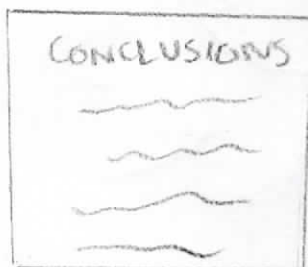
Year:

☐ 2017 — Selecting year to filter information

Rent:
Rate:
Year:

Clicking on the council area brings up statistics / info

FOCUS

OPERATIONS

- Users can filter map & bubble chart by year
- Clicking marks produces tool-tips w/ more info
- Can filter by region or council area on bar & bubble plots

DISCUSSION

PROS

➕ Good interactivity

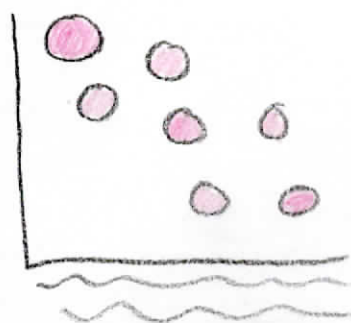➕ Clear Sightlines

CONS

➖ Limited information

➖ Minimal Narrative

IMPACT OF COST-OF-LIVING ON FERTILITY

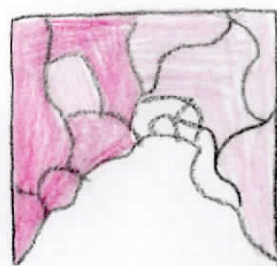## INFLATION

Rate / Year

BIRTHS

RENT

MAP

GRID VIEW — Equal containers for each idiom

LAYOUT

▽ REGION

Filtering by region allows for bar chart to transform
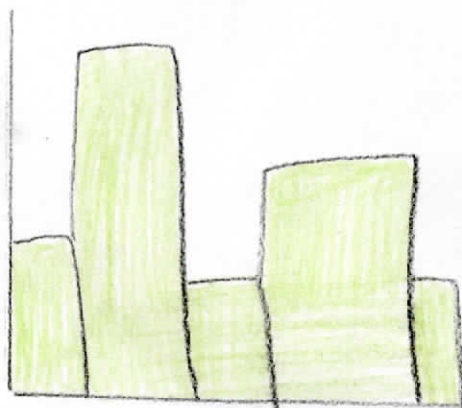
— Shows only births for that region

FOCUS

OPERATIONS

- Can use legend on bubble plot to highlight region
  ↳ Change opacity
- Tooltips on each each mark
- Filters by year

DISCUSSION

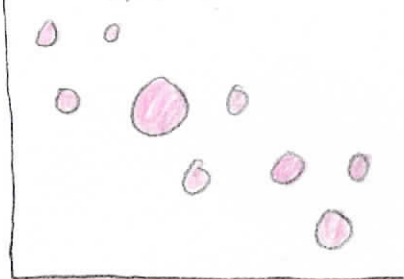### PROS

+ Room for text explanation
+ Neat & easy to follow

CONS

− No visual heirarchy, every idiom of equal size/focus
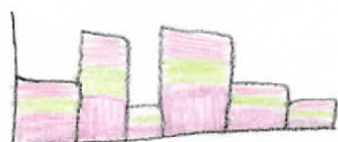− No groups of similar idioms for ease of understanding

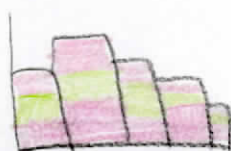# IMPACT OF COST-OF-LIVING ON FERTILITY
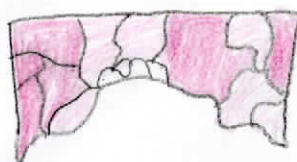
RENT

BIRTHS 2016

2017

2018

2019

2016

2017

FERTILITY

2018

2019

LAYOUT

REGION

Selecting region will dull other region marks

FOCUS

OPERATION

- Tool-tips
- Click filter on bubble plot to show year
- Highlight marks with bubble plot legend

DISCUSSION

PROS

+ Easy to compare changes year-to-year

+ Good use of colours & colour consistency

CONS

- Minimal interactivity

- Cluttered layout
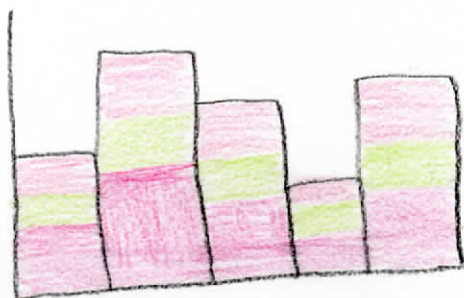
IMPACT OF COST-OF-LIVING ON FERTILITY

With cost-of-living increasing, it's harder to afford a family
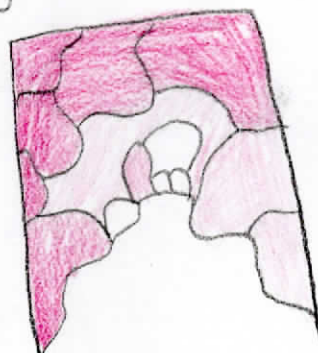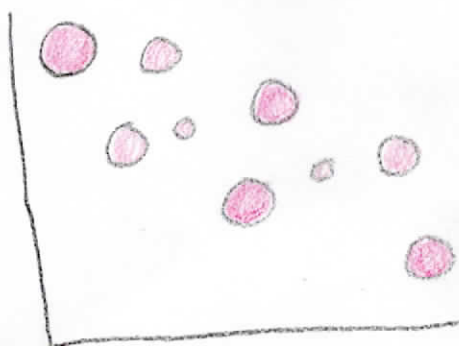
INFLATION
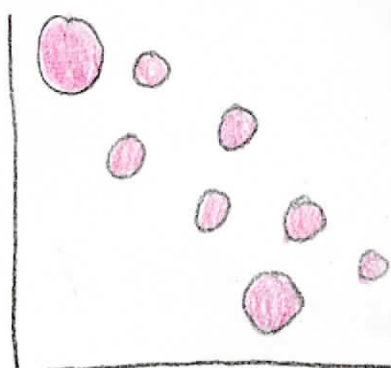

BIRTHS

Detail key terms

RENT & FERTILITY

Explain correlation between rent & cost-of-living

YEAR: ▼ 2017

Filtering year will simultaneously update both charts for better comparison

YEAR: ▼ 2017

2017
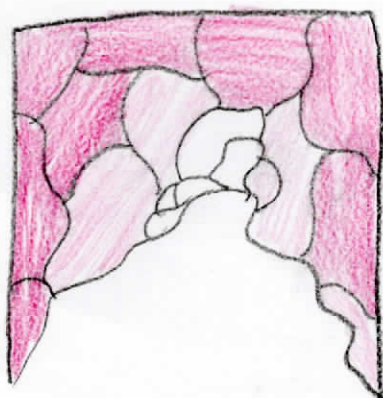
2017

LAYOUT

OPERATIONS

- Each mark will have tool-tips on hover
- Filtering drop-downs will be used for bar chart
- Combined year for bubble plot & map
- Legend of bar chart to highlight information

DETAIL

FOCUS

Dependencies

- CSV files stored on central GitHub
- Vegalite
- Australian Bureau of Statistics for all data
- Mapshaper & natural earth for geographical data

Time & Effort

- Estimated 1 week to clean & gather data
- Estimated 3 days to produce idioms