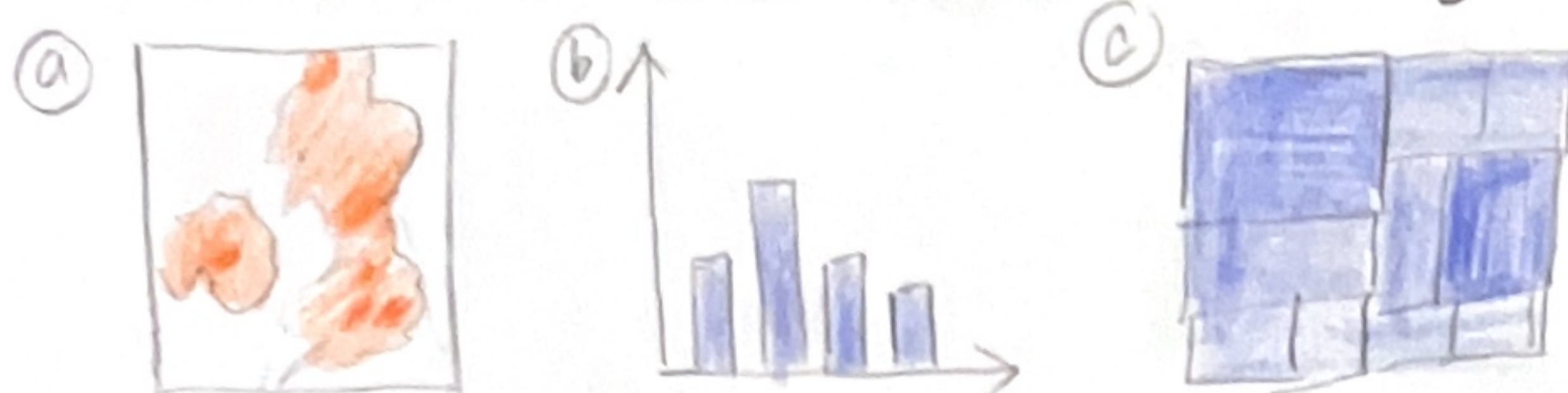


# IDEAS

① Global Museum Density Relative to Population



② Museums Per Area Across UK County



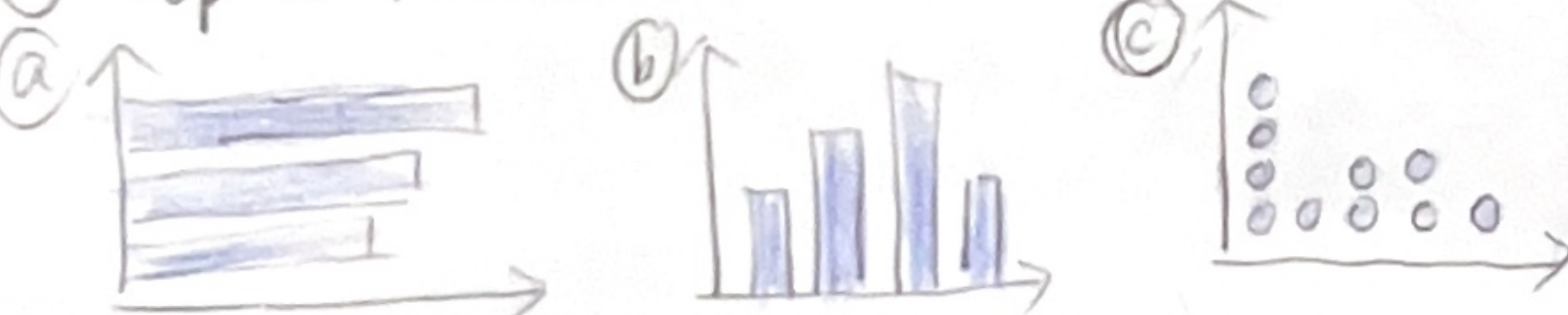
③ Museum Density in UK (per 100K population)



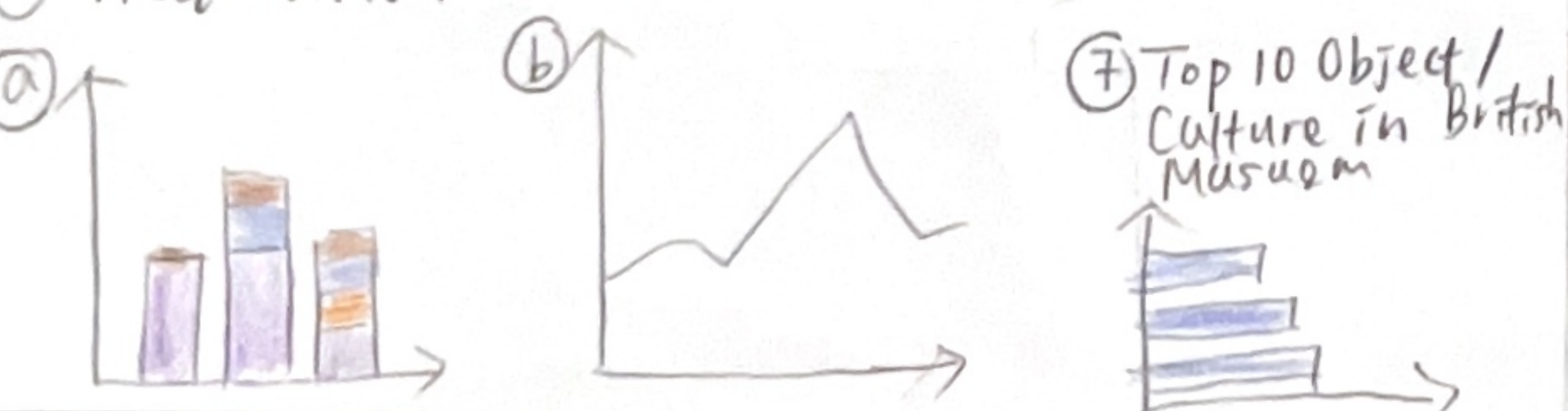
④ Museum Collections Subject Breakdown Across UK



⑤ Top 10 Visited Museums in UK



⑥ Acquisition Over Time in British Museum



## COMBINE & REFINE

For the ⑥, Acquisition Over Time in British Museum, I combined Bar chart and Line chart to show the trend. which year has highest object collection

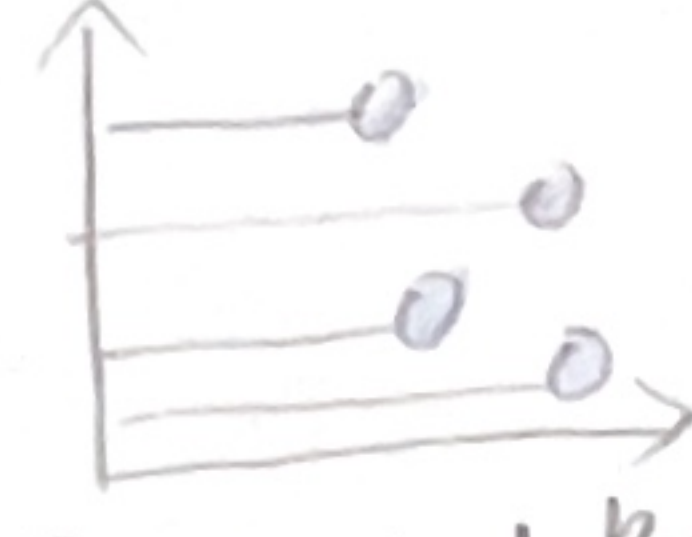
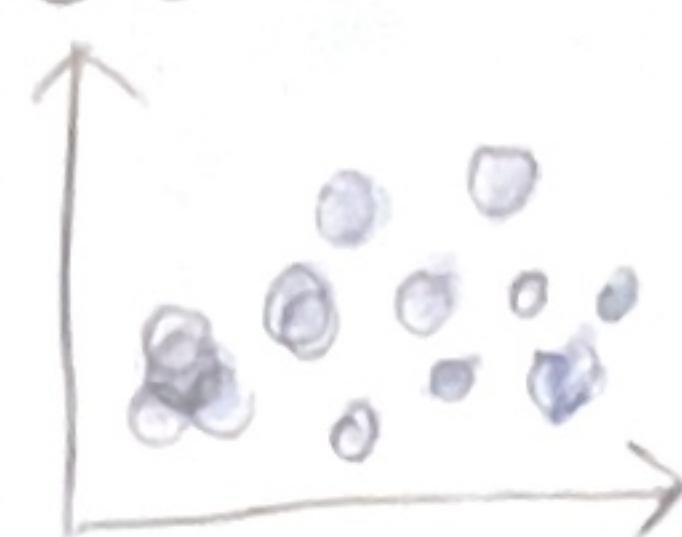


## FILTER

① ② Chloropleth Map ③ ④ Chloropleth Map



③ ④ Scatterplot ⑤ ⑥ Lollipop Map



⑤ ⑥ Horizontal Bar chart



⑥ Stacked Bar chart



→ Remove ⑦

## CATEGORIZE

Museum

Qualitative

Quantitative

- Count / Population ①
- Count / Area ②
- Count Per 100K ③
- Top 10 museum ⑤
- Number of object acquired over years ⑥

- Subject of museum collections ④

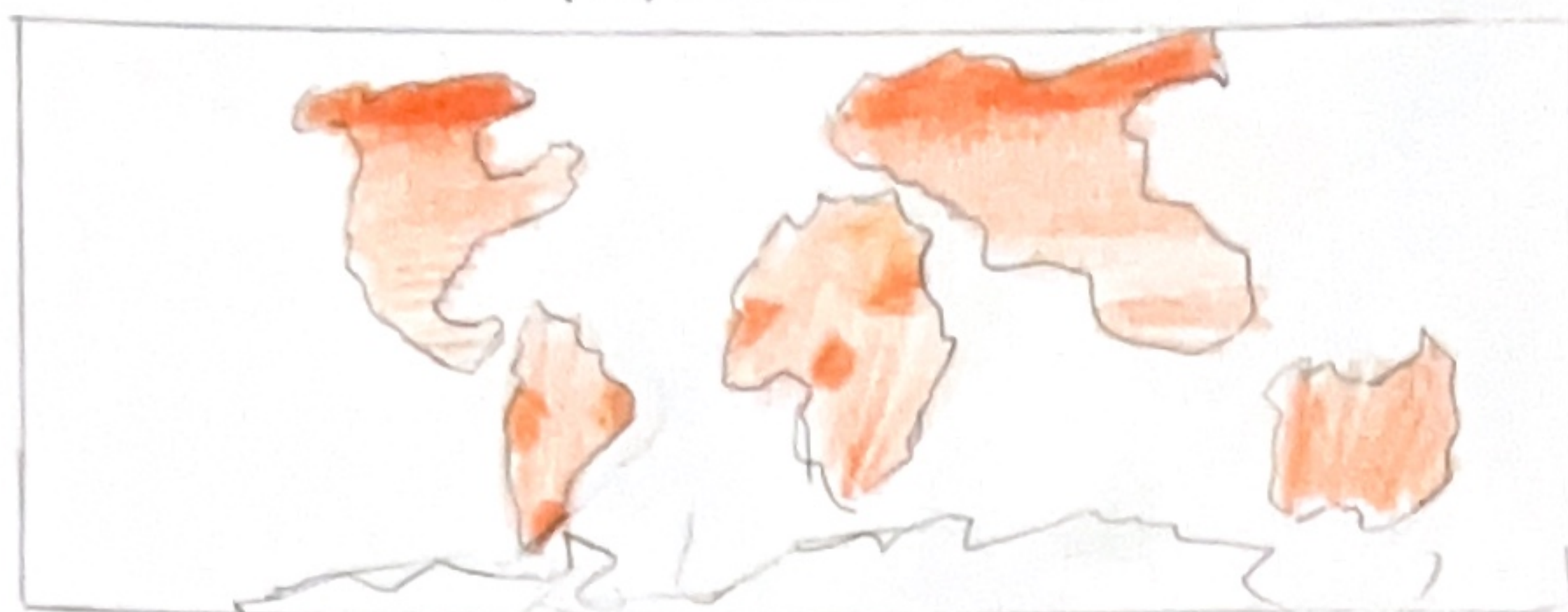
## QUESTIONS

- Where in the world can people easily access museums?
- How are museums spread across UK?
- Are densely populated areas better served by museums?
- What kinds of museums are most common across UK?
- Which museums are most popular?
- How has top 1 museum's collection evolved?

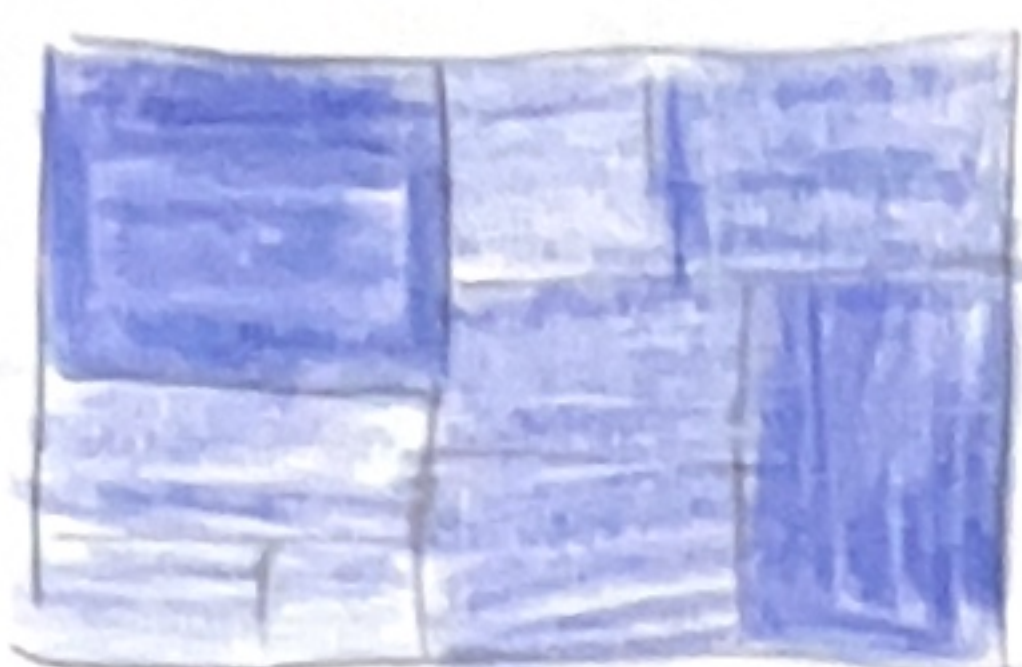


# LAYOUT

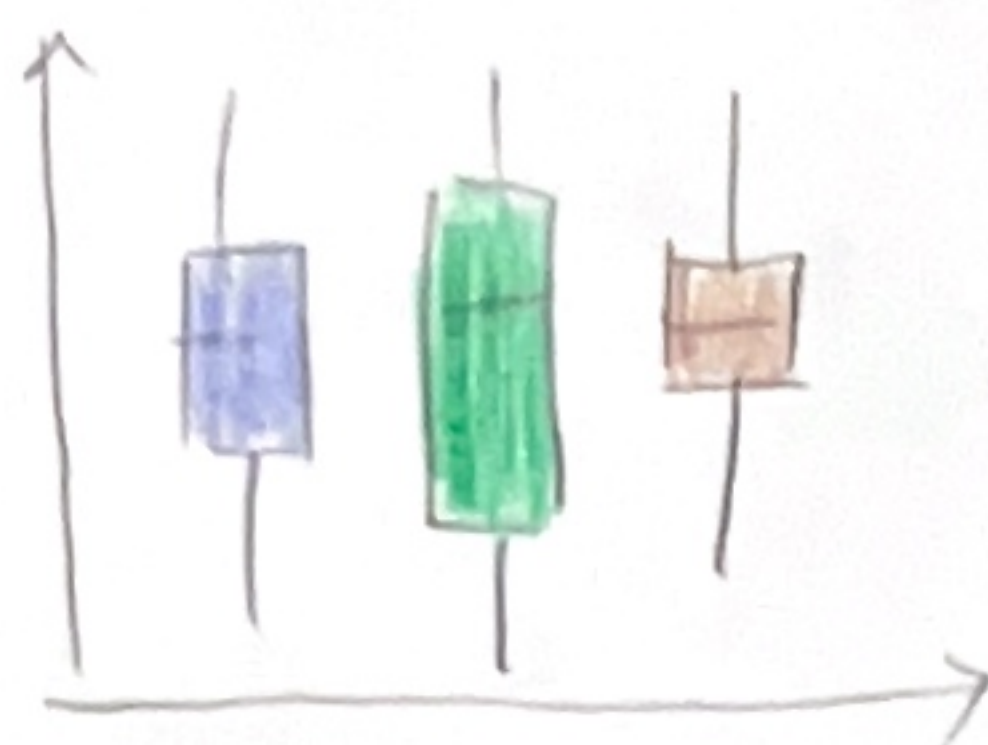
## MUSEUM



Museum Per Area (UK)



Museum Density (UK)



Museum Subject in UK

UTILITIES WAR MIXED  
BUILDINGS LOCAL HISTORY  
ARTS TRANSPORT PERSONALITY

TOP 10 MUSEUMS In UK



TOP 10 object in British Museum



## FOCUS

- ① Focus on how museum distribute in each countries.
- ② Dive into one of the country to have a further investigation about how area and density affect.
- ③ Dive deeper, list out top 10 and dive into top one visited museum and show the top 10 object type that have the most.

Author: Ting Shu Hai

Sheet : 2

Date : 10/10/2025

Task : Layout Design 1

## OPERATION

### Tooltip

- ↳ Country, Museums Count, Population, Museums perlook
- ↳ Museums count, Area
- ↳ LAD, Museums Count, Population
- ↳ Subject, Museum Counts

### Annotation

- ↳ Highlight countries with highest museum density.
- ↳ Highlight and explain a bit why boxplot get this visualisation

## DISCUSSION

### Advantages:

- ① The idioms are clear and straightforward.
- ② Users can interact easily as there are no complex annotations.

### Disadvantages

- ① The big title and title for each graphs is too simple and not specific.
- ② No storytelling, suddenly jump from worldwide to uk.

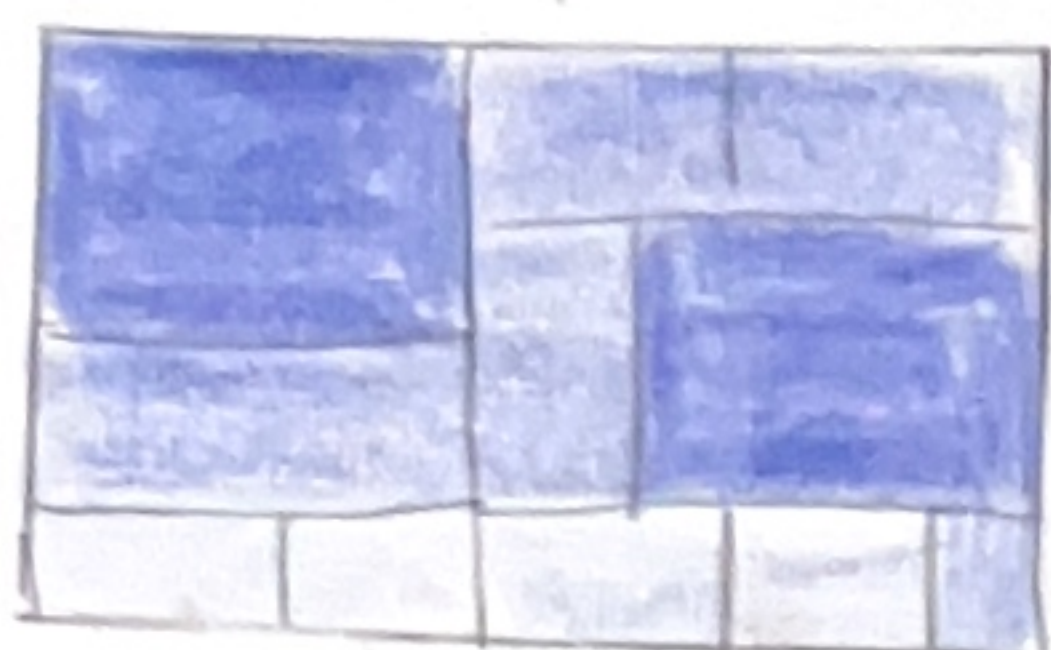


# LAYOUT

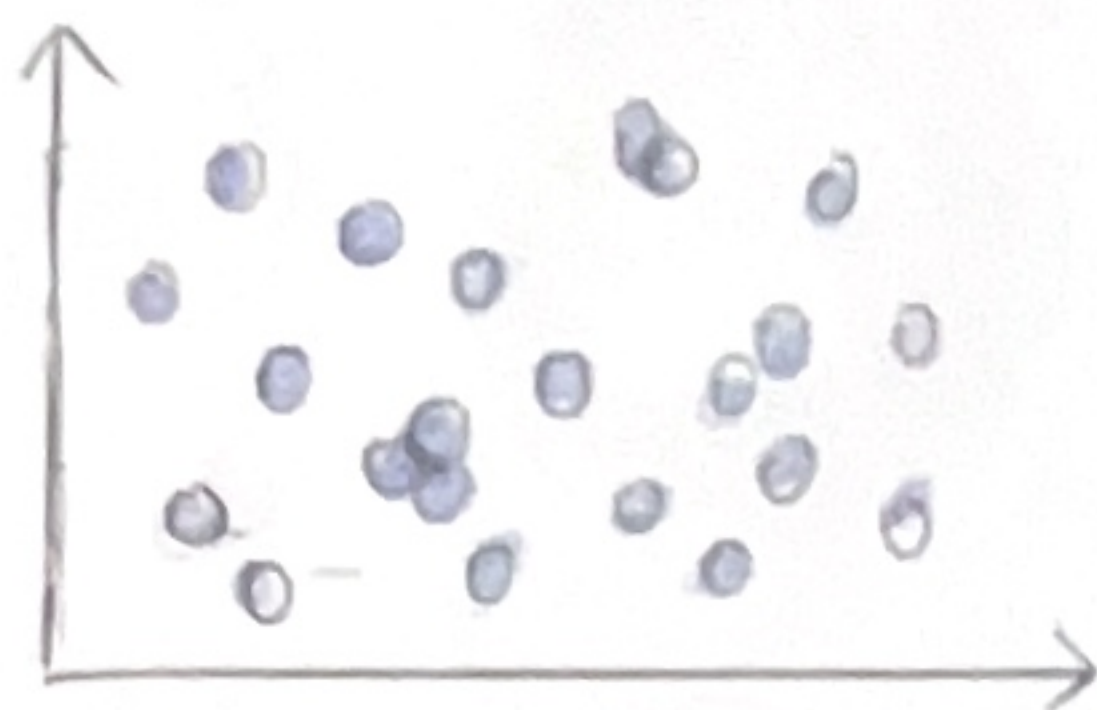
## DISCOVER MUSEUMS



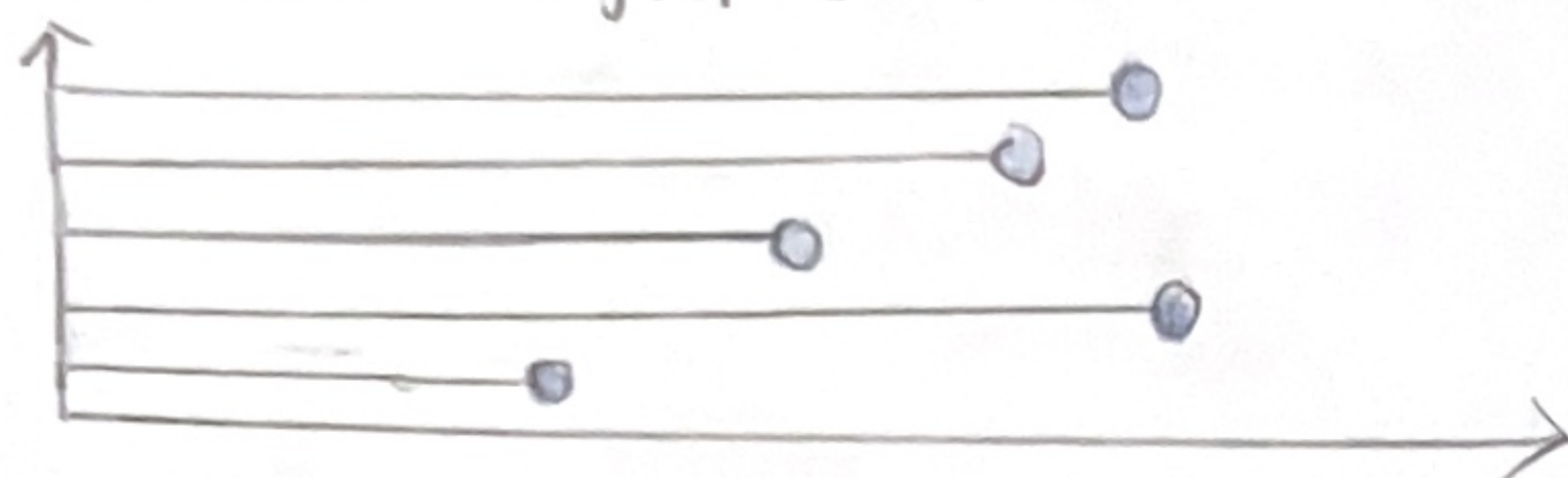
Museums Per Area  
Across UK LAD



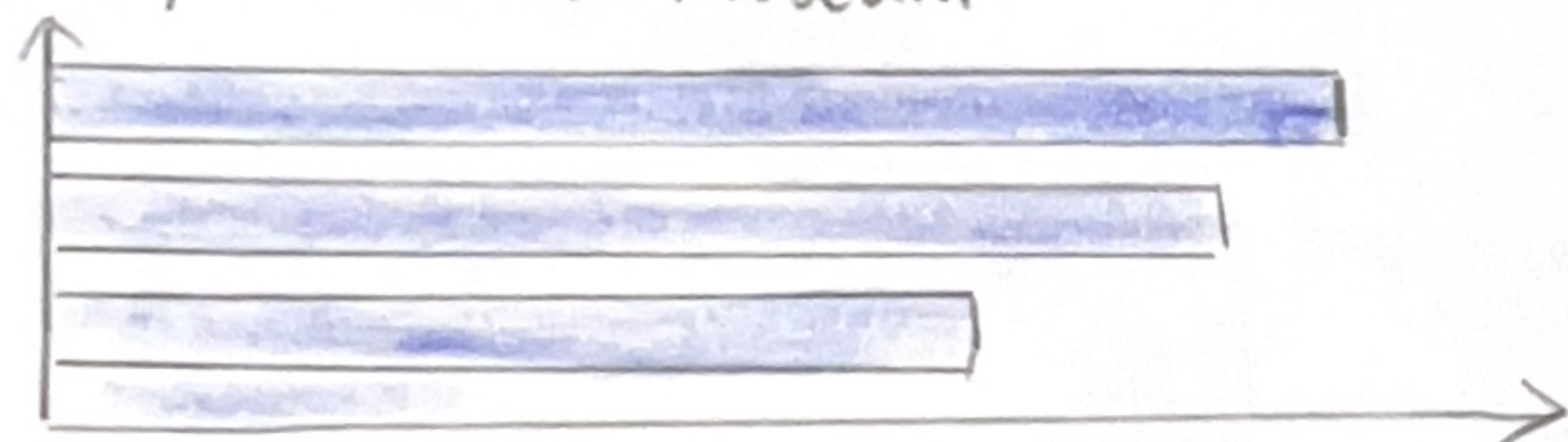
Museum Density  
in UK



Museum Subject Breakdown in UK



Top 10 Visited Museum in UK



Acquisition Over Time in British Museum



## FOCUS

- ① Focus on exploring distribution, diversity and significance museums from global to UK.
- ② Highlights patterns of inequality, such as LAD with few museums despite large populations or areas.
- ③ Explores how museums interest evolves over time.

Author: Ting Shu Hui

Sheet: 3

Date: 11/10/2025

Task: Layout Design 2

## OPERATION

### Tooltip

- ↳ Country, Museum Count, Population, Density
- ↳ Museum Count, Area
- ↳ LAD, museum count, Population
- ↳ Subject, Museum Count
- ↳ Year, number of objects

### Annotation

- ↳ Highlight countries with highest density in global map
- ↳ Add museum count on lollipop chart
- ↳ Add highest trend on Line + Bar Chart

## DISCUSSION

### Advantages

- ① Clear flow and idioms
- ② Data normalized for maps

### Disadvantages

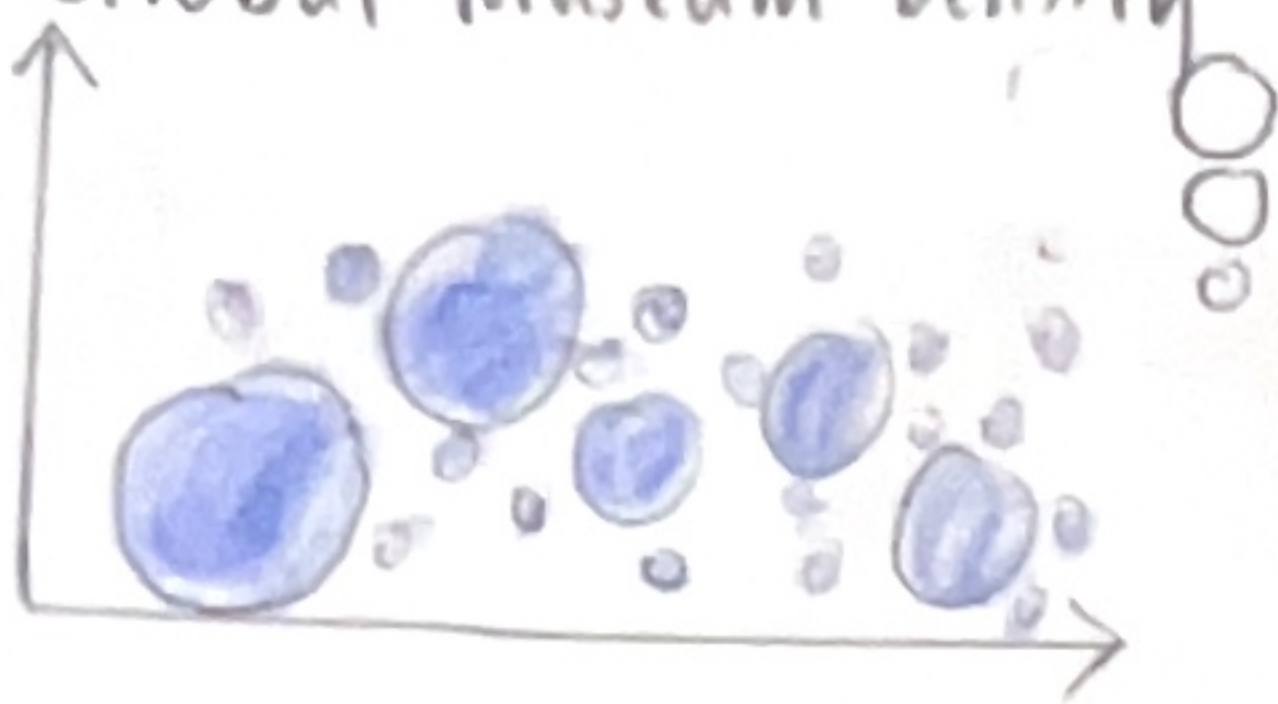
- ① Lack of filter
- ② Lack of text



# LAYOUT

DISCOVER MUSEUMS: EXPLORE UK & GLOBAL COLLECTIONS

Global Museum Density

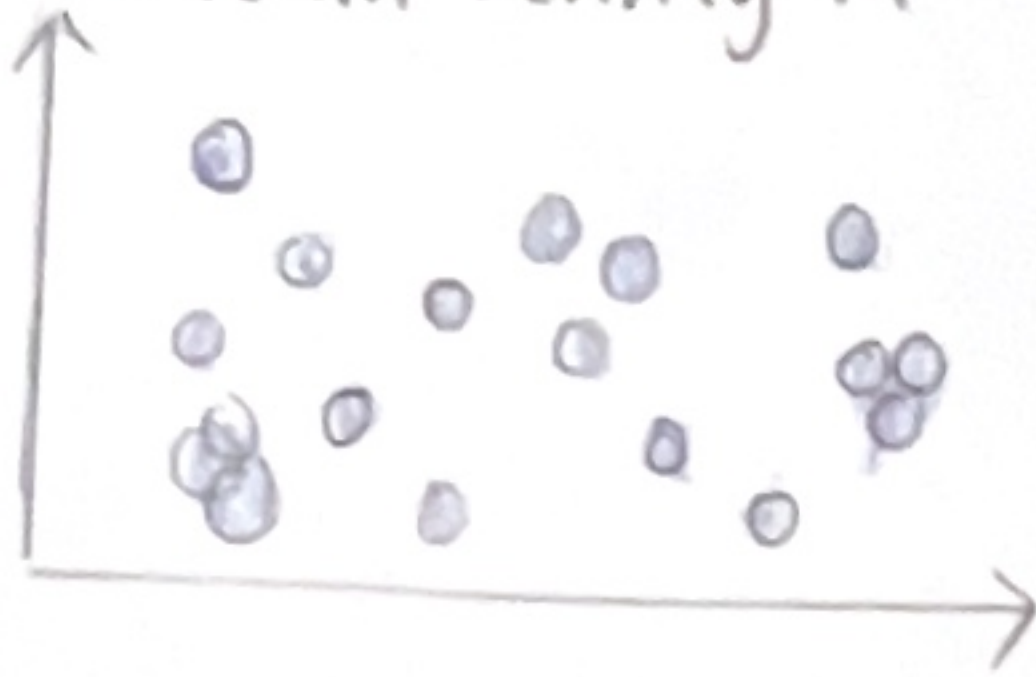


Museum in UK (per Area)



Explore UK Museum

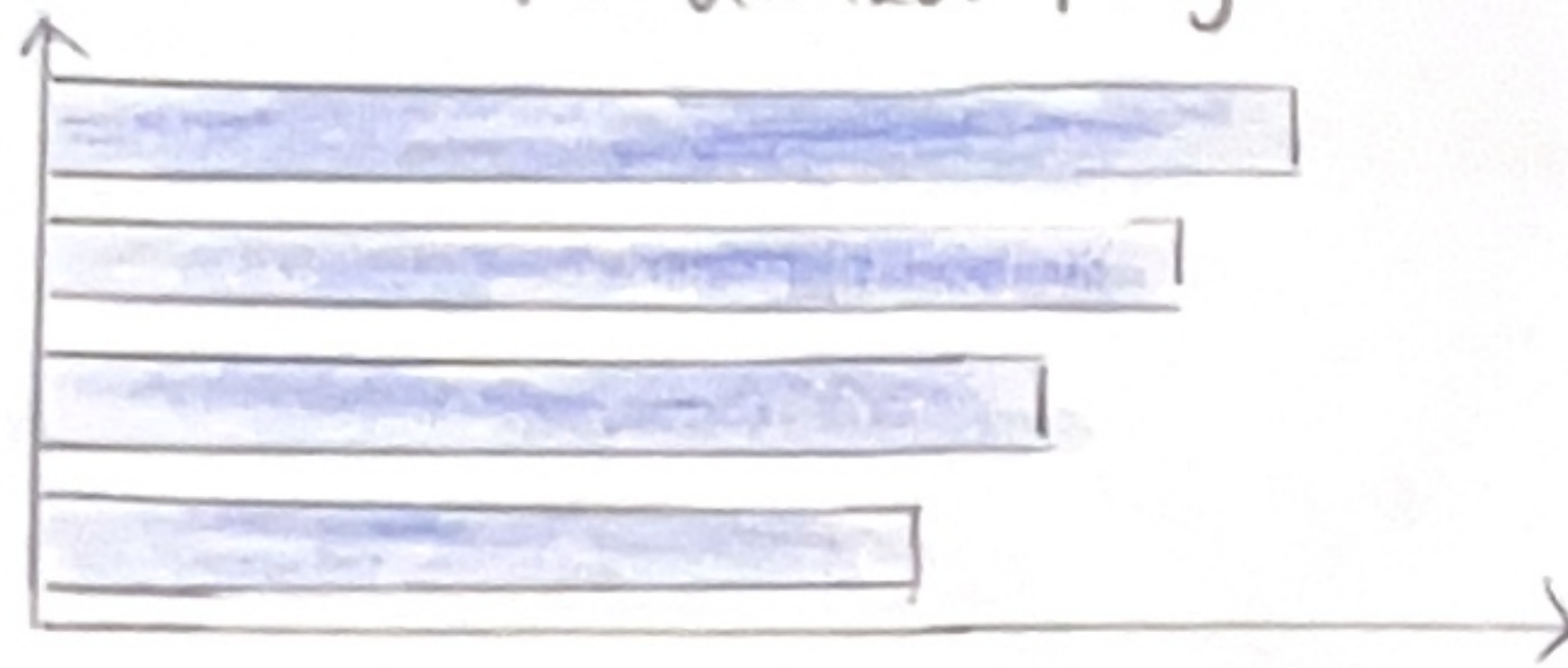
Museum Density in UK



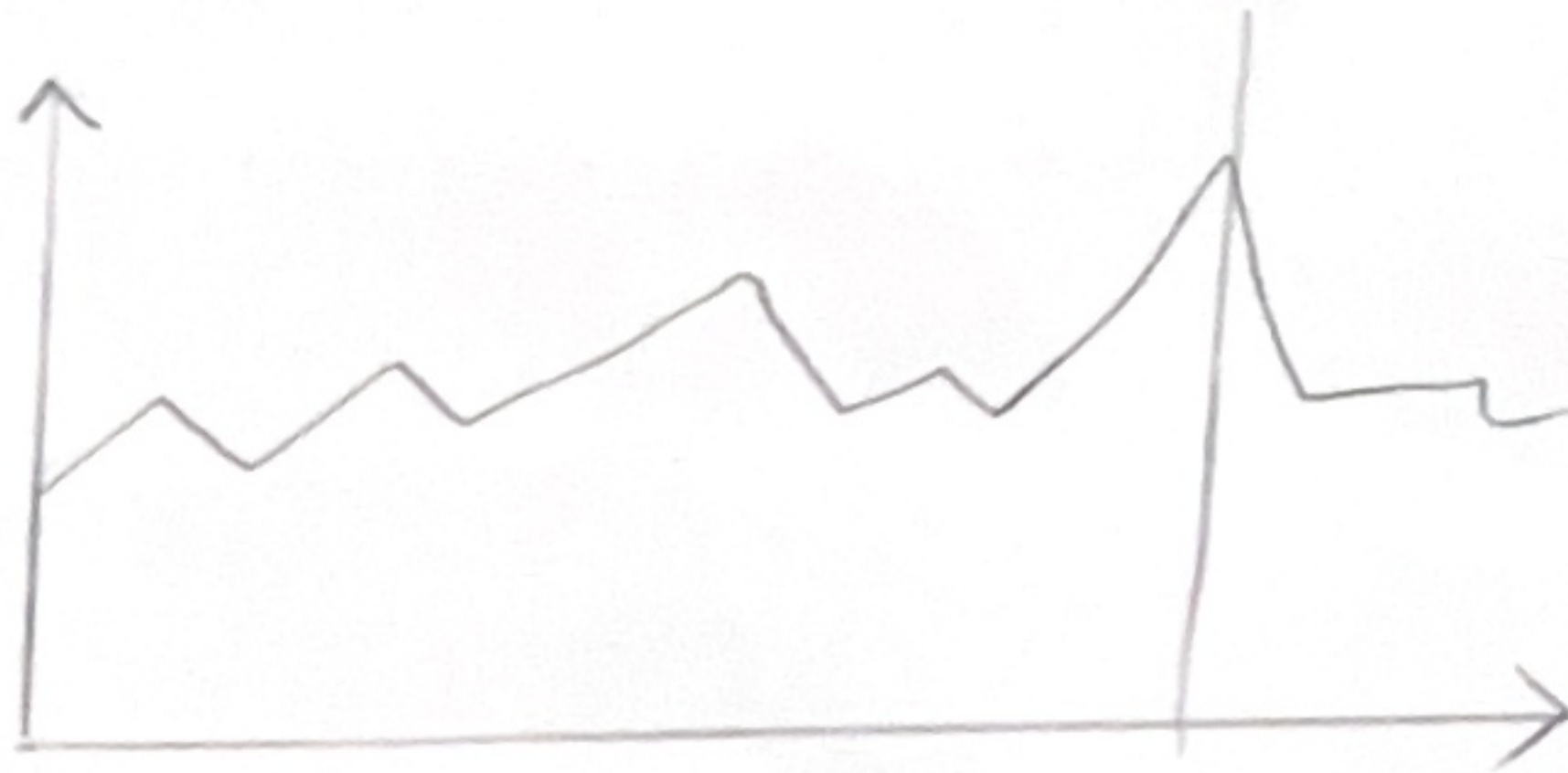
Museum Subject Breakdown



TOP 10 Visited Museum  
in United Kingdom



Acquisition Over Time in British Museum



## FOCUS

- ① Focus how museums reflect cultural presence, accessibility.
- ② Giving insight how cultural interest have developed.
- ③ Focus on UK instead of showing how global has accessibility.

Author: Ting Shu  
Sheet: 4  
date: 11/10/2025  
Task: Layout Design 3

## OPERATION

### Tooltip

- Country, Counts, Population, Density
- Count, Area, LAD
- LAD, Count, Population
- Year, Number of objects.

### Annotation

- give actual values for pie chart
- annotate line chart peak.

## DISCUSSION

### Advantages

- ① The idioms are straightforward, easy to follow.
- ② Strong insights, visual clarity as using of normalized views.

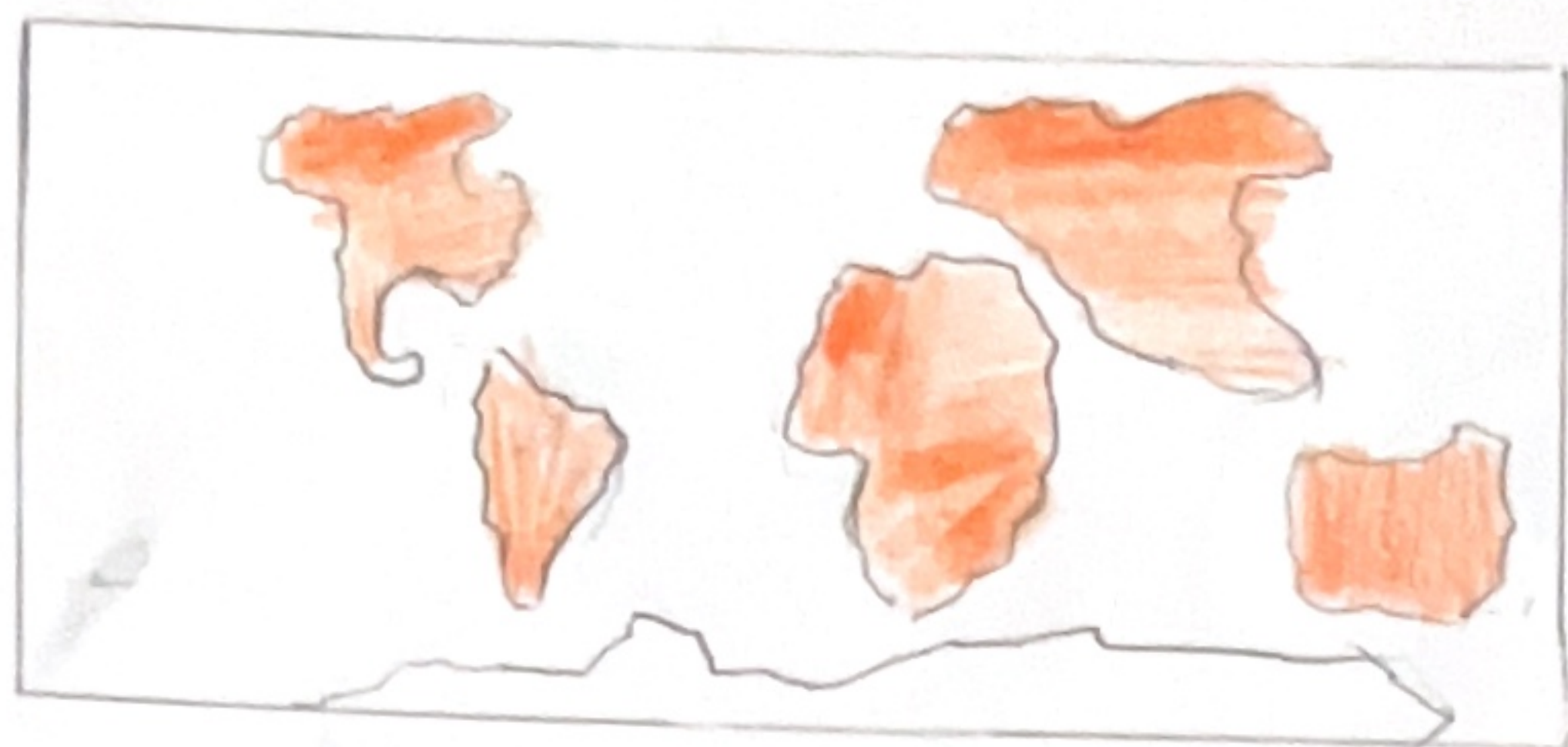
### Disadvantages

- ① Lack of filter
- ② Lack of storytelling
- ③ Hard to catch point, global and UK shouldn't be side by side



# LAYOUT (Combined layout 2 & 3)

DISCOVER MUSEUMS: EXPLORE UK & GLOBAL COLLECTIONS

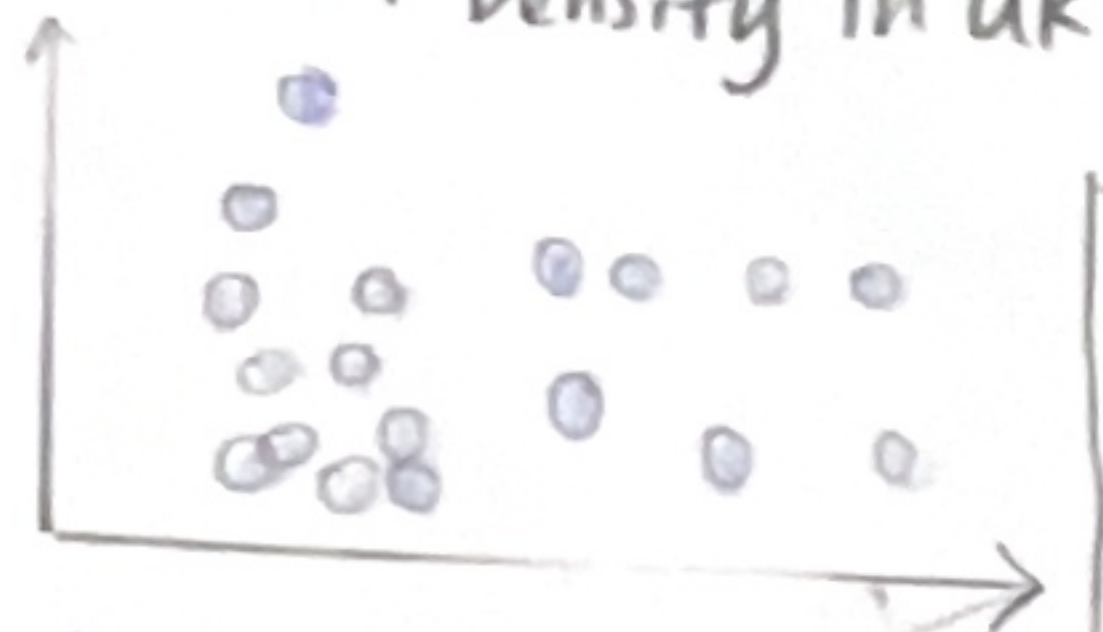


Explore UK Museums

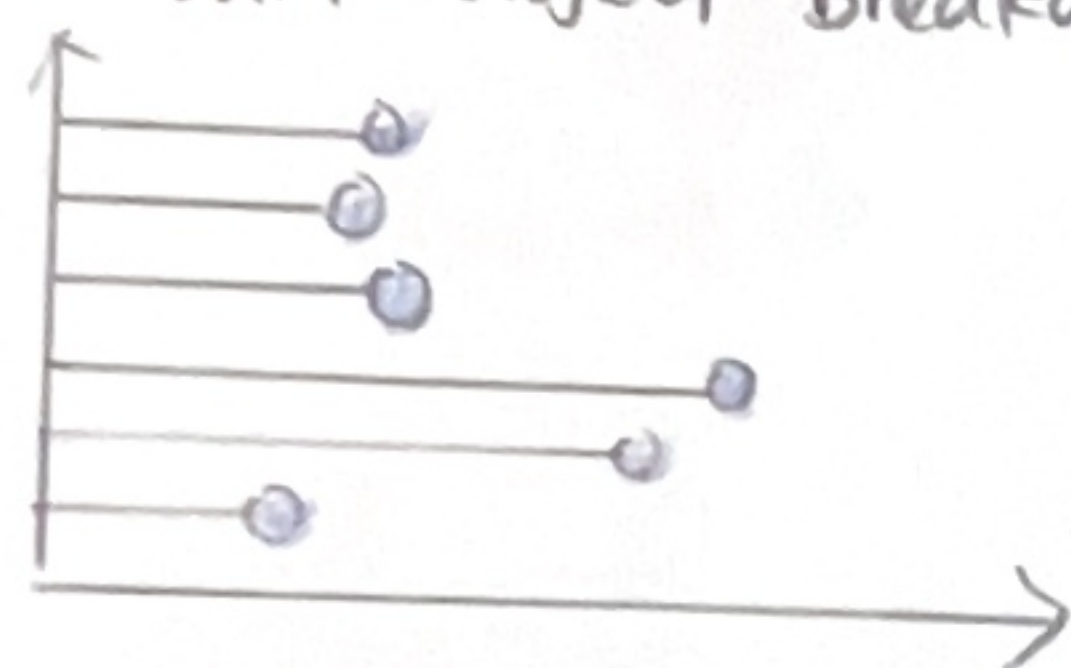
Museum Count Per Area across UK LADs



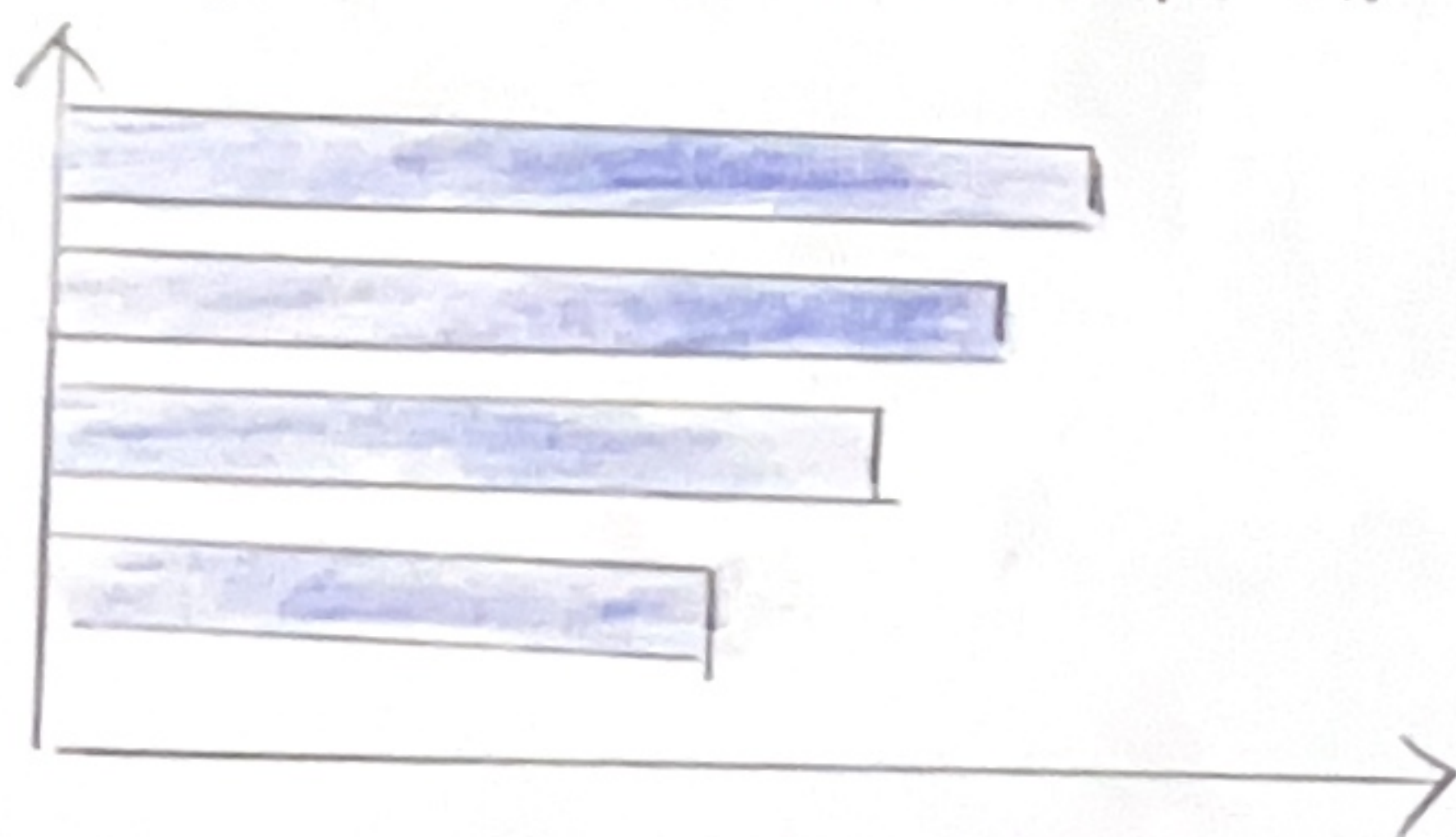
Museum Density in UK



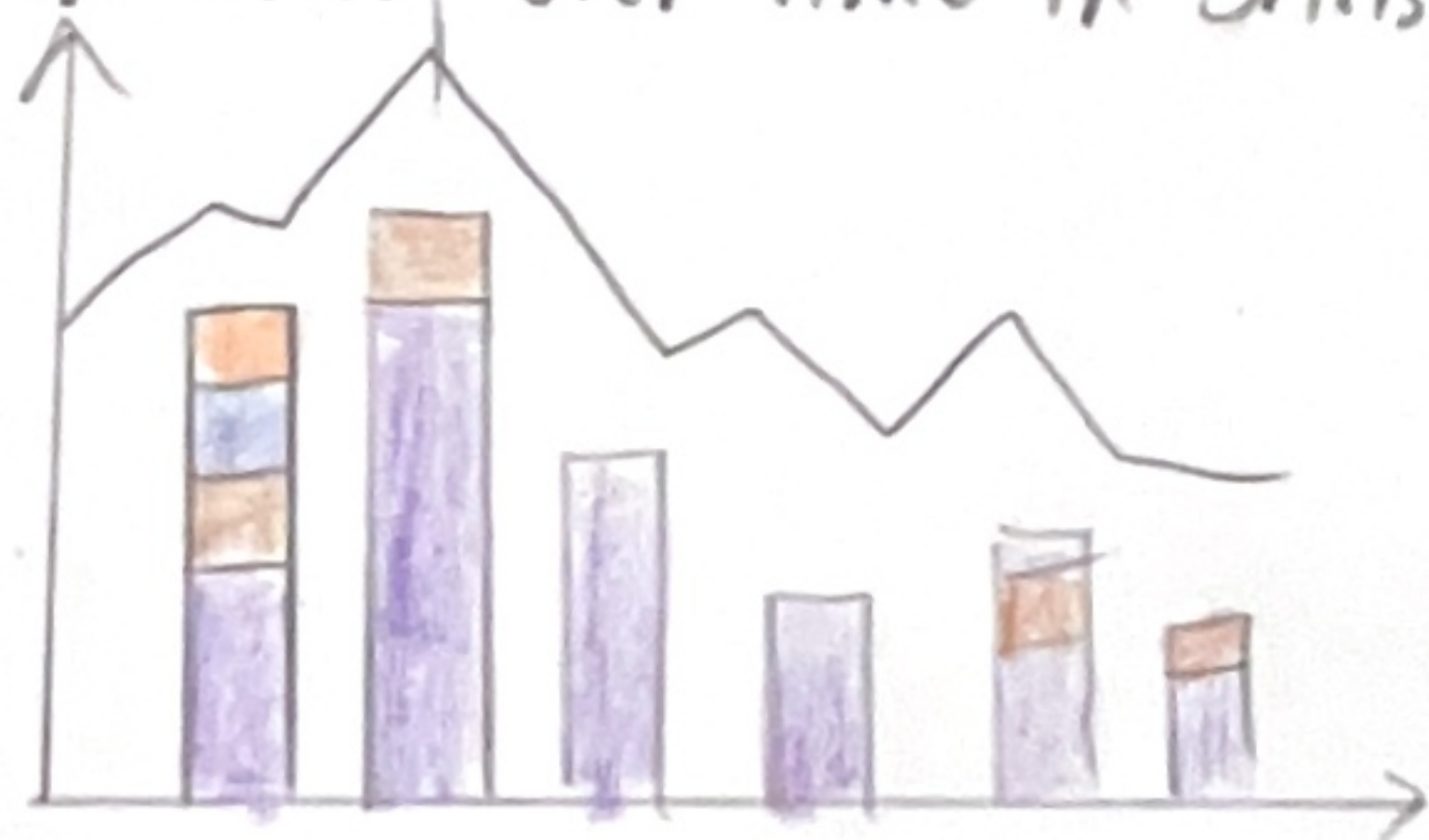
Museum Subject Breakdown



Top 10 Visited Museum in UK



Acquisition Over Time in British Museum



Text

Filter

Author: Ting Shu Hu

Sheet: 5

Date: 12/10/2025

Task: Final Layout Design

## OPERATION

### Tooltip

- Country, Count, Population, Density
- Count, Area
- LAD, Count, Population
- Year, number of object

### Annotation

- Highlight highest density in both map
- Add in trend why acquired the most in that museum.

### Filter

- Dropdown filter by range of year because data too large.

## FOCUS

- ① Focus on storytelling, exploring museum distribution, trends across different context, from global to UK-specific insights.
- ② Dive deeper and deeper global → UK → top 10 museums → top 1 museum acquisition

## DETAILS

Dependencies: Vega Lite, VS code, Python for preprocessing

- ① Clean data (2 days)
- ② Plot graph (1 week)
- ③ Combine and add text (1 day)