

Dear Data

Lesson 3: What is it going to look like?



Learning Intentions & Success Criteria

- Learning Intentions:
 - How to find your interesting data within the tally chart
- Success Criteria
 - Identified the interesting data in your tally chart
 - Designed three concepts to represent your data
 - Designed to layouts on how to divide your final visualisation

Finding something interesting in the tally chart

- A piece of data is interesting if:
 - That data is bigger than the other data in its category
 - That data is smaller than the other data in its category
 - All data in a category is the same (or exceptionally close to it)
- TASK: Bearing these three things in mind what stands out in your tally chart, circle the column of that category of data.
- Discuss your interesting data with your group and be ready to tell the class

Planning your visualisation theme concept

- You are going to experiment with ways to represent your data in a visualisation, without worrying about the actual data
- This process will involve:
 1. Choosing a theme for your visualisation (or pick a random theme)
 2. Sketching how that theme could be used to convey data
- We are going to look at some theme examples and how they can be changed to show data

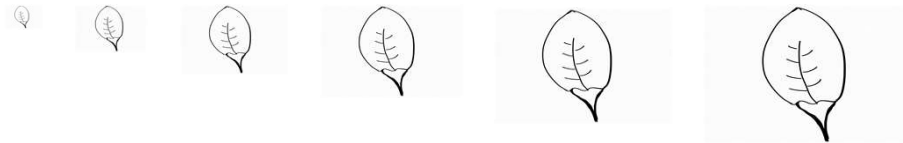
Example of concept plan: Theme leaves

What can we change about a leaf to show data?

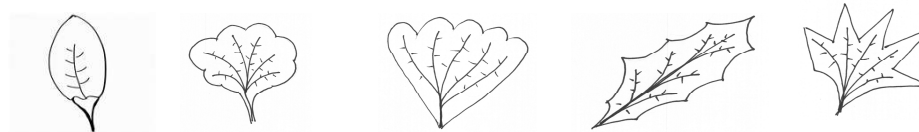
- The colour of the leaf



- The size of the leaf



- The Shape of the leaf

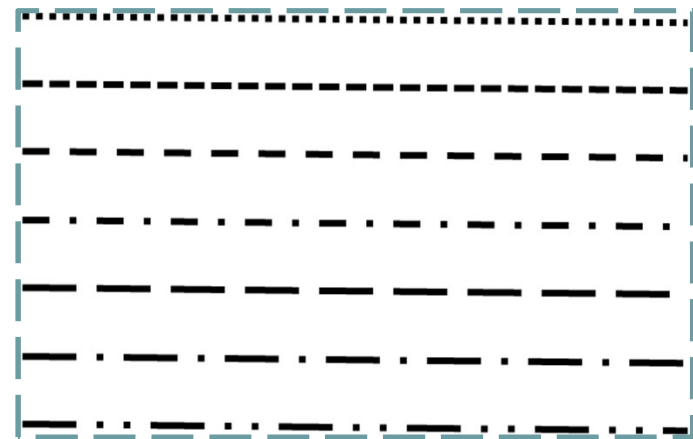


- There are many more (including angle of leaf, number of points, number of veins inside, pattern of the leaf)

Example of concept plan: Theme lines

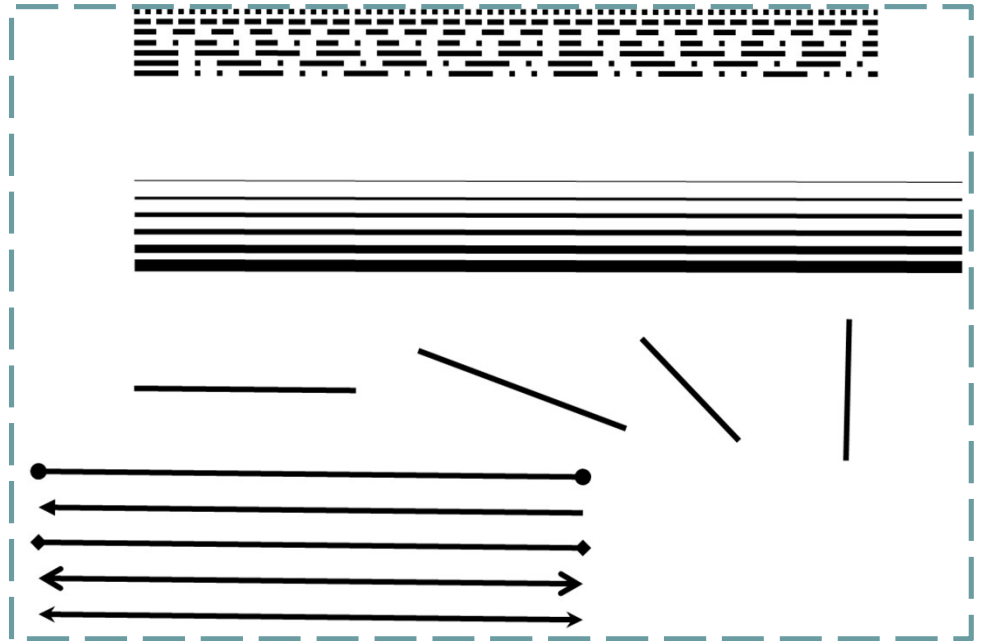
What can we change about a line to show data?

- The pattern of the line



What can we change about a line to show data?

- Thickness
- Angle
- End
- There are many more (colour of the line, length of the line, bump in the line)



TASK: Your three concept designs

1. Choose a theme (or select from the options)
2. Develop the concept for your theme:
 - As many changes as you can think of shown in a colour sketch as in the examples we just looked at

Dividing your visualisation into sections

Now that we know how we can use our theme to show data, we are going to think about how we show our main focus in our visualisation.

This involves dividing the visualisation into sections (1 for each answer to the main focus questions).

STEP ONE: How many sections?

From the sample data set:

Main Focus ↓	
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

7 Sections

Main Focus ↓	
Listening	
Reading	
Watching	
Playing	

4 Sections

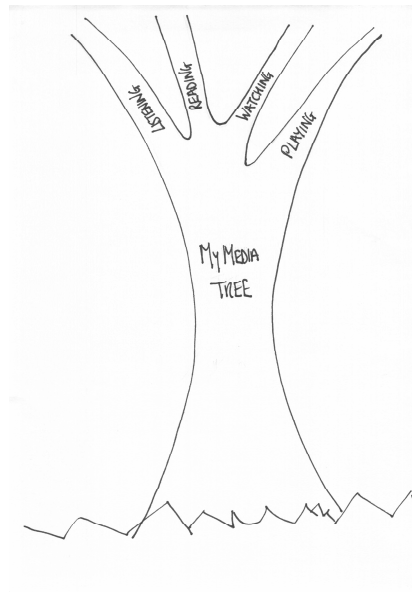
Main Focus ↓	
Desktop Computer	
Phone	
iPad	
TV	
Cinema Screen	
Real book	
E-Reader	

7 Sections

STEP TWO: Sections to match the theme

Themed sections for the leaves theme:

- Trees have leaves, each branch could be a main idea



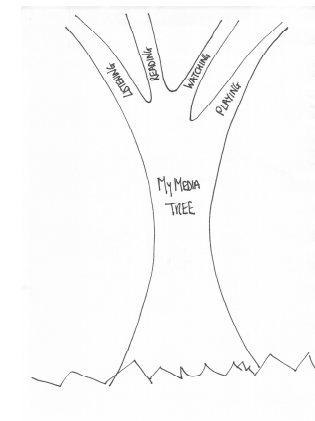
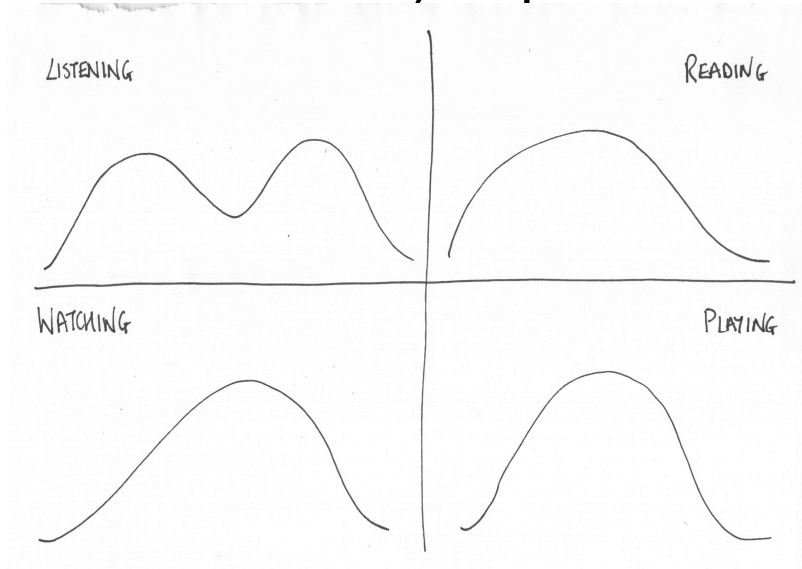
Main Focus ↓	
Listening	
Reading	
Watching	
Playing	

Piles of leaves as a theme

Themed sections for the leaves theme:

- Trees have leaves, each branch could be a main idea
- Trees lose their leaves in autumn, so piles of leaves one for each main focus

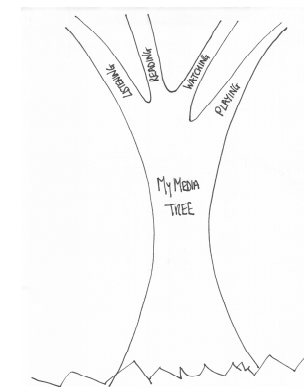
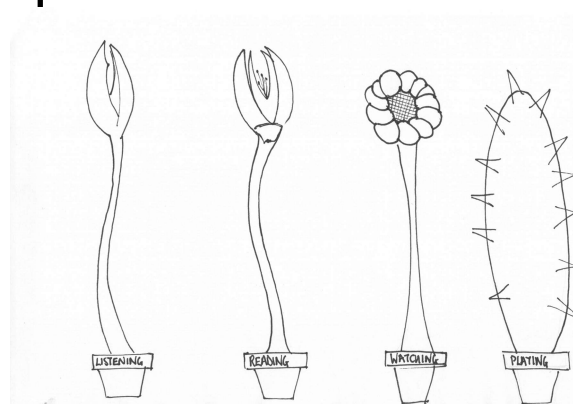
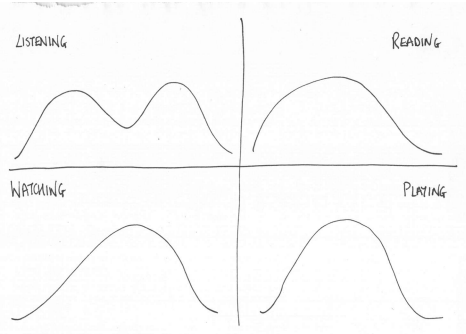
Main Focus ↓	
Listening	
Reading	
Watching	
Playing	



Plants as a theme

Themed sections for the leaves theme:

- Trees have leaves, each branch could be a main idea
- Trees lose their leaves in autumn, so piles of leaves one for each main focus
- Plants have leaves each plant could be a main focus



Main Focus ↓
Listening
Reading
Watching
Playing

Summary of theme ideas

Themed sections for the leaves theme:

- Trees have leaves, each branch could be a main idea
- Trees lose their leaves in autumn, so piles of leaves one for each main focus
- Plants have leaves each plant could be a main focus
- There are more ideas for you to find ...

Different ideas for different topics

Themed sections for a theme of cars:

- Roads have cars, each lane could be a main focus
- Car parks have cars, each area of the car park could be a main focus

Themed sections for a theme of houses:

- Streets have houses, each street could be a different main focus
- Cities have blocks of houses, each block could be a different main focus

TASK: Create your own visualisation

Create your own visualisation for the data you have in your tally chart. Think about:

- How many different items are in your main category?
- how you are going to divide your visualisation to allow that many sections?
- Now complete your visualisation

If you require this document in an alternative format, such as large print or a coloured background, please contact data.schools@ed.ac.uk

