



Open & Inclusive Special Interest Group

once upon a time



the art of telling the story
of complex images

Huw Alexander | textBOX



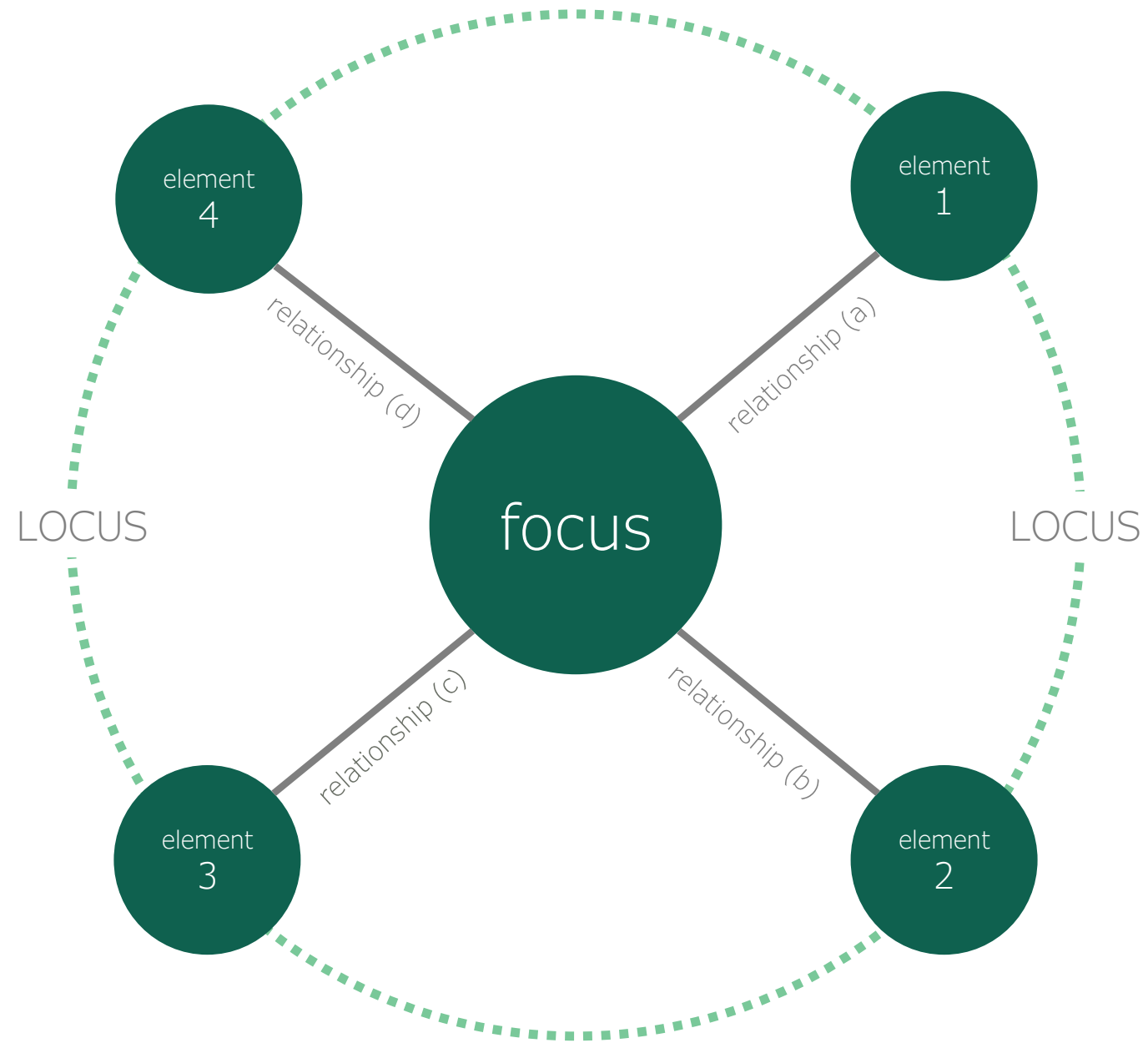
focus|LOCUS

method

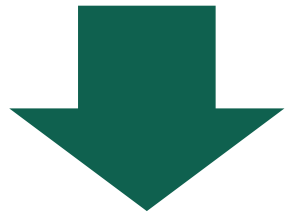
1.  echo

2.  special
circumstances

3.  PICTURE



deconstruction



reconstruction





TEDx OpenUniversity
an independently organized TED event

It's the small things! How to make
learning support, rather than
challenge, mental wellbeing



Kate Lister





SCENE
SETTING

STORY
TELLING

PATHWAY



OVERVIEW


STRUCTURE

FOCUS
ELEMENT

LOCUS
ELEMENTS

SCENE-SETTING

STORYTELLING



scene
setting
rules

OVERVIEW

FRAMEWORK

PUNCTUATION

PATHWAYS

LISTS



FOCUS

DETAIL

DESCRIBE

TRENDS

LANGUAGE



special circumstances

WHO

WHEN

WHAT

HOW

WHERE

WHY



precise
informative
consistent
thorough
useful
relevant
engaging

quality
control



visualising
complexity

A figure shows the recommended focus of wellbeing training inputs as 4 elements, Psychological, Financial, Physiological, and Sociological, juxtaposed together.





The figure illustrates the recommended focus of wellbeing training inputs. A rectangle is divided into 4 quadrants labelled as follows:

1. Upper left quadrant. Psychological.
2. Upper right quadrant. Financial.
3. Lower left. Sociological.
4. Lower right. Physiological.

A green box positioned at the centre of the figure is labelled Wellbeing Training.

telling
the
story



...probably the
best statistical
graphic ever
drawn.



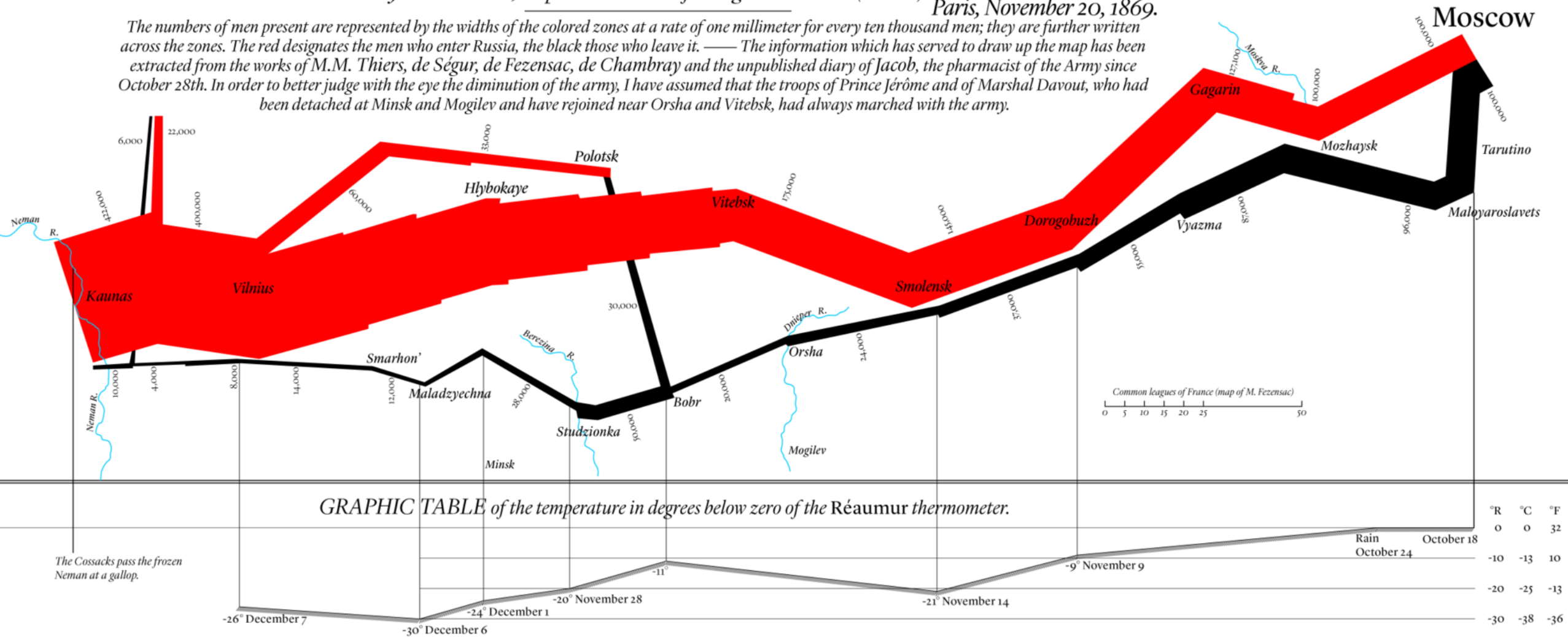
Edward Tufte

Figurative Map of the successive losses in men of the French Army in the Russian campaign 1812 ~ 1813

Drawn by M. Minard, Inspector General of Bridges and Roads (retired).

Paris, November 20, 1869.

The numbers of men present are represented by the widths of the colored zones at a rate of one millimeter for every ten thousand men; they are further written across the zones. The red designates the men who enter Russia, the black those who leave it. — The information which has served to draw up the map has been extracted from the works of M.M. Thiers, de Ségur, de Fezensac, de Chambray and the unpublished diary of Jacob, the pharmacist of the Army since October 28th. In order to better judge with the eye the diminution of the army, I have assumed that the troops of Prince Jérôme and of Marshal Davout, who had been detached at Minsk and Mogilev and have rejoined near Orsha and Vitebsk, had always marched with the army.





An infographic by Charles Joseph Minard charts the invasion of Russia by French forces led by Napoleon in 1812. The graphic follows the eastwards progress of the French army and their subsequent westward retreat from Moscow. The chart provides details of troop numbers, time, temperature and casualties. The troop numbers are visualized using a red invasion pathway and a black retreat pathway. The decline in troop numbers during the campaign is demonstrated by the width of the pathways becoming narrower. One millimeter represents 10,000 soldiers. The temperature is based on the Reaumur scale. The casualty and temperature data points are as follows:

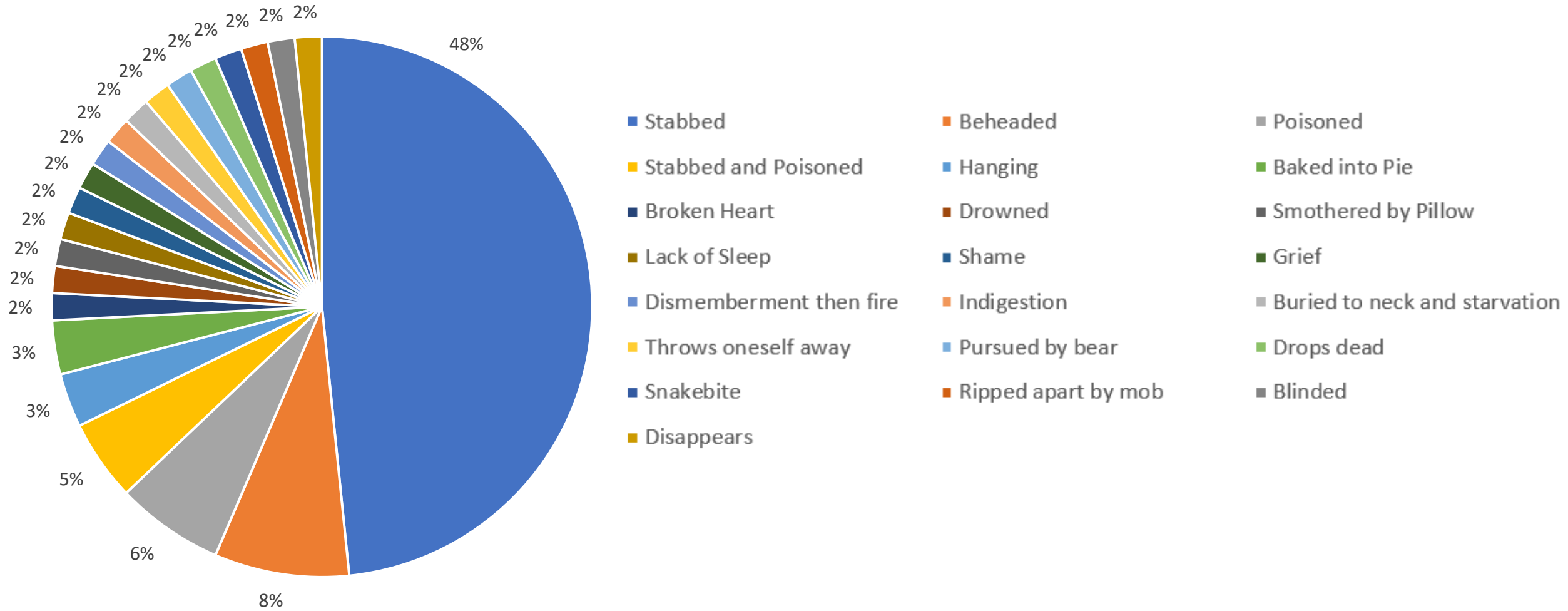
Part 1. The Invasion of Russia. The path of the army is coloured Red.

- Kaunas, 422,000. Crossing the River Neman.
- Vilnius, 400,000. At this point Prince Jerome's detachment separate from the main army.
- Vitebsk, 175,000.
- Smolensk, 145,000.
- Gagarin, 127,100. Crossing the River Moskva.
- Moscow, 100,000. Temperature, 0.

Part 2. The Retreat from Moscow. The path of the army is coloured Black.

- Maloyaroslavets, 96,000. Temperature, 0.
- Mozhaysk, 87,000. Temperature, minus 5. October 18th.
- Vyazma, 55,000. Temperature, minus 8.
- Smolensk, 37,000. Temperature, minus 15. November 14th.
- Orsha, 24,000. Temperature, minus 19. Crossing the River Dnieper.
- Bobr, 20,000. Temperature, minus 14.
- Studzionka, 50,000. Temperature, minus 15. Crossing the River Berezina. The remnants of Prince Jerome's army rejoin the retreating army. November 28th.
- Maladzyechna, 28,000. Temperature, minus 22. December 6th.
- Smarhon, 12,000. Temperature, minus 30.
- Vilnius, 14,000. Temperature, minus 27.
- Vilnius, 8,000. Temperature, minus 26. December 7th.
- Kaunas, 4,000. Crossing the river Neman.
- Kaunas, 10,000. The vanguard of the French army rejoins the retreating forces.

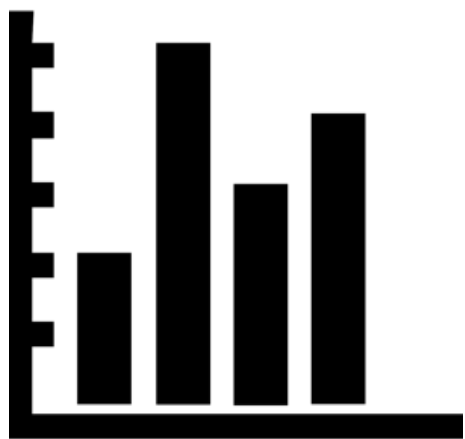
causes of death in Shakespeare's plays



A pie chart illustrates the various causes of death in Shakespeare's plays. 22 causes of death are listed within the chart. There are 62 deaths in total. They are listed here in order of frequency together with percentage of total:

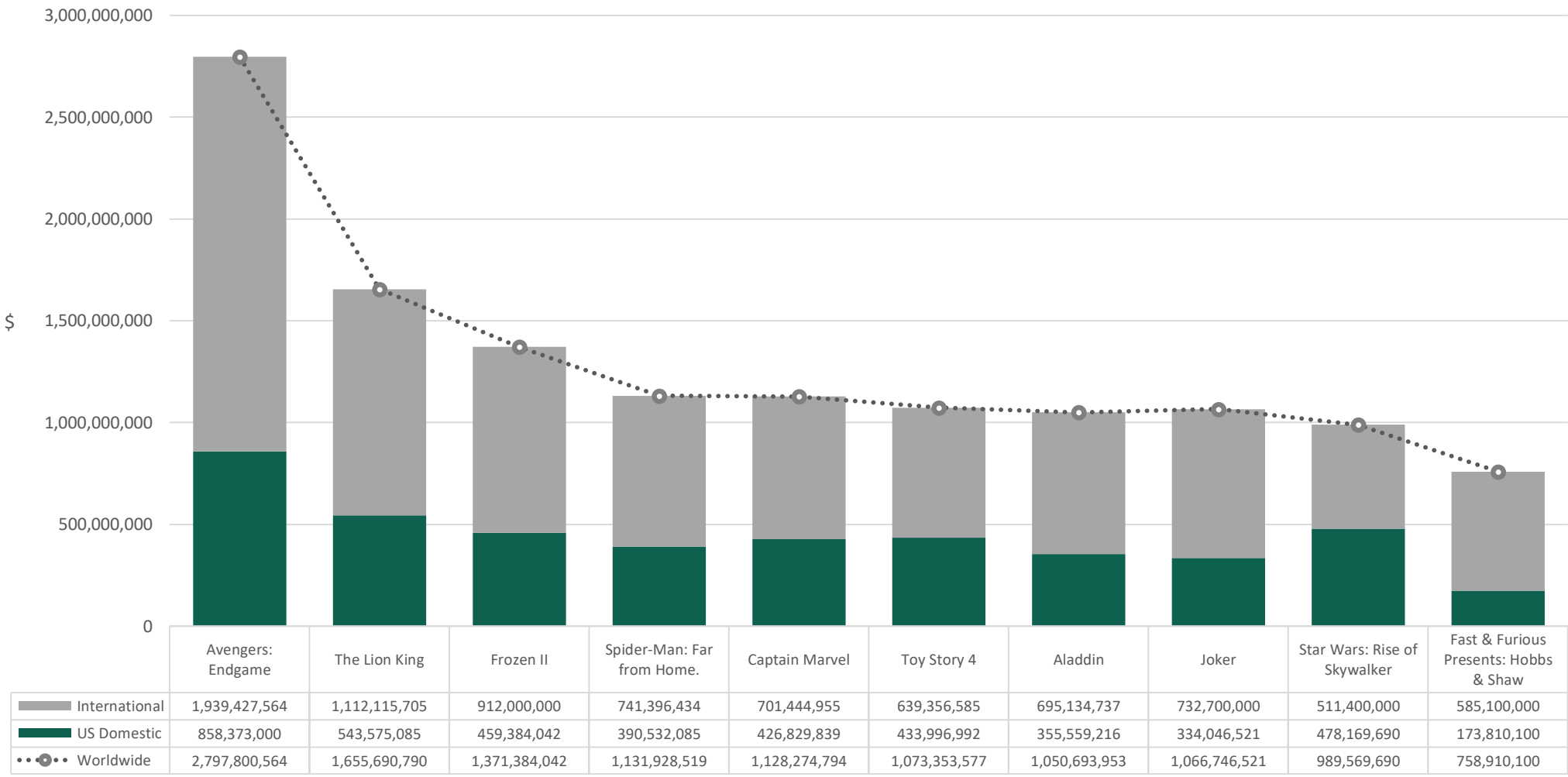
1. Stabbed, 30. 48 per cent of total.
2. Beheaded, 5. 8 per cent of total.
3. Poisoned, 4. 6 per cent of total.
4. Stabbed and Poisoned, 3. 5 per cent of total.
5. Hanging, 2. 3 per cent of total.
6. Baked into Pie, 2. 3 per cent of total.
7. Broken Heart, 1. 2 per cent of total.
8. Drowned, 1.
9. Smothered by Pillow, 1.
10. Lack of Sleep, 1.
11. Shame, 1.
12. Grief, 1.
13. Dismemberment then fire, 1.
14. Indigestion, 1.
15. Buried to neck and starvation, 1.
16. Throws oneself away, 1.
17. Pursued by bear, 1.
18. Drops dead, 1.
19. Snakebite, 1.
20. Ripped apart by mob, 1.
21. Blinded, 1.
22. Disappears, 1.

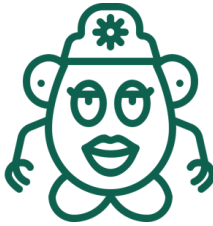




bar charts

Top 10 Box Office Films of 2019

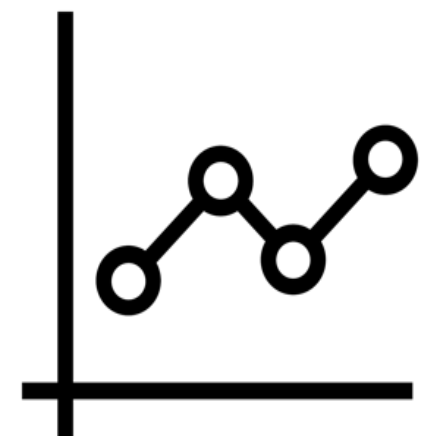




A vertical bar chart illustrates the top 10 films at the worldwide box office in 2019. The box office take, in U.S. dollars (in millions), is plotted on the Y-axis with a range of 0 to \$3 billion. The 10 films are plotted on the X-axis.

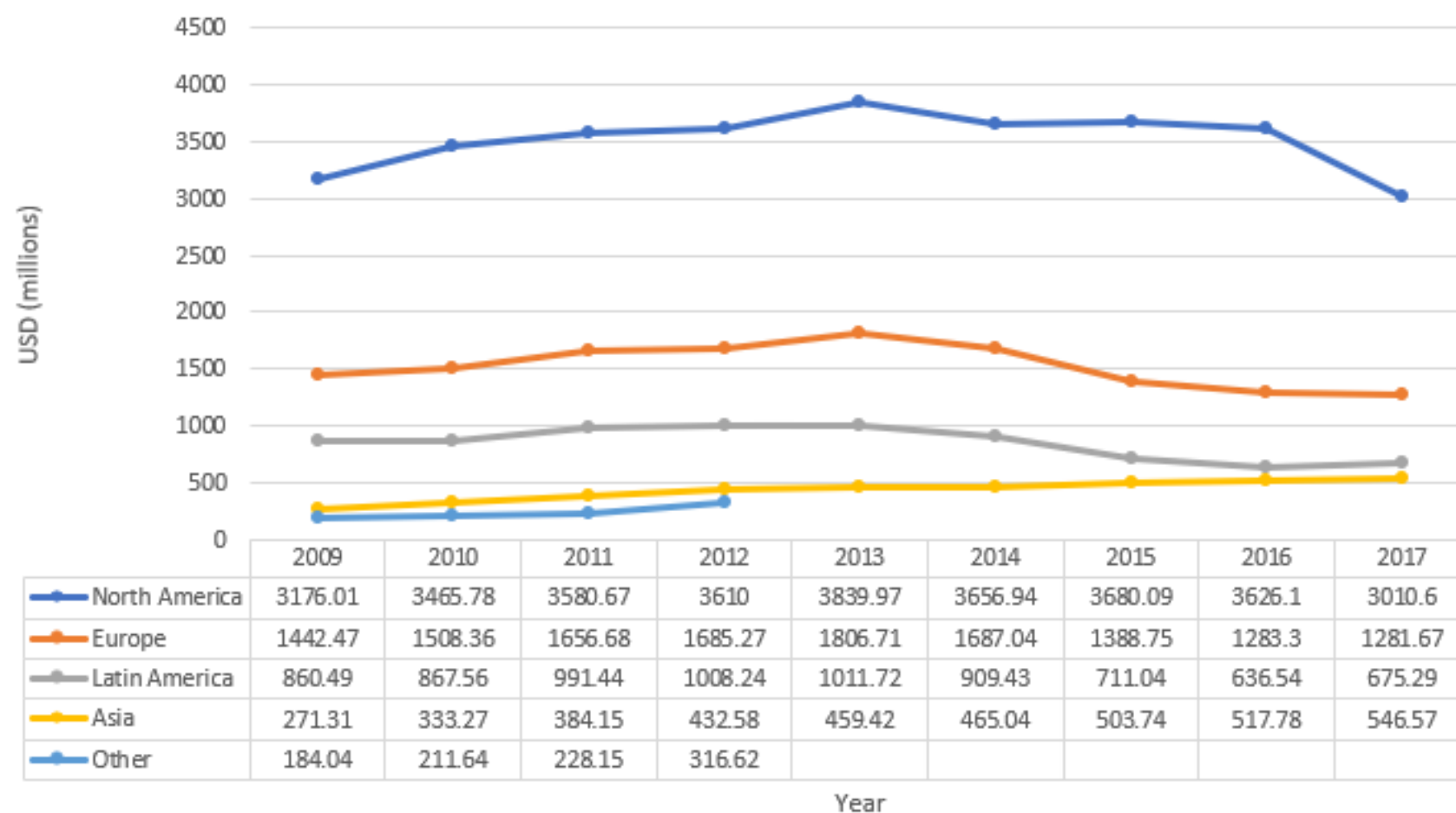
The data points are as follows:

1. Avengers: Endgame. Worldwide, \$2,797,800,564. U, S Domestic, \$858,373,000. International, \$1,939,427,564.
2. The Lion King. Worldwide, \$1,655,690,790. U, S Domestic, \$543,575,085. International, \$1,112,115,705.
3. Frozen 2. Worldwide, \$1,371,384,042. U, S Domestic, \$459,384,042. International, \$912,000,000.
4. Spider-Man: Far from Home. Worldwide, \$1,131,928,519. U, S Domestic, \$390,532,085. International, \$741,396,434.
5. Captain Marvel. Worldwide, \$1,128,274,794. U, S Domestic, \$426,829,839. International, \$701,444,955.
6. Toy Story 4. Worldwide, \$1,073,353,577. U, S Domestic, \$433,996,992. International, \$639,356,585.
7. Aladdin. Worldwide, \$1,050,693,953. U, S Domestic, \$355,559,216. International, \$695,134,737.
8. Joker. Worldwide, \$1,066,776,521. U, S Domestic, \$334,046,521. International, \$732,700,000.
9. Star Wars: The Rise of Skywalker. Worldwide, \$989,569,690. U, S Domestic, \$478,169,690. International, \$511,400,000.
10. Fast & Furious Presents: Hobbs & Shaw. Worldwide, \$758,910,100. U, S Domestic, \$173,810,100. International, \$585,100,000.



line charts

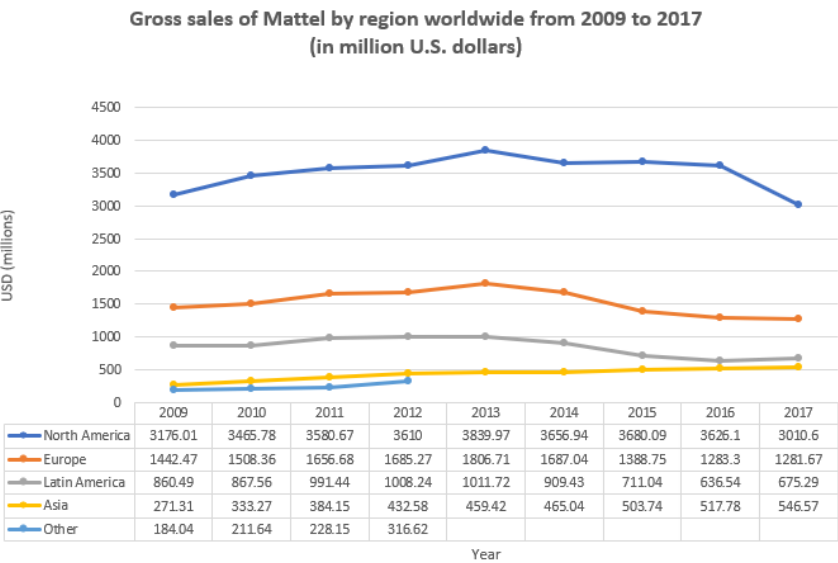
Gross sales of Mattel by region worldwide from 2009 to 2017
(in million U.S. dollars)

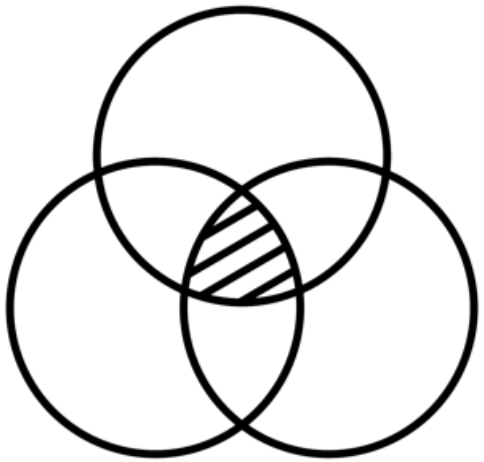


A line chart describes the gross sales of Mattel by region between 2009 and 2017. The chart is measured in U,S dollars in millions on the Y-axis and years on the X-axis. Data are provided for 5 regions: North America, Europe, Latin America, Asia and Other.

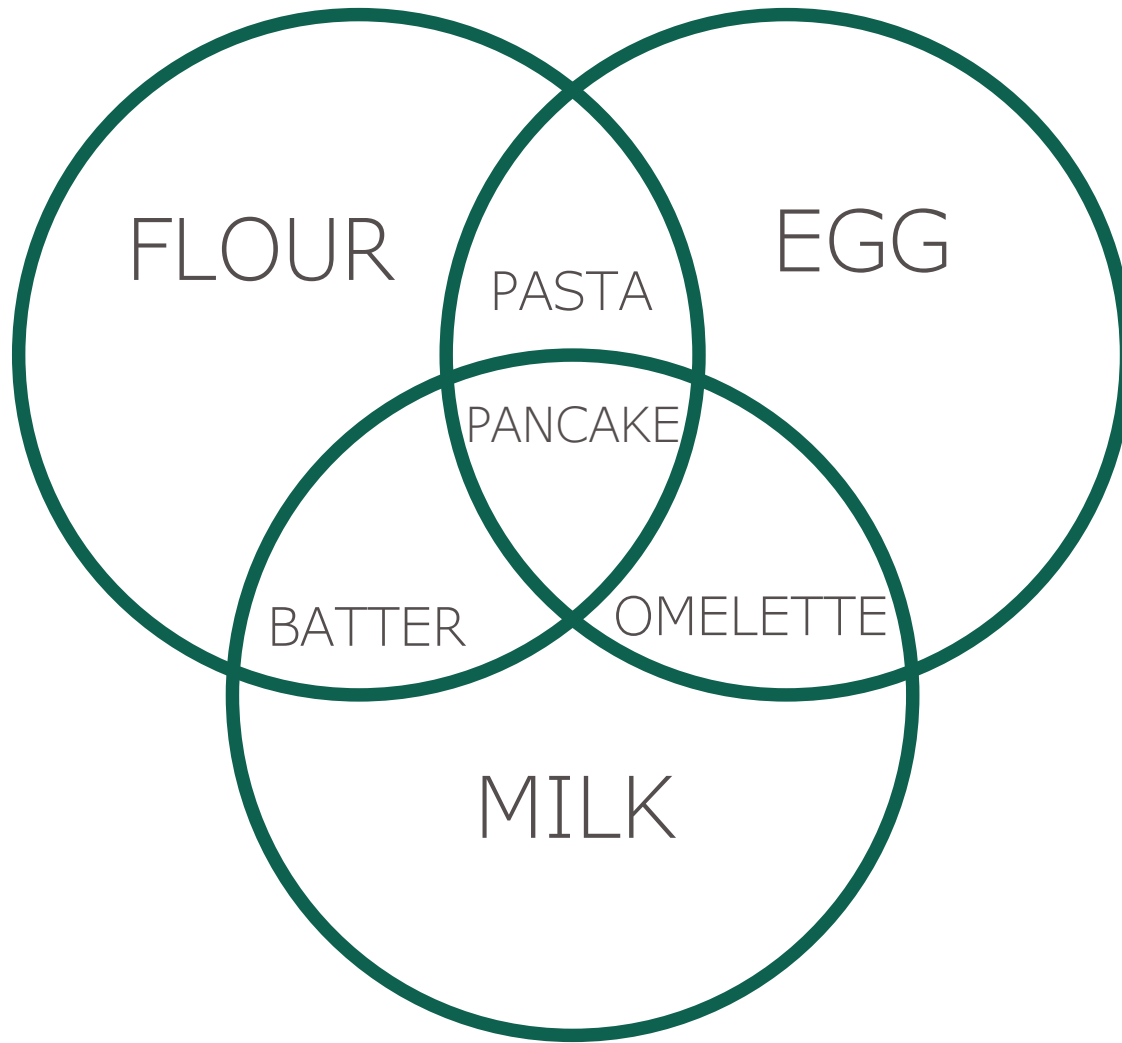
The data points are as follows:

- 2009. North America, 3,176.01. Europe, 1,442.47. Latin America, 860.49. Asia, 271.31. Other, 184.04.
- 2010. North America, 3,465.78. Europe, 1,508.36. Latin America, 867.56. Asia, 333.27. Other, 211.64.
- 2011. North America, 3,580.67. Europe, 1,656.68. Latin America, 991.44. Asia, 384.15. Other, 228.15.
- 2012. North America, 3,610. Europe, 1,685.27. Latin America, 1,008.24. Asia, 432.58. Other, 316.62.
- 2013. North America, 3,839.97. Europe, 1,687.04. Latin America, 1,011.72. Asia, 459.42. Other, no data.
- 2014. North America, 3,656.94. Europe, 1,687.04. Latin America, 909.43. Asia, 465.04. Other, no data.
- 2015. North America, 3,680.09. Europe, 1,388.75. Latin America, 711.04. Asia, 503.74. Other, no data.
- 2016. North America, 3,626.1. Europe, 1,283.3. Latin America, 636.54. Asia, 517.78. Other, no data.
- 2017. North America, 3,010.6. Europe, 1,281.67. Latin America, 675.29. Asia, 546.57. Other, no data.





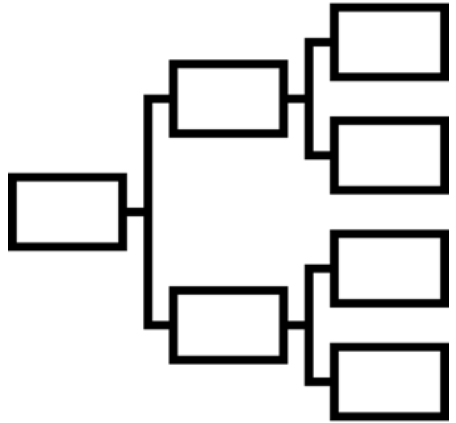
Venn diagram



A Venn Diagram with 3 intersecting circles labeled in a clockwise direction, Egg, Milk and Flour.

The Flour and Egg circles are positioned above the Milk circle to create a triangular shape. The intersections, in a clockwise direction, are as follows:

1. Egg intersects with Milk to create Omelette.
2. Milk intersects with Flour to create Batter.
3. Flour intersects with Egg to create Pasta.
4. Egg, Flour and Milk intersect to create Pancake at the centre of the Venn diagram.



flowcharts



FREDDIE MERCURY

WANTS

TO BREAK
FREE

TO MAKE A
SUPERSONIC
MAN OUTTA
YOU

TO RIDE
HIS
BICYCLE

IT ALL.
NOW.

DOESN'T
WANT

YOU TO
STOP HIM
NOW

ISN'T SURE
ABOUT

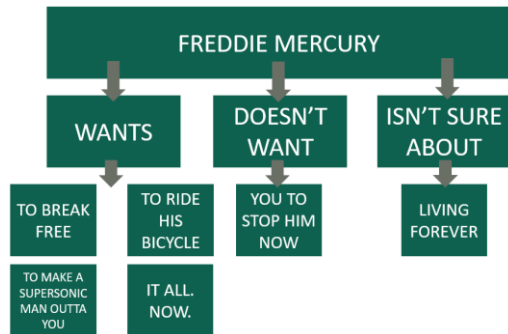
LIVING
FOREVER



A flowchart illustrates what Freddie Mercury wants through his lyrics. The flowchart has 3 levels and develops from north to south. At the top of the chart is a box labelled Freddie Mercury. The next level contains 3 boxes labelled Wants, Doesn't Want and Isn't Sure About. The last level contains 6 options.

The 6 pathways through the flowchart are as follows:

1. Freddie Mercury wants to break free.
2. Freddie Mercury wants to ride his bicycle.
3. Freddie Mercury wants it all, now.
4. Freddie Mercury wants to make a supersonic man out of you.
5. Freddie Mercury doesn't want you to stop him now.
6. Freddie Mercury isn't sure about living forever.



\geq a brief
note on
equations \leq



I am a great fan of
science, but I
cannot do a
quadratic equation.



Terry Pratchett



MathSpeak

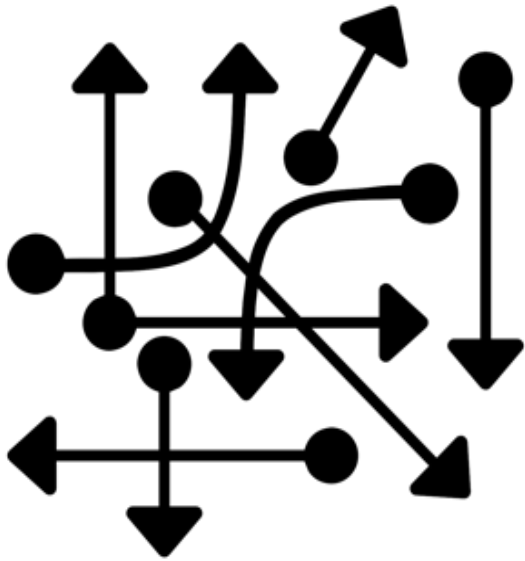
<https://www.seewritehear.com/accessible-mathml/mathspeak/examples/grammar-rules/>

$$E = mc^2$$



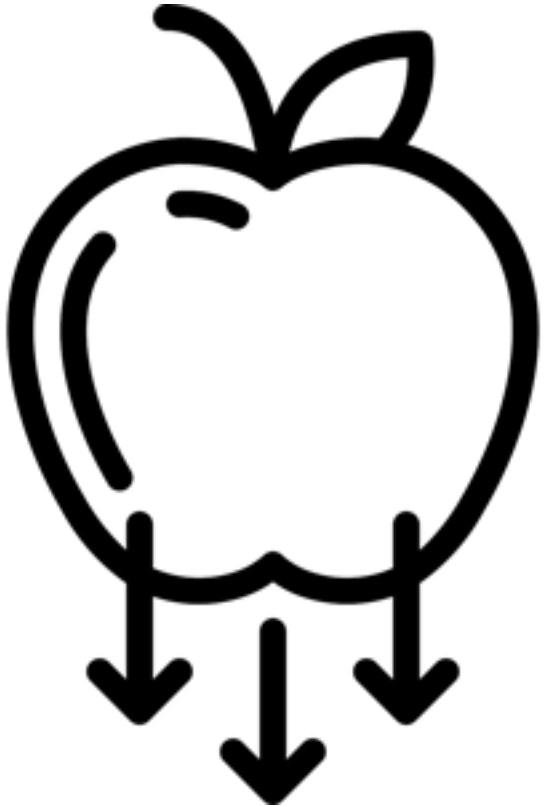
Upper E equals m c
superscript 2

$$x_{t+1} = kx_t(1 - x_t)$$



x Subscript t plus 1
 equals k \times Subscript t
 baseline left
 parenthesis 1 minus x
 Subscript t right
 parenthesis

$$F = G \frac{m_1 m_2}{r^2}$$



Upper F equals upper G
StartFraction m
subscript 1 m subscript
2 over r superscript 2
EndFraction.

$$K_r = \frac{1}{3} \int_0^\infty \langle v \rangle \lambda_v C_v dv = \frac{c}{3} \int_0^\infty \lambda_v C_v dv.$$

Upper K Subscript r equals StartFraction 1 over 3 EndFraction
 Integral Subscript 0 Superscript Infinity baseline left-pointing
 angle bracket v right-pointing angle bracket Lambda Subscript
 v baseline upper C Subscript v baseline d v equals
 StartFraction c over 3 EndFraction Integral Subscript 0
 Superscript Infinity baseline lambda Subscript v baseline upper
 C Subscript v baseline d v.



recap

SELECT
YOUR
FOCUS

CREATE
STRUCTURE

CAPTURE THE
DETAIL

LISTS ARE
FRIENDLY

DESCRIBE,
DO NOT
INTERPRET

PUNCTUATION

CREATE
LOGICAL
PATHWAYS

IDENTIFY
TRENDS

WALK
IN THE
USER'S
SHOES

TEST
THE
ACCURACY



recipe





What is the use of
a book, without
pictures or
conversations?



said Alice.

description
ends

QUESTIONS

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textboxdigital.com



LIVING PAINTINGS: TOUCH TO SEE BOOKS AND THE OPEN UNIVERSITY'S ARTS AND HUMANITIES CURRICULUM


Jenny Moakes, Production Manager in FASS

How do I enrich students' learning?

- The Universal Design for Learning¹ guidelines promote multiple means of representation in learning.
- In providing support for visually impaired students a reliance on image descriptions is the norm.
- Living Paintings² made it possible to offer something different through their library of Touch to See Books.

Provide multiple means of
Representation ➔

Recognition Networks
The "WHAT" of learning



Provide options for
Perception (1) ➔

- Offer ways of customizing the display of information (1.1) ➔
- Offer alternatives for auditory information (1.2) ➔
- Offer alternatives for visual information (1.3) ➔

73.4 miles from the OU....

- In Kingsclere, Newbury, Berkshire is the charity Living Paintings, founded in 1989 by Alison Oldland MBE.
- Alison had been a lecturer in Art History and was inspired to produce descriptions of paintings for the blind and visually impaired. She then decided to add relief images to the descriptions and Touch to See Books came about.

“As Chairman it gives me great pleasure to have seen this idea, which came to me more by chance than good management, grow into something which, to quote a blind member, “breaks down the barriers in a sighted world”. Alison Oldland MBE

A History of the World in 100 Objects

- A105 Voices Texts and Material Culture adopted the Living Paintings Touch to See Book, A History of the World in 100 Objects as an option for TMA 01 from 17B presentation for visually impaired students
- A227 Exploring Religion adopted the same book as a reasonable adjustment from its first presentation in 17J

Did this work and was it a success with our students?

- Issues
 - No way of knowing how many students took up the alternative
 - No feedback or quality assurance mechanisms focussing on alternative assessment (except academic expertise in module team)
 - As such no real review can be done

National Gallery 2 and Architecture 08

- A112 Cultures, a module which replaces A105 (alongside sister A113) in 20J is considering adopting two Living Paintings Touch to See Books to help enrich its Art History curriculum for visually impaired students (UK)
 - How can we get feedback on VI and other alternatives?
 - How can we make sure that our chosen alternative approaches are what our students need and want?
 - How can we be more rigorous in this area and assess how our alternatives impact on student experience?
 - How do we raise the profile of alternatives that really help, both across this University and in other Universities?

Thank you





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