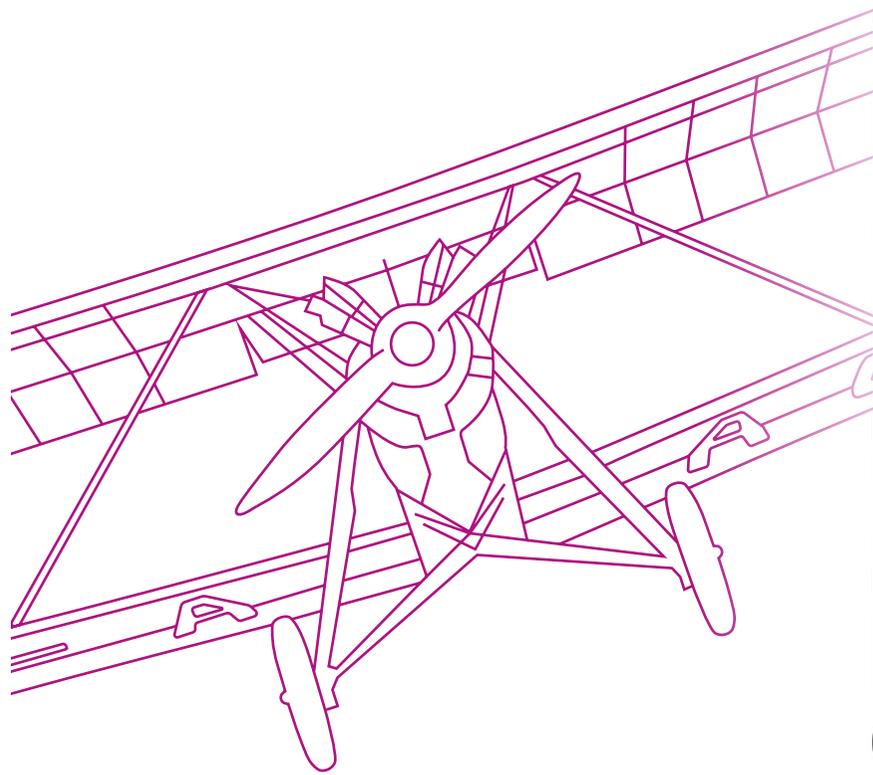


# SCIENCE MUSEUM

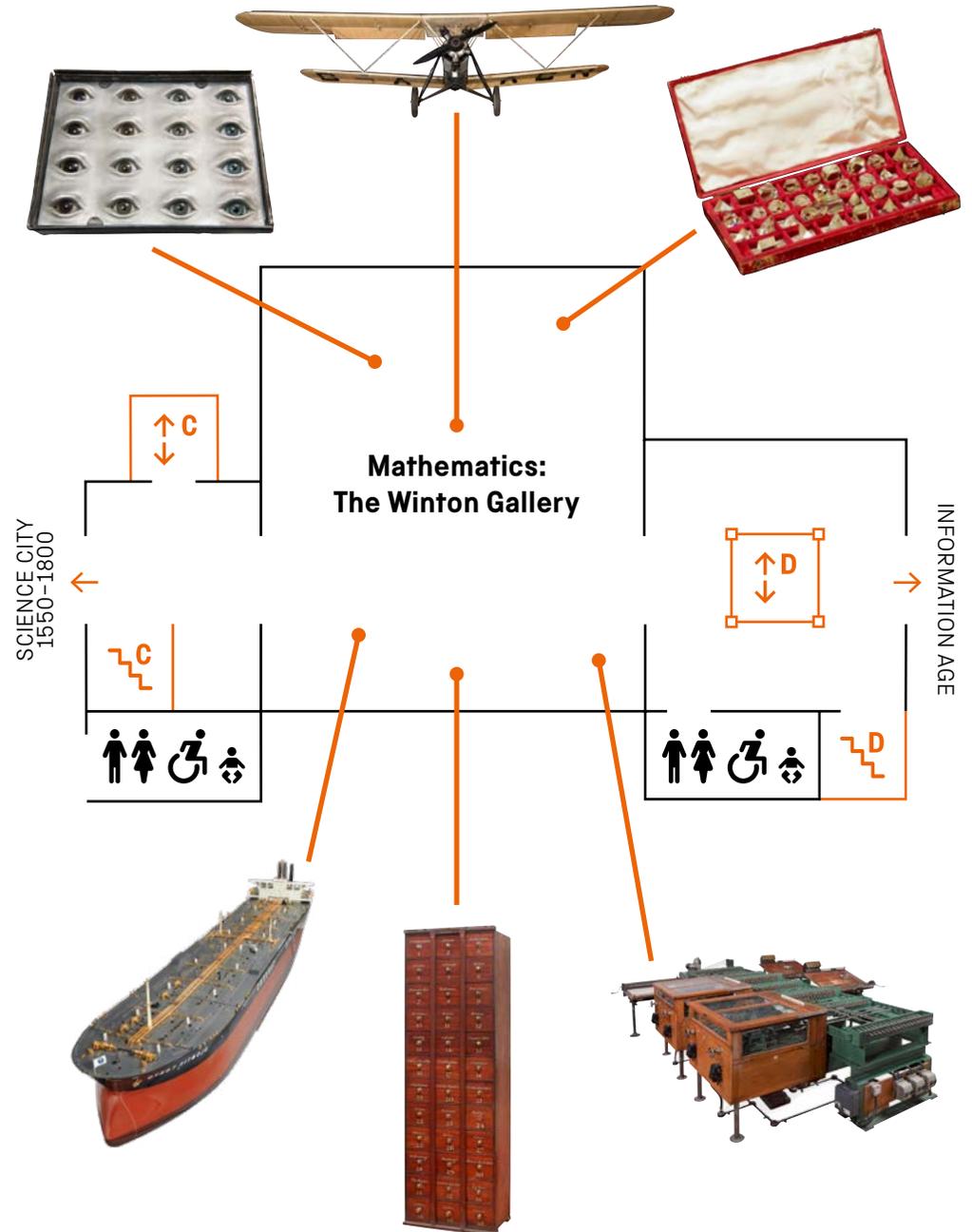


# ACTIVITY TRAIL

## MATHS

<b>EXPLORING</b> 	Ages <b>11-14</b> <b>14-16</b>	Topic <b>MATHS</b>	 <b>30 MIN</b>
	Skills used <b>CURIOSITY • OBSERVATION • DISCUSSION</b>		

## Map of *Mathematics: The Winton Gallery*

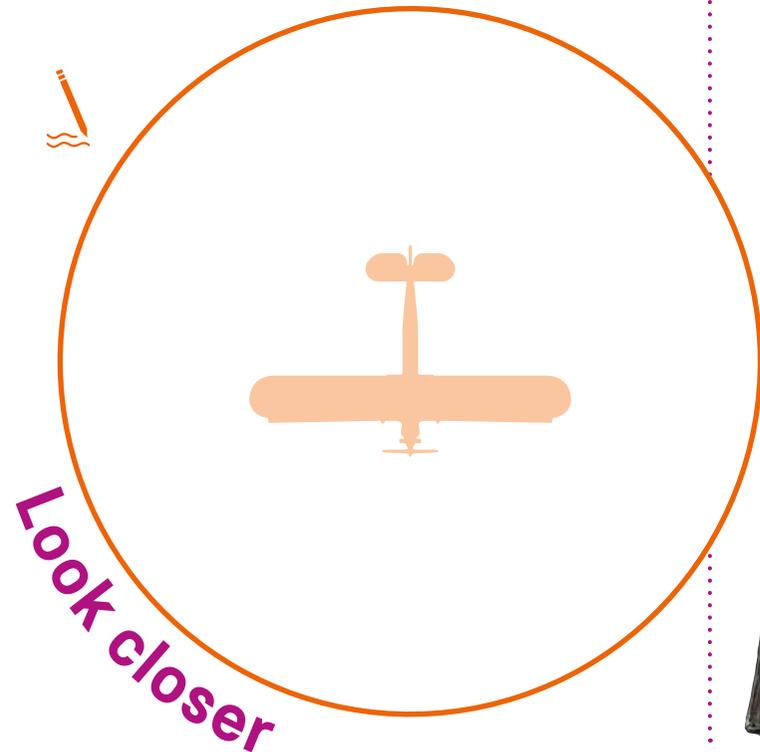


## Geometry



### Find the Gugnunc aircraft in the centre of the gallery

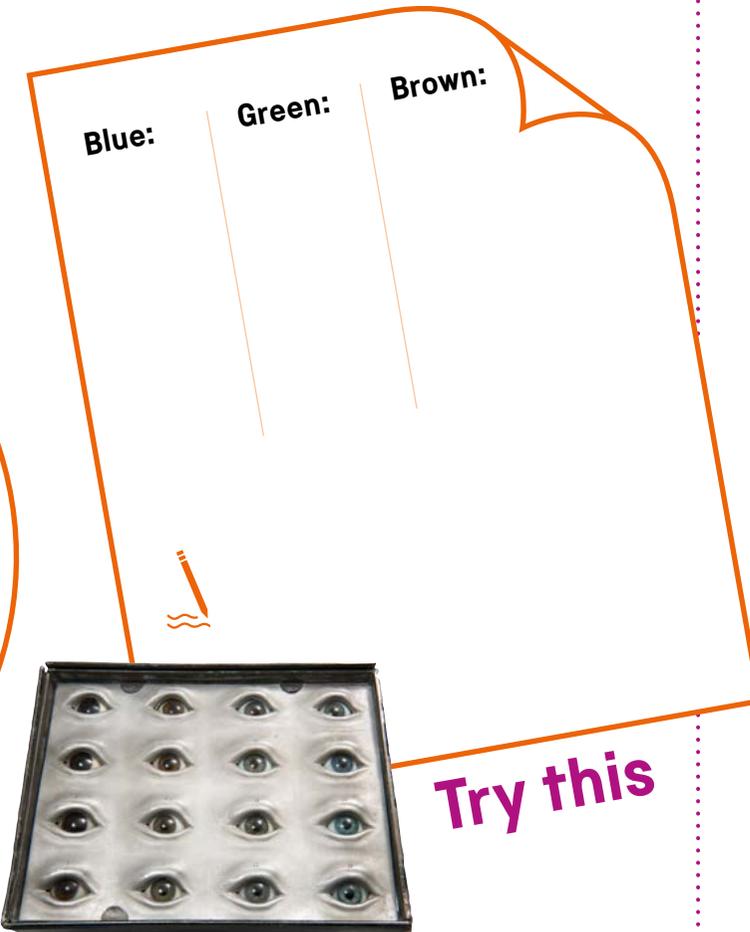
Look up at the purple waves behind it. Look down at the lines on the floor. How did architect Zaha Hadid use the shape of the plane to inspire the shape of the gallery? Draw some of the flowing lines around the plane.



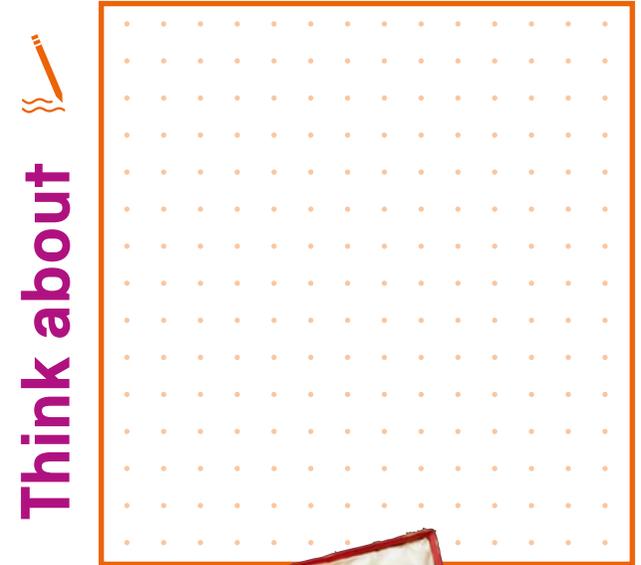
## Statistics

### Find the glass eyes in the 'Life and death' zone

These blue, green and brown eyes were used to gather statistics. Look around this room and collect data on how many blue, green and brown things you can find. What was the most common colour? Why do you think this was?



## Geometry



### Find the geometric teaching models in the 'Maps and models' zone

Which of these crystal-like shapes do you like most? Draw your favourite shape in 3D. How many lines of symmetry does your shape have?

## Number

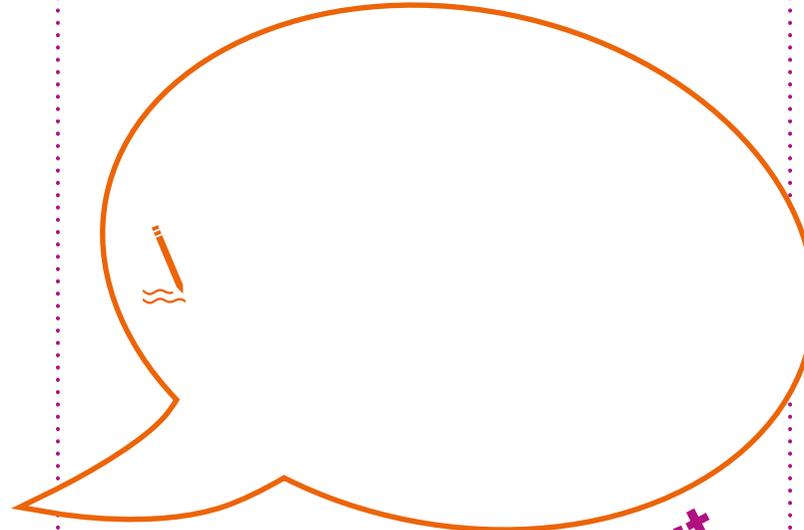
### Find the differential analyser in the 'War and peace' zone

Sometimes calculations are too complex to do in your head or by hand. Vast teams of women calculated bomb trajectories using this machine. What tools do you use to help you do calculations? How do these compare with this machine?

Think about 



## Measurement



Talk about

### Find the cabinet of international weights and measures in the 'Trade and travel' zone

Look closer at the open drawers. At one time, everyone used different standards for weight. What challenges are there when we have different ways of measuring – for example, pounds versus kilograms?



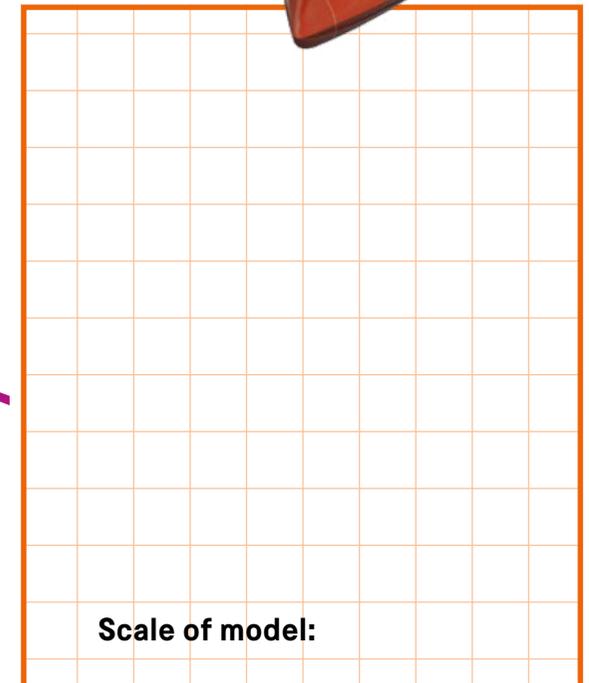
## Ratio and proportion

### Find the *Globtik Tokyo* tanker model in the 'Trade and travel' zone

Estimate how long this model is. The real ship is 378.85 metres long. Work out roughly how many times bigger the real tanker is. This tells you the scale of the model.



Try this



# Seek and find...

Go to the *Science City 1550–1800* gallery.

How many of these six measuring tools can you find?

## Talk about

Which items in this gallery interest you?

Do any of the items surprise you?

Why do you think there are so many measuring tools in this gallery?

## Explore more

What other things can you find in the rest of the museum, or at home, that are used for measurement?

**Dividers**  
(measures distance)



**Table clock**  
(measures time)



**Balance scales**  
(measures weight)



**Pedometer** (measures distance walked)



**Theodolite**  
(measures angles)



**Hydrometer** (measures alcohol strength)



(Bonus point for this tricky to find object)