

CASTLETOWN

HOUSE, COURTYARD CAFÉ, PARKLANDS, EVENTS & CONFERENCE CENTRE

Maths Trail

3RD & 4TH CLASS

A Note for Teachers and Guides

This trail has been designed to help your students explore the building in a fun and interesting way, that also aligns with their primary level maths. To book a visit in advance, please see our website or get in touch. Clipboards and pencils only - no biros or rubbers in the house please. Help us to care for the house by remembering that everything in it is precious.

Thanks to the enthusiastic mathematicians of Scoil na Mainistreach, Celbridge, Co. Kildare who helped develop this trail.

The Basement Axial Corridor

Castletown House was built in 1722. How old is the house this year?

There is said to be a window for every day of the year in Castletown House. How many windows are there?

Why is this called an 'axial' corridor?

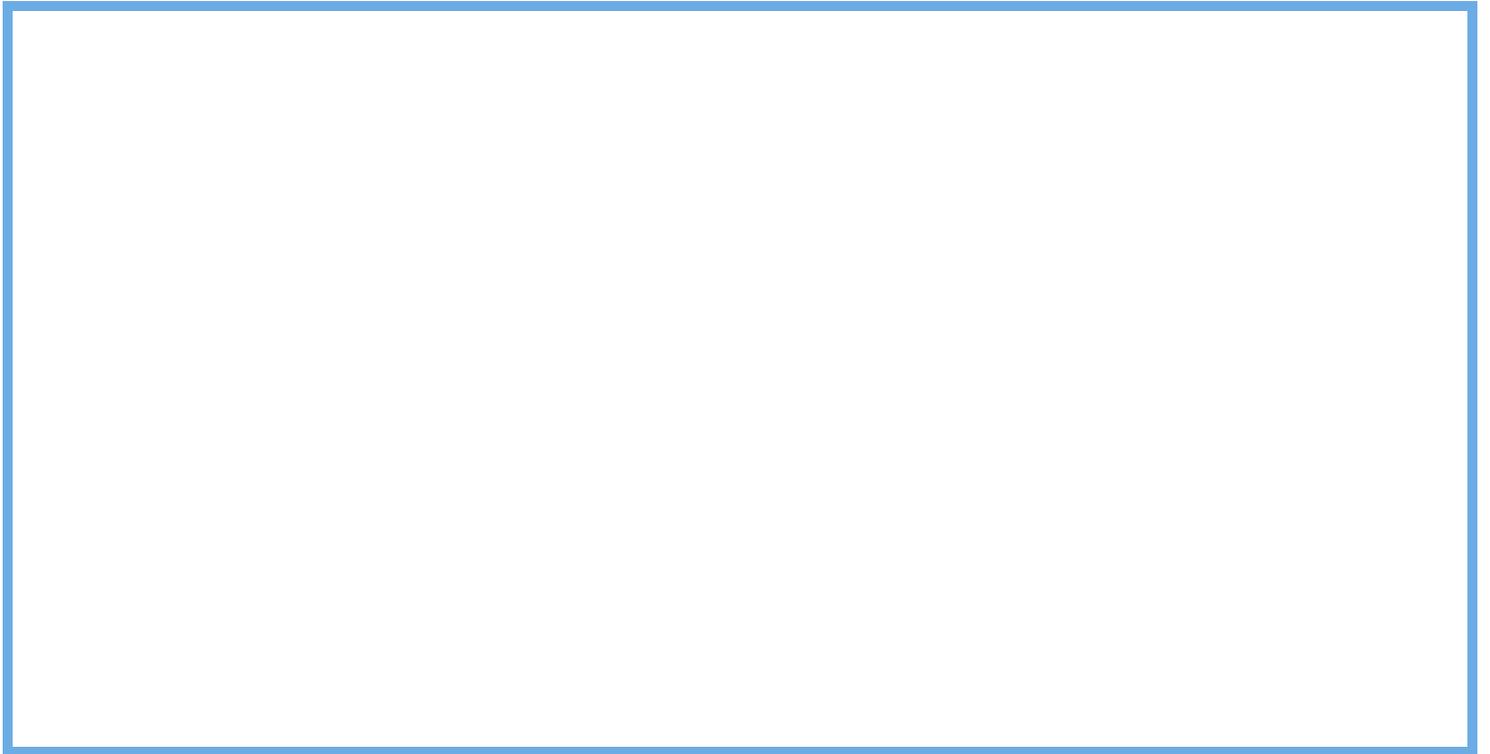
Stand with the window behind you – multiply the number of doors that are on your right by the number of doors on your left.

What type of angle is seen at the side of the ramp at the window?



The Dining Room

Can you spot the clues in this room which tell you how the room was used?



How many oval shapes are in this room?

How many panels are there on the doors in this room?

The Brown Study

What do you like and dislike about this room?

Estimate the height of the tall door in this room which was made in 1720s.

After you have measured it, write the actual height of the door here.

There are 2 horse-drawn carriages in the linen picture. 28 horses were used to pull 2 carriages. Each carriage needs the same number of horses. How many horses would pull one carriage?

The Red Drawing Room

What clues in the room tell you how the room was used?



If it took 10 minutes to clean each of the paintings on the walls in this room how long, in minutes and hours, would it take to clean all of the paintings?



The Green Drawing Room

Look for the clues to tell you how this room was used, and write them here.

Look around for this Greek Key design. What is its secret meaning?



Draw the Greek Key design in the box below.

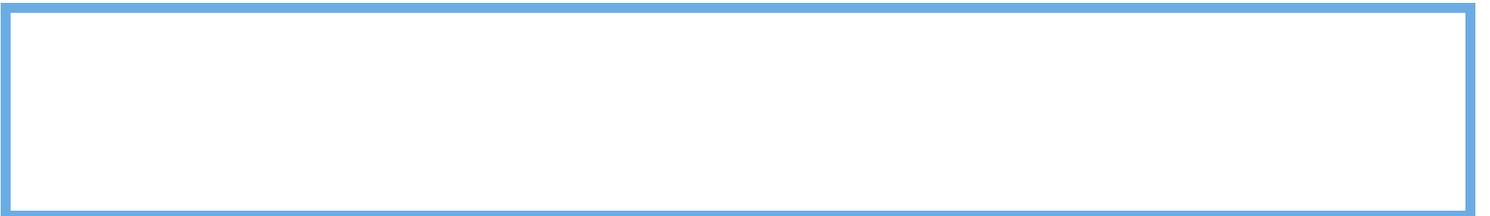
You are now in the middle of the house on its central axis.
Can you see the secret door in this room?

The Print Room

What is special about this room?



Look at the frames of the pictures on the walls. List four 2-D shapes used.



What 2-D 4-sided shape is not used as a frame?



The State Bedroom

Who slept here?

If it took an artist 5 hours to paint a picture how long would it take the artist to paint all of the paintings on the walls in this room?

The East Axial Corridor

In this hallway you can see two marble statues of William and Katherine Conolly, who built Castletown House, reclining (lying down). Why are they reclining?

They were both born in 1662. William died in 1729 and Katherine died in 1752. How much longer was her life than William's ?



Look at William's statue. Is this his own hair?

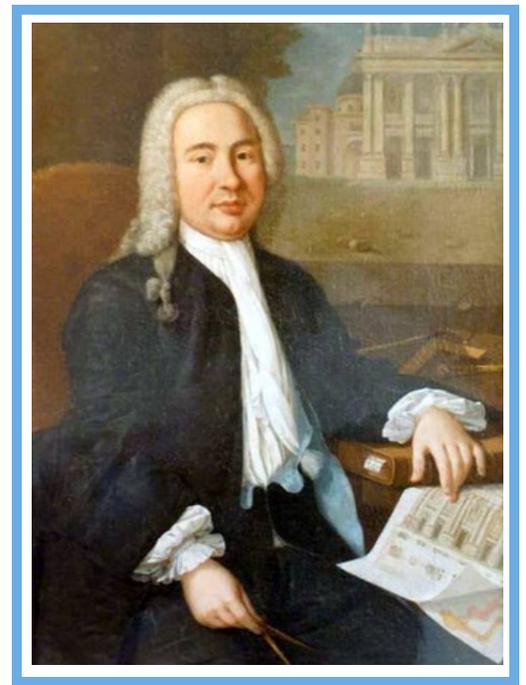
These long extravagant wig hair styles had to last for weeks. They were smoothed with wax made from pig fat and then covered in powder to hold them in shape. Mice and lice sometimes colonised the cosy interiors of the elaborate wigs feeding on the smelly hair dressings.

If wig powder cost € 2.25 per 500ml and William used 2kg of powder per year, how much did he spend each year on powder ?

The Entrance Hall

What clues here tell you how the entrance hall was used?

This is the Architect of Castletown House, Alessandro Galilei. Without touching the table, look closely to see the date on the picture. What is the date?



What are the chances of you meeting him today? Likely, impossible, possible, or certain? Choose one and write it below.

Draw a mirror image of the lines in this photo below.



The Flying Staircase

Why is it called a flying staircase?



Imagine it is night-time and electricity has not yet been invented. How would you light your way up the stairs to bed?



250 lbs of beeswax candles were used to light the Long Gallery, dining room and parlour in 1787, and 2127 lbs of tallow or common candles in the rest of the house.

The builder of the brass staircase banister left a clue for you to find his name. With your back to the windows look at the banisters to find the clue. What is the clue and what was his name?

(Please don't touch the hand rail or brass banisters on the stairs.)

The Lanfranchini brothers created the stucco plaster designs on the walls of the staircase. How many human forms can you see on the walls?

If 2.5 litres of wet plaster is needed for each portrait, how many litres are needed to make 8 portraits?

The Long Gallery

Choose two people to measure the length and width of this room using their stride. When you have found these measurements, calculate the area of this room (width x length), and write your answer below.

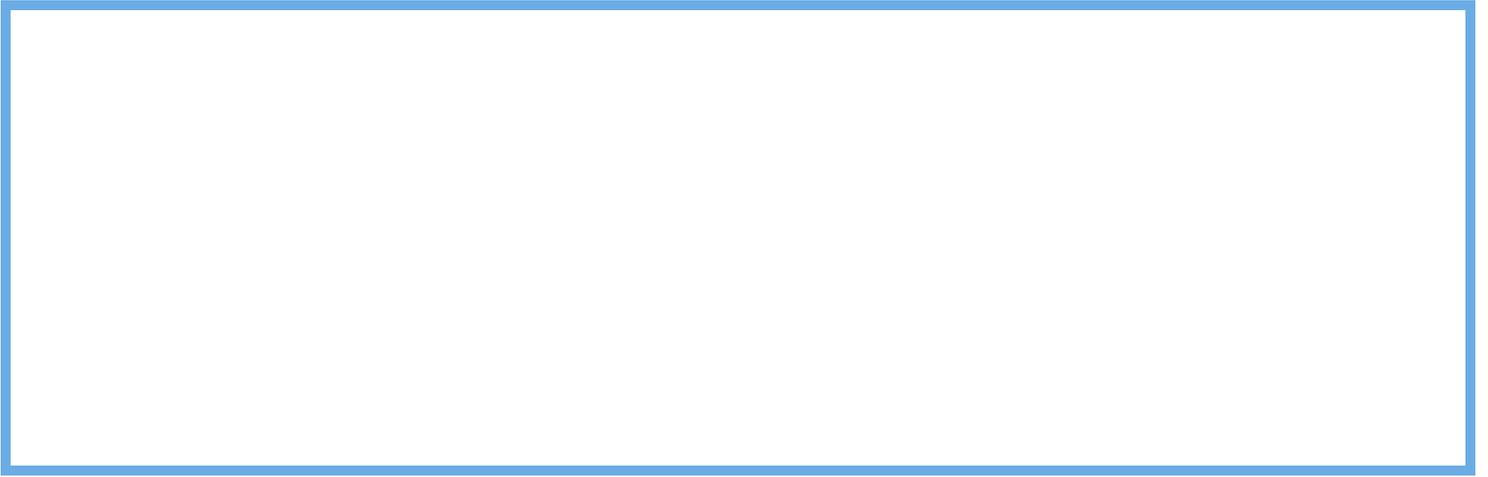
The three chandeliers are made from Venetian glass (i.e. glass from Venice in Italy). Venice is approximately 1,600 km from Dublin. If a plane flies at 400km per hour, how long will it take to bring the glass from Venice to Dublin?

Look at the statue of the woman with the quiver of arrows. She is a Greek Goddess. Find her name by cracking the following code.

The key is 35:8:3:9:3

A = 3	D = 35	E = 36	G = 4	I = 8
K = 34	M = 5	N = 9	Q = 10	X = 6

What new words and information have you learned on this tour?



What did you like about the tour?



What did you not like?

