



UNIVERSITY OF  
CAMBRIDGE

## Yusuf Hamied Department of Chemistry Science Trail

Although the trail starts by the entrance to the Department of Chemistry carpark and ends close to the carpark at the Grand Arcade, you may start at whichever question is most convenient. Actual walking time is about 1 hour, but allow time to find the answers, too!

<p>On the side of the Department of Chemistry building on Lensfield Road you will find a bas relief. The symbols are from alchemy and represent (from left to right) Talc, Iron, White Lead, Verdigris and Precipitation. It was designed by Mary Spence Watson (1913–2006) to represent the progression of the modern science of Chemistry from its alchemical origins.</p>	
<p>What year was the artwork created? (You could also try drawing your own symbol!)</p>	<p>1958.</p>
<p>Walk away from the carpark down the gravel path to the Polar Museum next door to the Chemistry Department. Outside the museum is a small boat, a replica of the one Sir Ernest Shackleton and his crew of six used to row across the ocean on a 16-day rescue mission.</p>	
<p>How far did they have to travel in the <i>James Caird</i> from Elephant Island to South Georgia (in miles or kilometres)?</p>	<p>800 miles/1500km.</p>
<p>What unit of speed is derived from a nautical mile?</p>	<p>One nautical mile per hour.</p>
<p>In front of the museum is a statue of a husky. Dog sledge teams were used by the British Antarctic Survey (BAS) in Antarctica from 1945 and were an essential aid to both travel and research. To comply with environmental protocol, since 1994 huskies have not been allowed on Antarctica, but this monument is a celebration of their previous contribution.</p>	
<p>How many husky teams were there?</p>	<p>28.</p>
<p>Walk out of the Polar Museum gate and turn left along Lensfield Road back past the Department of Chemistry. At the junction of Lensfield Road with Trumpington Street you will find Hobson's Conduit.</p>	
<p>Why was Hobson's Conduit built?</p>	<p>To supply running water into the town.</p>
<p>Turn right into Trumpington Street and cross over to the large sculpture outside the Department of Engineering. Called <i>Construction in _____</i> (Kenneth Martin, 1905–1984), it represents a formula used in jet propulsion.</p>	
<p>What is the atomic number of the construction material that forms part of its name?</p>	<p>13.</p>
<p>Walk along Trumpington Street towards the centre of town. The railings outside the Fitzwilliam Museum are decorated with an exotic fruit.</p>	
<p>On which continent did this fruit originate?</p>	<p>South America.</p>
<p>Cross back over Trumpington Street and walk down Fitzwilliam Street, opposite the museum. On one of the houses a plaque shows where a well-known Cambridge student once lived.</p>	
<p>What is the name of his most famous book?</p>	<p>On the Origin of Species.</p>
<p>Retrace your steps to the junction with Trumpington Street, turn right, cross back over and continue until you reach Little St Mary's church. Turn left into Little St Mary's Lane.</p>	
<p>Why do you think the lamp on the side of building doesn't have a light bulb?</p>	<p>It is a gas-lamp.</p>

Return to Trumpington Street, turn left and continue towards the town centre until you reach the corner of Bene't Street and King's Parade. Here you will find the Corpus Clock, a popular landmark also known as the Chronophage, meaning 'time-eater'. You have to look carefully to tell the time from three rings of LED lights.	
How often is the clock exact to the minute?	Every 5 minutes.
You could also try drawing your own mythical beast and inventing a suitable name for it!	
Further along Bene't Street is a famous pub.	
What significant event happened here?	Francis Crick & James Watson first announced their discover of how DNA carries genetic information.
Retrace your steps to King's Parade. High on the side of the building opposite the clock you will find a Blue Plaque.	
Who does it commemorate?	Alan Turing.
What is he famous for?	Mathematician, computer pioneer & code-breaker.
Where did he work during the war?	Bletchley Park.
Continue walking along King's Parade, past King's College and Great St Mary's Church, until you reach Senate House Passage where you will find an ancient method of telling the time.	
How many faces does this timepiece have?	Six.
Return to King's Parade, turn left onto Trinity Street and walk past Gonville & Caius College. Among the many busts of ex-scholars decorating its exterior walls is one of William Harvey, famous for discovering that blood circulates around the body.	
What are the names of the three main types of blood cell?	Red blood cells, white blood cells & platelets.
Continue walking along Trinity Street and see if you can guess what type of fruit tree is growing outside Trinity College gates.	
Who do you think it celebrates?	Apple tree and Isaac Newton.
Retrace your steps to the Chronophage and turn left onto Bene't Street before turning right onto Free School Lane just after the church.	
What was discovered at the Old Cavendish Laboratory and by whom?	The electron by J J Thomson.
Continue walking until you reach the end of the lane, then turn left and follow Pembroke Street until you reach Pembroke Arch. This is the entrance to the Museum of Zoology and although the museum is closed, you can go up the steps and see the Fin Whale skeleton inside the atrium.	
How long has the whale been dead?	156 years.
Return to Pembroke Street, cross the road and pass under the arch to the Sedgwick Museum of Earth Sciences. Can you find some feet? These belong to the full body cast of Anthony Gormley, buried upside down in the ground.	
Can you name a famous landmark created by this artist?	Angel of the North.
How many different animals can you find as carvings or sculptures near the Sedgwick Museum? Can you name them all? (Don't forget the outside of the building, which stretches all the way to Downing Place!)	2 x bear, 2 x bison, <i>Tyrannosaurus</i> , woolly mammoth, <i>Iguanodon</i> , <i>Megatherium</i> .