

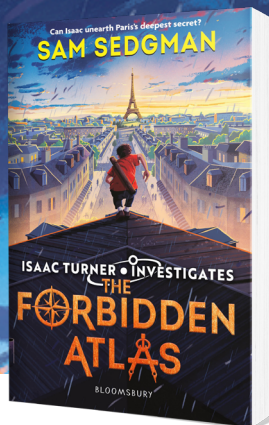
Can Isaac unearth Paris's deepest secret?

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**Educational
Resource
Pack**

ISAAC TURNER • INVESTIGATES
THE
FORBIDDEN
ATLAS

BLOOMSBURY



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About the Book

Isaac and Hattie have been invited to a high-profile event at the French National Archives in Paris to finally celebrate their achievement in saving time. But as Isaac prepares to make his speech, the lights go out and a single shot is fired.

The police think it was an assassination attempt on the infamous businessman Balthazar Blaise, but Isaac and Hattie realise that something very different is going on when they discover a boy taking something from the archives before vanishing without a trace.

As they investigate, Isaac and Hattie are pulled into an underground world, searching secret and forgotten places for a stolen letter, a missing sister and a map that will unearth a long-buried secret ...

About the author

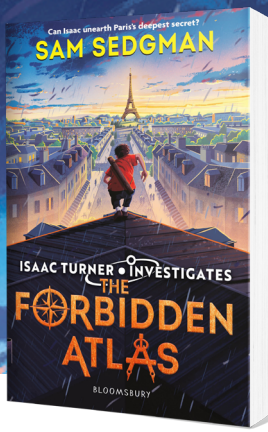
Sam Sedgman is the bestselling, award-winning author of *The Clockwork Conspiracy* and the Adventures on Trains series, co-written with his friend M. G. Leonard. His first novel for younger readers, *The Highland Falcon Thief*, was published in 2020, and was awarded Children's Fiction Book of the Year at the British Book Awards. His work has been translated into more than twenty languages.

Alongside his writing, Sam is an experienced presenter and podcaster, confirmed nerd and enthusiastic ferroequinologist. A lifelong fan of games and puzzles, he once ran a company devising murder mystery treasure hunts. He lives in London, on top of a railway station.



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Explore Themes of: ✓ Maps ✓ Measurement ✓ Paris ✓ Mystery and adventure
✓ Friendship

Subject Checklist: ✓ English ✓ Geography ✓ Maths ✓ MFL ✓ D.T. ✓ Art
The activities included here are suitable for the classroom or library sessions.

CONTENTS:

Pre-reading activities

1 – Exploring Paris

Activities: Research famous Parisian landmarks; make a 3D map of Paris.

Objectives: Identify key landmarks in Paris; select and use a range of construction materials; work collaboratively with a group.

2 – Friendship

Activities: Create a friendship compass.

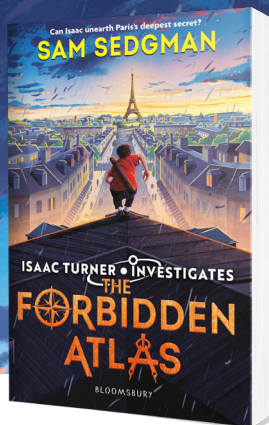
Objectives: Discuss the characteristics of a healthy friendship.

3 – Measuring Distance and Time

Activities: Construct a one second pendulum to help measure a distance of five metres.

Objectives: Apply problem-solving skills; measure time and distance accurately.

Further Activity Ideas



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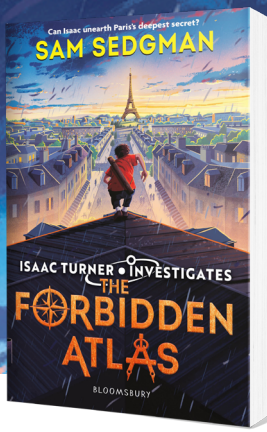
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Book Cover Discussion Questions:

- Where do you think the book is set? What do you know about this location?
- What genre do you think the book might fit within? Why?
- Can you guess what the boy in the picture might be carrying on his back?
- What do you think might happen in the story?
- Can you think of three questions about the book based on the front cover?
- What do you like about the cover design?



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Setting

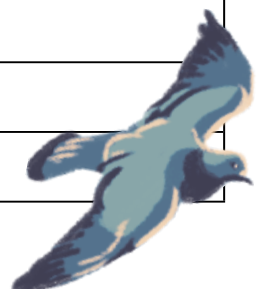
The novel is set in Paris. Can you find Paris on a map of Europe? How long do you think it would take to travel to Paris from your hometown?

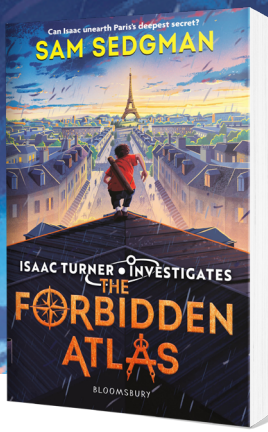


Language

In the table below are some French words and phrases you will encounter as you read the novel. Can you find out what they mean in English? Keep this table with you as you read and add any other French words or phrases you learn from the book as you go!

<i>Rue</i>	
<i>Maison</i>	
<i>Gare</i>	
<i>Musée</i>	
<i>Église</i>	
<i>Arrête</i>	
<i>Voleurs</i>	
<i>Aidez-moi!</i>	
<i>Je parle français</i>	





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EXPLORING PARIS

Read the extract from pages 70–71!

'Isaac's eyes widened in wonder as Blaise opened the apartment door. It was at the building's corner, and flooded with morning sunshine from a window overlooking the intersection below. In the centre of the main room, a large glass table was inlaid with a three-dimensional model of the city beyond the window, complete with undulating hills, rooftops clustered over the land like animal scales and the river Seine weaving through it like a ribbon.'

'Whoa!' said Isaac, running his hand over the glass. 'That must have taken you years!'

'I am fortunate enough to employ expert model makers to assist me,' said Blaise, blushing. 'But I am very proud of it. This is my *salle des cartes*. The map room. I am a cartophile, you see. Someone who adores maps.'

'Maps of what?' Hattie asked, examining the wood and glass cabinets that lined the walls. They were filled with leather-bound books, some as large as tables.

'A great many things,' said Blaise proudly. 'Some of the earliest maps of the world, when it was believed to be flat. Maps of the moon; maps of the sea; maps of the French railway network. But mostly I collect maps of Paris. That's where my fascination began. My father founded the Blaise property empire before I was born, and I grew up watching him in his office poring over all kinds of maps of the city around me.'

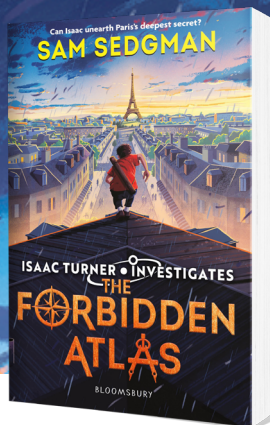
'Why do you like them?' Hattie asked, as Isaac looked upwards and saw the ceiling was painted with constellations: a map of the night sky.

Blaise chuckled. 'I suppose because the world is messy, but a map makes order from that mess. Not every detail can be shown on a map – it would be impossibly complex. So each map is a choice: a different way of seeing the world. Do you understand?'

'Er, yeah,' said Hattie. 'I think so.'

Discussion Questions:

- Can you guess what the French word for 'map' is?
- If a cartophile is 'someone who adores maps'. What do you think a cartographer might be?
- Why does Blaise love maps?
- Have a look at the map at the start of the novel. What do you like about this map? How do you feel when you look at it?
- Compare the map at the front of the novel with other maps of Paris found in books or online. How are the maps similar and how are they different? What choices has each cartographer made about what to include and what to exclude? What does each map tell you about Paris?



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ACTIVITY! CREATE A 3D MAP OF PARIS

As a class, create your own 3D map of Paris, just like the one Blaise has in his salle des cartes!

Working in a small group, choose a famous Parisian landmark. Each group should pick a different one. Here are some key landmarks mentioned in the text:

Sacré-Coeur, Musée des Archives Nationales, Notre-Dame, Panthéon, Arc de Triomphe, Tour Eiffel, Musée d'Orsay, Gare du Nord, Pont d'Arcole, Centre Pompidou, Tour Montparnasse

With your group, find out as much as you can about your landmark. Then, use modelling materials of your choice to recreate it in 3D. You could use paper or card, junk modelling materials, wooden dowels, balsa blocks, straws, air dry clay or construction toys like lego or K'NEX.

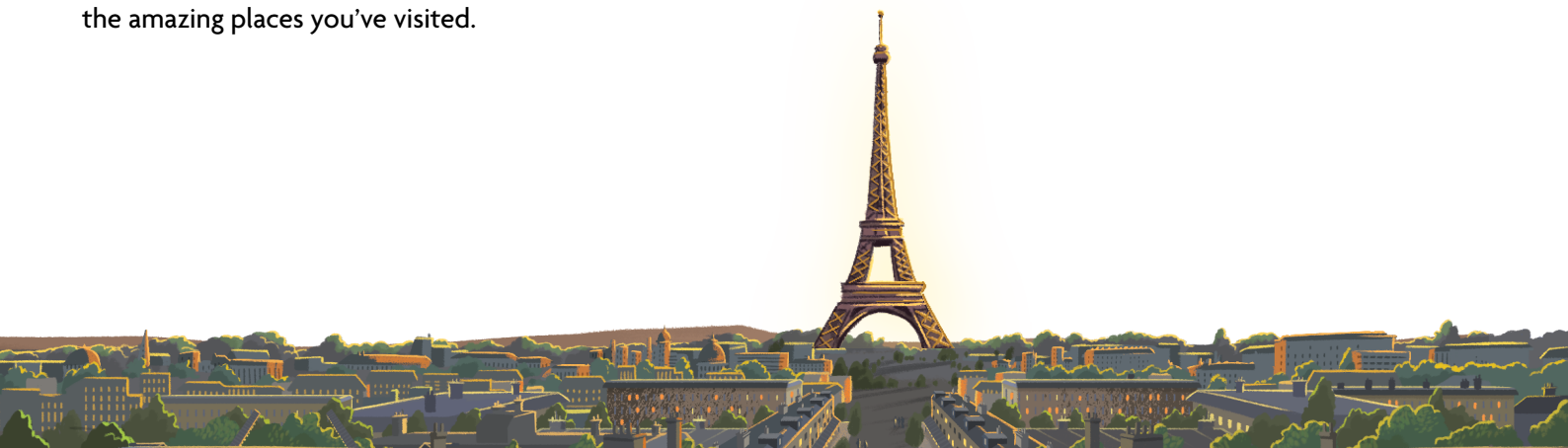
When you have all completed your models, create the outline of Paris on the floor or table by laying a piece of string out in the shape of the city. Use blue fabric or paper to make the river Seine. Then, using a map of Paris for reference, arrange out your landmarks within the outline of Paris so that they are correctly placed in relation to each other. Step back and admire your own 3D model of Paris!

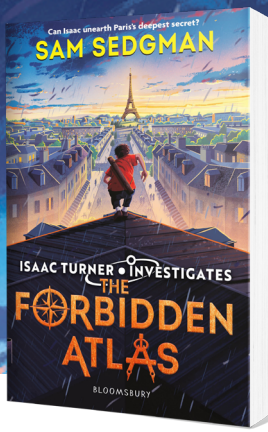
- Which direction is North, East, South and West on your map?
- Where would the entrance to the catacombs be?
- If you were in Paris, where would you like to visit and why?

Extra Challenge: A trip to Paris!

Imagine you are going on a trip to Paris with your group. Where will you stay and what places will you visit? Plan your trip and record your itinerary for each day.

Write a postcard to send home from your trip to Paris! Use descriptive language to tell your family about your trip and the amazing places you've visited.





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FRIENDSHIP

Read this quote from page 339 when Isaac is talking to his dad:

'I was really scared,' he said. 'And I wanted to tell you about it, but I couldn't. I thought I could be brave, and solve everything on my own, but I realised ... Well.' He thought of Hattie, Leon and Samira, fighting their way out of the catacombs. 'It's easy to get lost on your own. You need friends to help you find your way.'

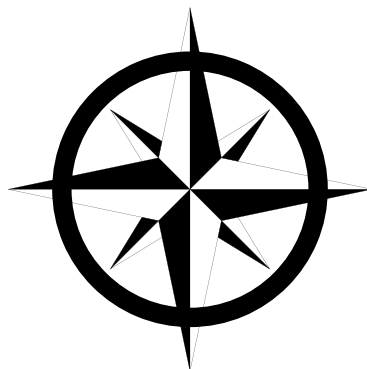
Discussion Questions:

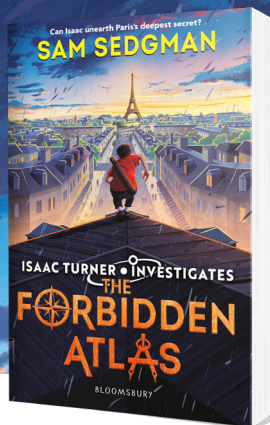
- What do you think Isaac has learnt during the course of the story?
- Compare the pictures on page 6 and page 341. Can you remember how Isaac felt in the first picture? How do you think he feels now? In what ways do you think he has changed?
- What do you like about Isaac, Hattie, Leon and Samira's friendship?
- Describe a time in the story when you think a character showed one of these qualities: Respect, Loyalty, Kindness, Support, Trust
- Can you think of a time when a friend has helped you find your way?

ACTIVITY! FRIENDSHIP COMPASS

During the novel, Isaac learns more about the value and importance of friendship. What do you think the characteristics of a healthy friendship are? With your class, write down as many ideas as you can. Examples might include: trust, honesty, loyalty, respect, kindness, support, shared interests, fun, forgiveness, empathy and understanding.

Which of these characteristics do you feel are the most important? Choose four characteristics that are the most important to you and add these to the friendship compass below:





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MEASURING DISTANCE AND TIME

Read the extract from pages 277–278!

We need to measure thirty-six *toises*,' said Samira, gesturing down the tunnel. 'That is about –' she scrunched her brow – 'seventy metres.'

'How?' asked Hattie. 'Anyone got a tape measure?'

'A stride is about a metre,' Leon suggested.

'But it has to be accurate,' said Isaac. 'A small mistake multiplied by seventy is huge – we'll end up looking in the wrong place.'

'We could tie our shoelaces together to make string,' Samira suggested. 'If we had something we knew the length of, we could measure it.'

Isaac frowned. 'Does your watch have a second hand, Samira?'

'Yes, why?'

'Then I've got it.' Isaac grinned. 'We'll measure *time*.'

He tied their laces together into a long string, with one of Hattie's boots dangling from the end.

'How is this going to help?' Hattie asked, standing on one leg.

'It's a pendulum,' Isaac explained. 'If you make the string longer it swings slower: shorten it and it gets faster. Pendulums that swing once a second are almost exactly a metre long – no matter how heavy the weight on the end is.'

'So we'll time it with my watch, and when it swings once a second, we'll have measured one metre?' Samira asked.

'Exactly,' said Isaac. 'It's something my dad showed me.'

They set the boot swinging back and forth, Hattie holding the string high while Samira counted the seconds and Isaac adjusted the length.

'Did you hear that?' Leon whispered, flashing his torch along the tunnel.

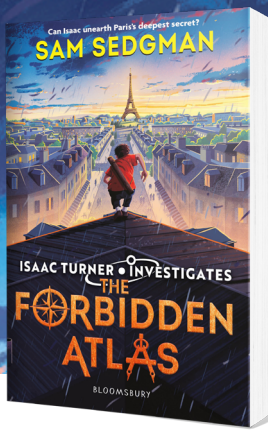
'We can't see if you look away,' said Hattie. 'Concentrate.'

'I thought I heard someone cough.'

'You must have imagined it,' said Samira.

'There!' said Isaac, grabbing the shoelaces. 'That's our metre.' It wasn't platinum, but it was good enough.

They laid the string end over end from the fleur-de-lis, until they had measured out seventy metres.



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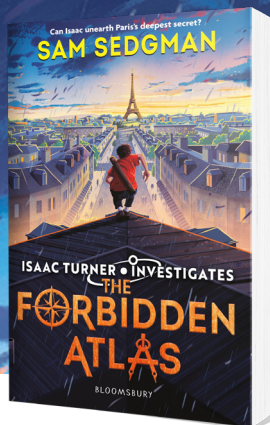


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Discussion Questions:

- Can you remember what a 'toise' is? (Turn back to page 272 to check!)
- Why does Isaac make a pendulum?
- What equipment does Isaac use to make his pendulum?
- How does the length of string affect the time the pendulum takes to make one swing?
- Would the time taken to make one swing have been different if Isaac had used another object, such as Leon's pencil case, rather than Hattie's shoe as the weight at the end of the pendulum?





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ACTIVITY! MEASUREMENT CHALLENGE

Your challenge is to measure out a 5-metre distance on the playground as accurately as possible. But there's a catch... you can't use any traditional measuring tools! That means no rulers, metre sticks, tape measures, or trundle wheels. Instead, you can use string, a stopwatch, and a small weight (or another small object).

Form a small group and discuss how will you use your equipment to measure out 5 metres. Use extract 2 to give you ideas!

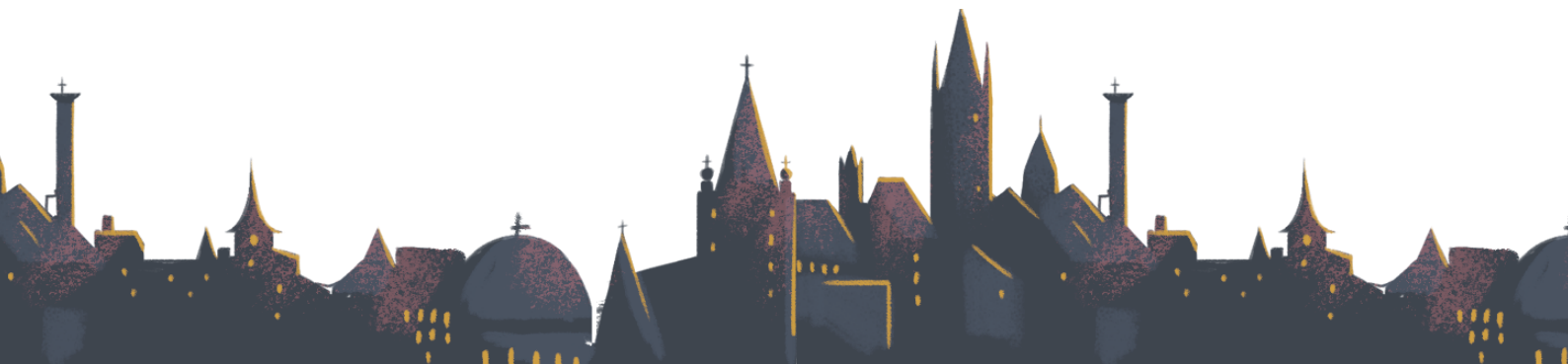
To make a pendulum, like Isaac:

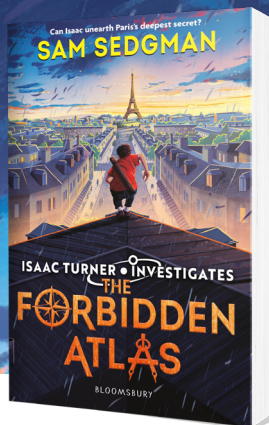
1. Attach your weight to one end of your piece of string (this is called the 'bob').
2. Hold on to the other end of the string then raise the bob up and release it. One swing is counted as one movement of the bob from left to right or from right to left.
3. Experiment with your pendulum. Remember, as Isaac says, if the string is one metre long, one swing will take one second. Can you use your pendulum to find one metre of string?

TIP — One approach would be to measure the time it takes your pendulum to make ten swings. If it takes less than ten seconds, your piece of string is less than a metre; if it takes more than ten seconds, your piece of string is more than one metre. Adjust the length of your string after each attempt and try again.

Go outside and measure out a 5-metre distance on the playground. As a class, check each group's measurement using a trundle wheel or metre stick. How close did you get to 5 metres? Was your method effective?

Extra Challenge: Experiment with using different bobs. What do you notice?





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FURTHER ACTIVITY IDEAS:

MATHS: In the past, many different units of measurement have been used to measure length, including cubits, feet, furlongs and paces. Can you find out what these units of measurement were based on? Invent your own unit of measurement to measure length! Measure items around the classroom using your unit of measurement and compare with a partner. Now, consider what problems might arise if every person used different units of measurement. On pages 11-12, Isaac learns about the invention of the metre. Why do you think the metre was based on measurements of the Earth rather than body parts? What do you think the benefits of having a standard unit of measurement are?

ART: On page 84, Patricia, Hattie and Isaac admire colourful graffiti on the walls of a neighbourhood in Paris. 'It's like a living gallery,' says Patricia. Read the descriptions in the book and look at some pictures of Parisian street art online. Which images do you like best and why? Imagine you are a graffiti artist and design your own piece of street art! How do you want people to think and feel when they see it? Use bright colours to paint your image. When you have finished, create a 'living gallery' in your classroom!

GEOGRAPHY/MATHS: On pages 113–114, Hattie shows Isaac and Leon how to read six-figure grid references on a map. Find a map of your local area that uses grid references such as an ordnance survey map. Can you give six-figure grid references for your home, your school and your favourite places to visit in your local area?

GEOGRAPHY: On pages 153–155, Blaise tells Isaac and Hattie about his plan for his 'Silhouette' development and why he's not allowed to build it. In 2023, Paris really did re-instate a ban on skyscrapers. What do you think the pros and cons of this ban might be? Do you agree or disagree with it? Would you allow Blaise to build Silhouette if you were in charge of city planning in Paris?

GEOGRAPHY: On page 281, Isaac says, 'Every map has a key'. What is a map 'key'? Have a look at an Ordnance Survey map. Can you find the key? What do the symbols mean?

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