



Google Arts & Culture

# Learn Anywhere: A History of Magic

Jim Kay, Study of Harry Potter and Draco Malfoy playing Quidditch for The Chamber of Secrets, The British Library

In association with



LEXICON



## How to use this lesson plan

This plan takes you on an exciting journey with plenty of links through to amazing online content so no need to print. This lesson plan is suitable for anyone but we recommend it for ages 7 to 11. It's a lot of fun to go on this journey with parents, teachers or your friends, but it is designed so you can explore independently at your own pace. There are different types of questions to answer: can you discover, explore and invent? We think so.

Check in with your parents or teacher if you need to, but you'll need a tablet, computer or smartphone. You can do this *Learn Anywhere* lesson on almost any device as long as you can get online and use a web browser.

There are 3 Chapters:

Chapter 1 - Magic Discovered 45 minutes

Chapter 2 - The Science and Art of Magic 60 minutes

Chapter 3 - Extra Discovery 45 minutes

You'll see some helpful signs on the way:



Useful information to guide you through the lesson.



Things you'll need to watch, read, learn and make things with during the lesson.



Digital activity time. Take quizzes and explore.



Estimated time to do a section of this lesson.



Explore online content. Discover videos, stories, or go and look at and zoom around pictures.



Activity time. This is where you get to design, make or write something of your own.

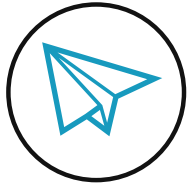


Headphones to listen to videos and audio.



## Things you'll need

Things that will help you during this *Learn Anywhere* lesson.



**Scrap Paper**



**Brush and Paint**



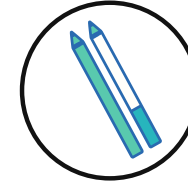
**Tablet or Computer**



**Scissors**



**Notepad**



**Pens and Pencils**

## Welcome to ***Learn Anywhere: The History of Magic***

In this *Learn Anywhere* lesson, you are going to learn all about magic. Discover for yourself how the history of magic and its legends appears in JK Rowling's magical world. You will investigate the original recipe for the Philosopher's Stone and find out if it is linked to the real-life Nicolas Flamel. You'll learn why constellations are important to the stories, have a go at some moving magic yourself and then create your own wizarding world. Get ready to investigate...

### **What will you do?**

1. Go on an adventure to discover the stories behind the magical world of JK Rowling.
2. Then you will hunt for facts and secrets that very few people know about magic.
3. You'll write a story of your own wizarding world.
4. You'll create a magical animation using digital apps, paper and pencils/pens.

The Ripley Scroll, The British Library



**What will you learn?**

1. Discover how the mind of a storyteller works with JK Rowling.
2. Discover where myth and legend meet early science in alchemy.
3. Learn to plan a story world.
4. Practice writing.
5. Learn how an artist interprets a story with magical illustrator Jim Kay.
6. Practice art modelling of an owl.
7. Discover persistence of vision through animation.
8. Practice role play through practical 'magic'.

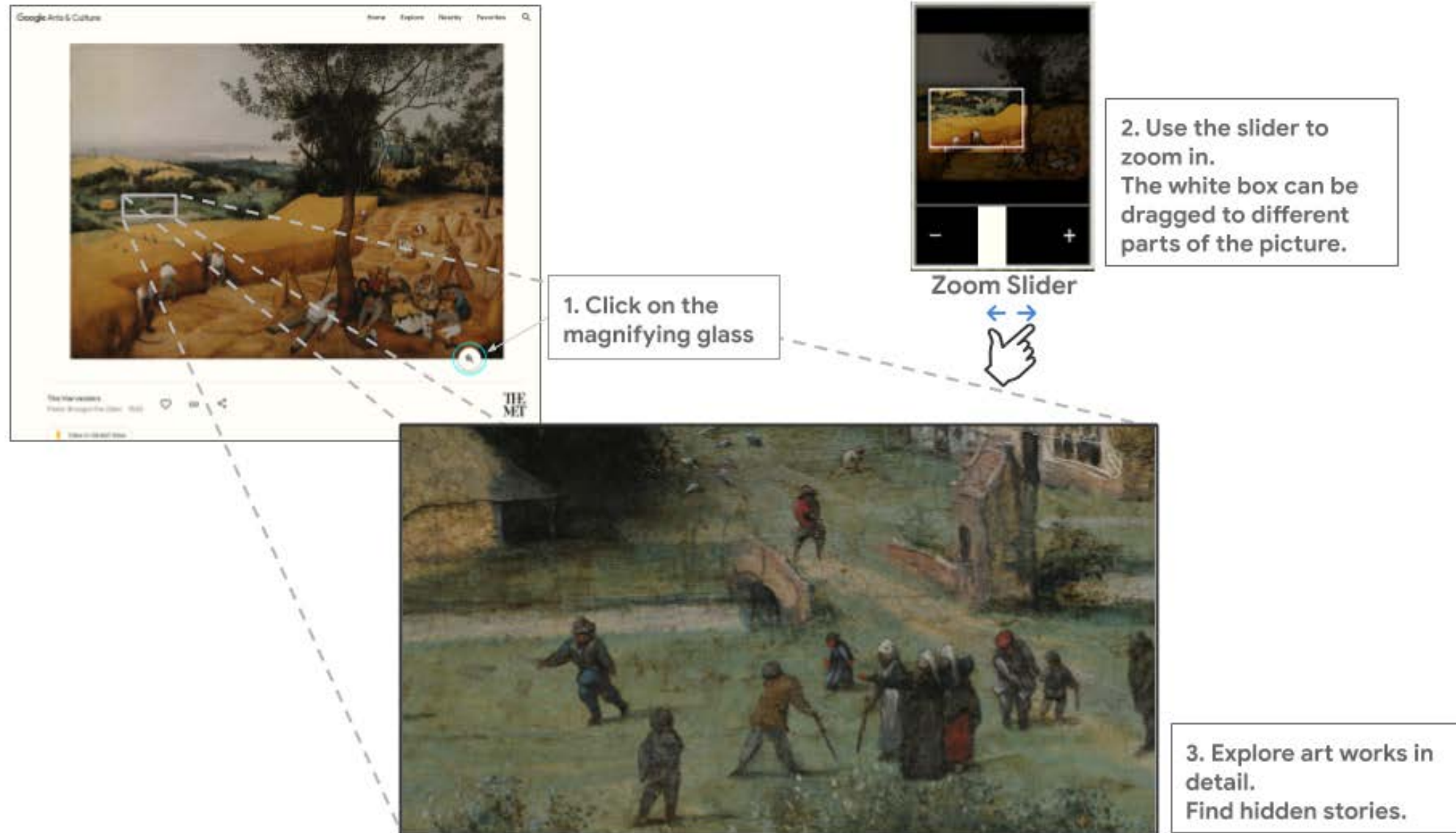
**After studying this lesson, you will be able to:**

1. Describe and identify the different features of Harry Potter's world - from owls to the Philosopher's Stone itself.
2. Understand the history of magic and its crossover with science.
3. Create a magical animation.
4. Write a descriptive story illustrating your own wizarding world.

**Vocabulary:** alchemy, animation, astronomy, basilisk, British Library, character, constellations, design, Diagon Alley, Dumbledore, geography, immortality, King Arthur, magic, mandrake, Merlin, Nicholas Flamel, persistence of vision, publishing, recipe, setting, storytelling, wizard.

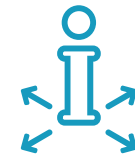
There's one more thing to know before you go on your lesson. Google Arts & Culture pictures are big. So big that you can zoom in. Explore. Sometimes right down to the pencil line.

So you just need to click on a link, then on the Magnifying Glass symbol and zoom in with the Zoom Slider. Drag the white box around and you can explore the picture. You'll find out for yourself. Here's an example of a Google Arts & Culture picture and the zoom slider.





# Chapter 1



What's this chapter about?  
Magic Discovered



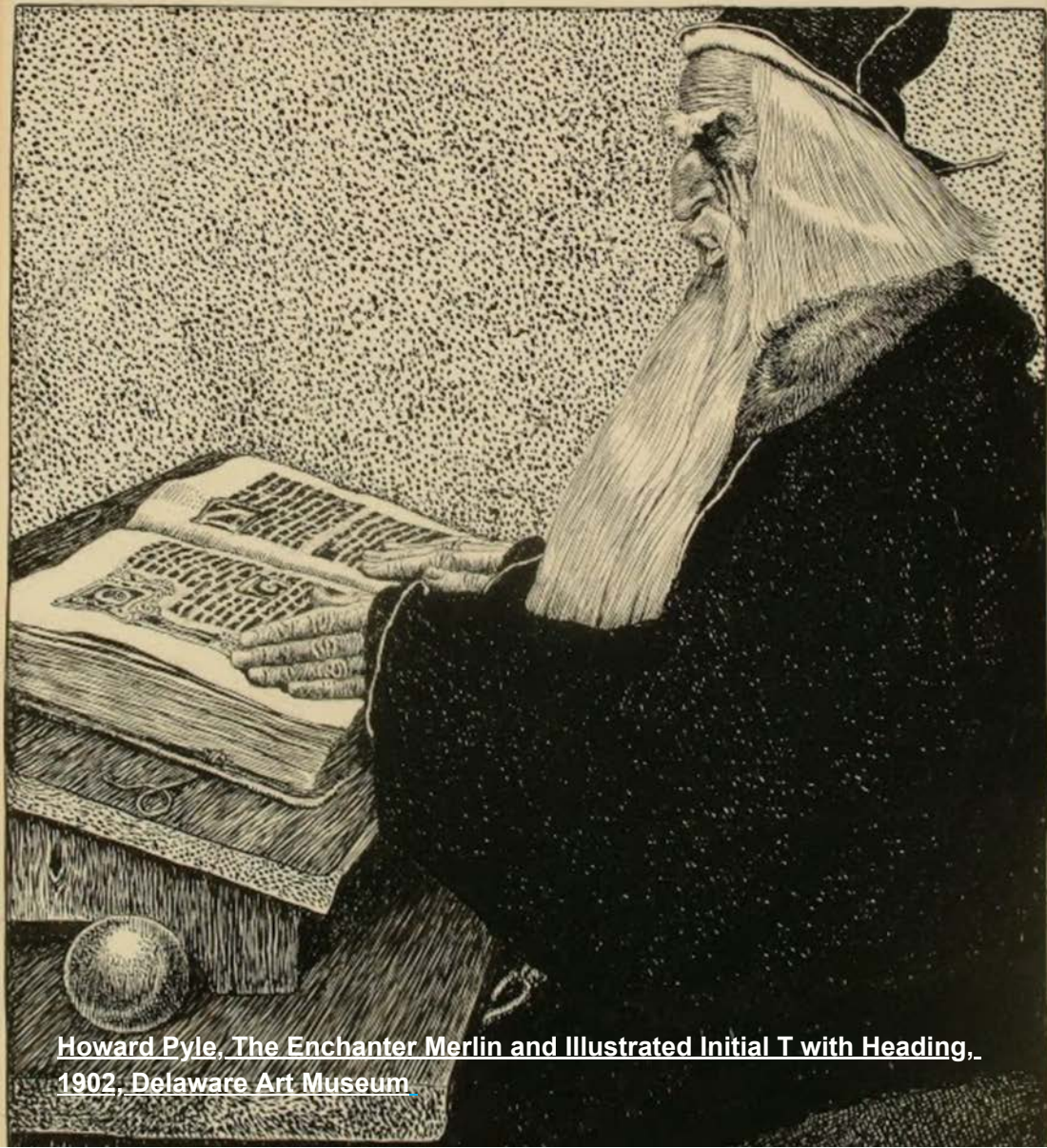
What will I do?  
Explore the history of magic  
Learn some awesome facts and  
take a quiz



How long will this chapter take?  
45 minutes



# he Enchanter Merlin.



Howard Pyle, The Enchanter Merlin and Illustrated Initial T with Heading, 1902, Delaware Art Museum.

The amazing history of magic.

You're going to investigate pictures and videos depicting different aspects of Harry's world, how it was created and how the magic has held us spellbound for over 20 years!

It would be great to discuss your favourite parts of the Harry Potter books with your parents or on a videocall, with your friends.

Magic has always been with us, from simple card tricks to stories of turning lead into gold. It has inspired artists and writers to imagine the fantastic, the impossible, the wondrous.

Merlin is a figure of legend, a great wizard, closely connected with King Arthur, or so it is said. Does he look like a wizard to you? He doesn't look much like Harry Potter but this is the traditional depiction of wizards. He looks more like a very stern Dumbledore.



Click [here](#) to explore this picture of Merlin.



Click [here](#) to explore more about charms and magic.





Click [here](#) to learn 10 strange things about magic. There's a mini quiz about these strange facts on the next page so you'll need to pay attention.



A phoenix rising from the ashes, in a bestiary, 13th century, The British Library





### Mini quiz

Question 1: How many days does a phoenix take to rise from the ashes?

Question 2: What is a bezoar?

Question 3: What is the date of the oldest object in The British Library and how do we know? Hint: this will be useful information later in our magical quest.

Question 4: How would you harvest a mandrake?

Question 5: How many horns can a unicorn have?

Question 6: Why should you carry a weasel?

Answers at the end - no peeking.

Which house do you think the Sorting Hat would put you in?



Click [here](#) to explore the Sorting Hat.

# Questions for Chapter 1

Let's finish this chapter with some questions. When you **Discover**, you are comprehending and remembering. When you **Explore**, you are really able to understand it and think it through. When you **Invent**, you are able to comprehend, understand, remember, analyse and do something cool with your new knowledge.

## **Discover:**

What is the name of the book, also known as the "Key of Knowledge", that contains the invisibility spell?

## **Explore:**

After studying the [10 Strange Things You Didn't Know About The History Of Magic](#), what is the oldest datable object in the British Library?

## **Invent:**

How do you think NASA was able to date the observation of the eclipse so precisely? If you get stuck, go take a look at [NASA's site for a clue...](#)



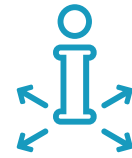
A crystal ball and stand, 19th and 20th century, The British Library





Watercolour illustrations to a memoir of Nicolas Flamel and his wife,  
18th century, The British Library

# Chapter 2



What's this chapter about?  
The Science and Art of Magic



What will I do?  
Explore the science and art behind the books  
Create your own moving magic



How long will this chapter take?  
60 minutes



Despite Harry Potter being a series of books all about magic, science is ever-present, as we will find out.

Let's take a closer look at the Philosopher's Stone: the pursuit of this magical item drives the story of the very first book in the series. In this book, Nicolas Flamel was the creator of the Philosopher's Stone. His knowledge of magic and alchemy had made him immortal.

Nicolas Flamel was a real person – do you think he is still alive today? You can discover and learn his story, by clicking [here](#).

Alchemy is often linked to magic but is also thought of as an early form of science. Alchemists attempted to purify, change, and perfect certain materials. Islamic and European alchemists developed a structure of basic laboratory techniques and theory, some of which are still in use today.

You can find a recipe for the Philosopher's Stone in the Ripley Scroll. The Scroll is six metres long and full of symbols and beautiful imagery.

Reading a scroll is very different to reading a book: it's unrolled, almost like a performance.



Click [here](#) to explore the Ripley Scroll.





Celestial Sphere, The British Library

Now it's time to look up. Astronomy, or the study of the universe, is very important. You remember from your earlier quiz that the oldest object in the British Library was dated by NASA technology.

Like everything, astronomy just takes practice to learn the night sky and you can see many stars and planets just by looking up. Many astronomers navigate the night sky by constellations, or patterns of stars. Constellations are ancient star patterns, mainly named by the Greeks and the Sumerians.

Explore this topic further by clicking [here](#)





There are two characters named in this picture of constellations – can you see them?

The characters are Draco Malfoy and Remus Lupin. They are very different characters in the books.

Bonus information – the star Sirius is nicknamed “The Dog Star” because it forms part of the Canis Major constellation which means The Great Dog constellation. What form does the patronus of Sirius Black take in the books? You could always check other characters to see if they are related to stars too (hint: check out Bellatrix and Andromeda).



Specimen of a male snowy owl, German Oceanographic Collection

Now let's take a look at some of the fantastical creatures JK Rowling depicted to create a sense of magical wonder.

Hedwig is a very important character in the books without speaking a word. What kind of animal is Hedwig?

Hedwig is of course, a snowy owl.

Owls have always been associated with wisdom and cleverness – see if you can find via the link below a coin from Athens celebrating the victory of the Athenians over the Persians in 469BC. It shows Athena, the Greek goddess of wisdom and... ..an owl.



Click [here](#) to find a very wise owl from ancient times.



Click [here](#) to find many more owls, some real, some fantastical.





Click [here](#) and zoom into Diagon Alley to see if you can find the owl.

What else can you recognise from the Harry Potter books in the picture?

**Jim Kay, A Panorama Section of Diagon Alley for The Philosopher's Stone, The British Library.**





The artist Jim Kay, has created beautiful pictures of some of the fantastical creatures in Harry's world. Explore these pictures by clicking [here](#) – what creatures can you find? Are they real? Or fantastical?



Click [here](#) to take a look at this animation of a beautiful owl. It is moving magic, turning a series of illustrations into a living thing.



How can a picture come alive, like the paintings at Hogwarts? Well it is animation. That works by playing a trick on the human eye. Our eyes and brain can see things move and fill in the gaps. When we watch a movie it is actually 24 separate photographs, called frames, being played one after another, in a single second. If you do that, you can show movement that has been captured through a camera lens, or drawn by hand or designed inside a computer.



1



2



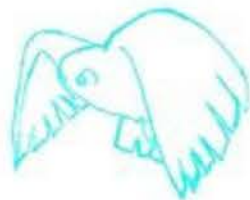
3



4



5



6



7



8



Your turn. You can create some animation.

This owl was sketched on a tablet by drawing eight different pictures and putting them together to create movement.

The simplest way to animate this is to create a flipbook with pencil and paper, a Post-It block or notebook would work just fine. Print out or draw the images and glue them down. Stack them one on top of another and they will animate.

You can trace the owl drawings to practice, or use them as inspiration to create your own sketches and animate them.

Or you can sketch something like this, by watching a video of an owl moving and pause it, sketch, move on and sketch again, until you have at least eight images of it moving. People walking or running, and birds flying are the easiest.

You can drop the pictures into Gboard gif maker. Or in an online gif maker. Ask your parent or teacher to choose one for you. You simply add the images and they will animate. Click [here](#), for a helpful tutorial – maybe you and your friends could all try it and show each other how you've brought art to life!

Practice makes perfect – all animators start with this simple method before they go on to create masterpieces in computer generated imagery, as in the Harry Potter movies.





# Questions for Chapter 2

Time for some questions. Here's a reminder of how it works. When you **Discover**, you are comprehending and remembering. When you **Explore**, you are really able to understand it and think it through. When you **Invent**, you are able to comprehend, understand, remember, analyse and do something cool with your new knowledge.

## **Discover:**

Which constellation is the Dog Star part of?

## **Explore:**

Why do you think some characters in the books have the same name as constellations?

## **Invent:**

The Hubble Space Telescope was launched to take our fascination with observing stars and the night sky into space. [Click here](#) to find out what the Hubble saw on your birthday. Write some fiction - 200 words or less, about what the Hubble saw. Try and make it magical.

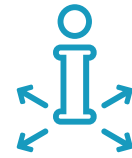


The snowy owl, in John James Audubon, The Birds of America, 1827 - 1838, The British Library



Jim Kay, Study of Aragog for the Chamber of Secrets, The British Library.

# Chapter 3



What's this chapter about?  
Extra Discovery



What will I do?  
Explore some extra facts about science  
Take some magic lessons  
Create your own wizarding world

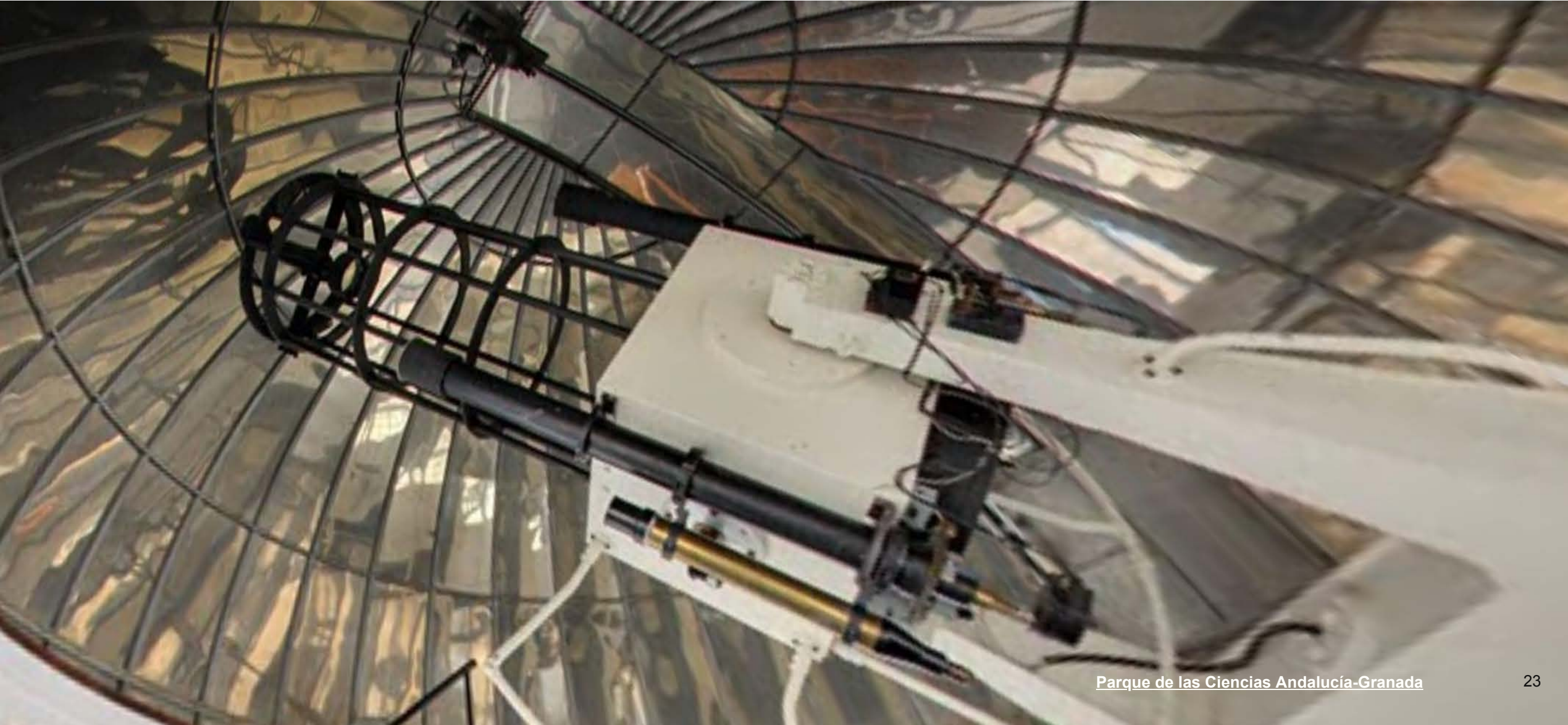


How long will this chapter take?  
45 minutes





Explore where astronomers work - click [here](#) to tour an observatory.







Defence Against the Dark Arts must be everyone's favourite lesson. Click [here](#) to start.







Skills for a modern wizard – click [here](#) to complete your training. By the way, we are not actually calling you a Muggle... For all we know you may be about to receive your letter inviting you to Hogwarts.. any time now...

Super Carlin Brothers, British Library.



# FOUR LESSONS IN MUGGLE MAGIC

# Questions for Chapter 3

Time for some questions. Here's a reminder of how it works. When you **Discover**, you are comprehending and remembering. When you **Explore**, you are really able to understand it and think it through. When you **Invent**, you are able to comprehend, understand, remember, analyse and do something cool with your new knowledge.

## **Discover:**

In defence against the dark arts what, according to Geiler, does the likelihood of a werewolf attacking depend upon?

## **Explore:**

Why do you think magic has been used across many cultures of the world to shield people against dark magic? What emotion do you think has triggered this behaviour?

## **Invent:**

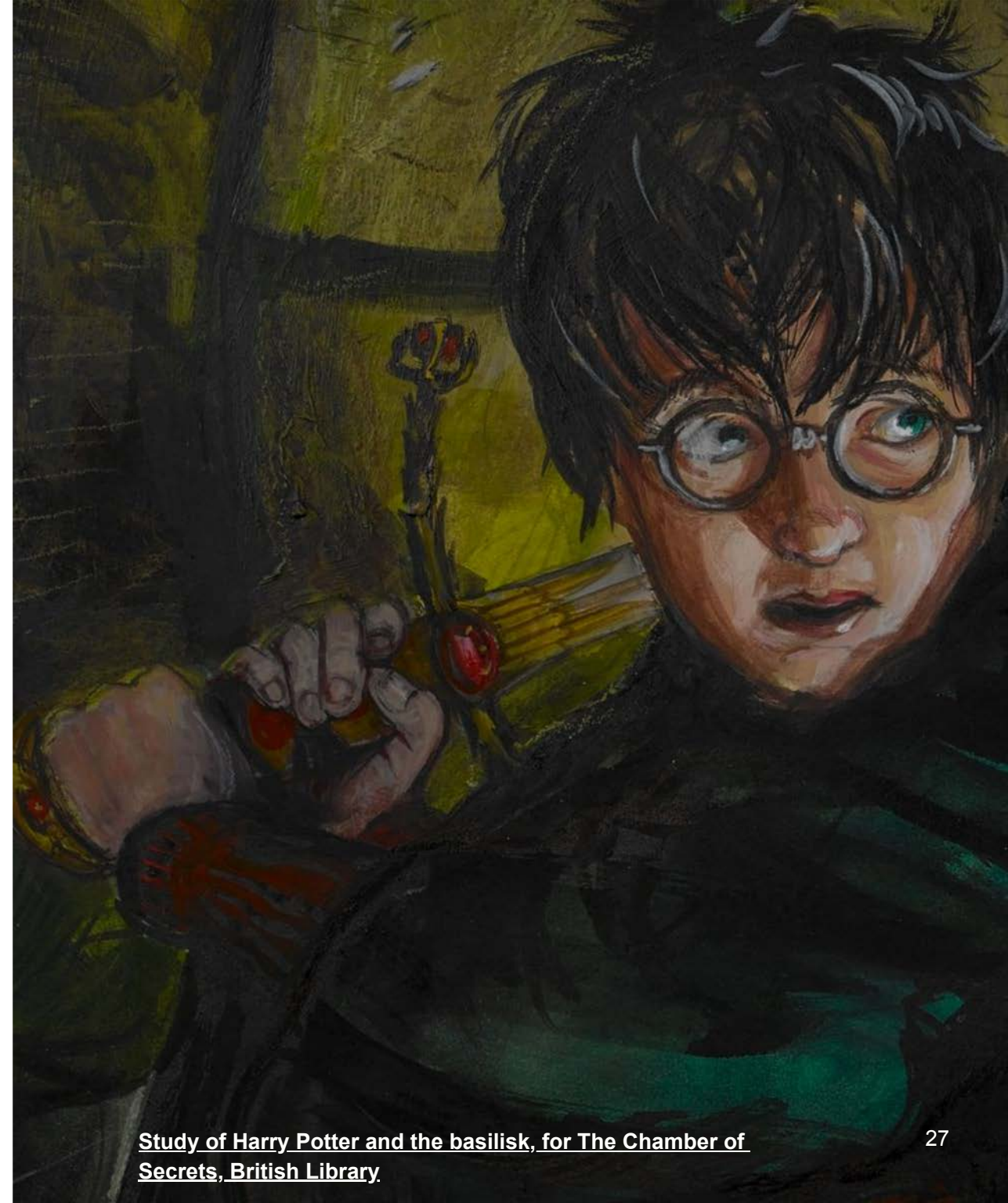
Now it's your turn to create a magical world. You can do this with pen or pencil on paper, a drawing app or even Minecraft! It doesn't matter, it just matters that you create it. Who lives in your magical world? What do they do? What do they wear? What is magical about it?





Congratulations. You have proven yourself an inventive wizarding student. You've won 50 House points.

Now it's time to continue your journey into magic, art and science [here.](#)



# Answers to all the questions

## Chapter 1

### Mini quiz

Question 1: How many days does a phoenix take to rise from the ashes?

Answer: Nine

Question 2: What is a bezoar?

Answer: Undigested fibre in the stomach of some animals

Question 3: What is the date of the oldest object in the British Library and how do we know? Hint: this will be useful information later in our magical quest.

Answer: 1192BCE

Question 4: How would you harvest a mandrake?

Answer: With a chord tied around a dog

Question 5: How many horns can a unicorn have?

Answer: Two

Question 6: Why should you carry a weasel?

Answer: To kill a basilisk

Discover: What is the name of the book, also known as the "Key of Knowledge", that contains the invisibility spell?

Answer: The Book Of King Solomon.

Explore: After studying the 10 Strange Things You Didn't Know About The History Of Magic, what is the oldest datable object in the British Library?

Answer: The Chinese Oracle Bone records an event which was observed in Anyang, China, 27th December 1992BC, so the Oracle Bone was carved some time shortly after that.

Invent: How do you think NASA was able to date the observation of the eclipse so precisely? If you get stuck, go take a look at NASA's site for a clue... [https://www.nasa.gov/vision/universe/solarsystem/sun\\_earthday.html](https://www.nasa.gov/vision/universe/solarsystem/sun_earthday.html)

Answer: The solar eclipse has been modelled mathematically, based on our Earth's orbit about the sun. On one side the Dragon Bone records a prediction made at the court of the ruler, while on the reverse is a written account of a lunar eclipse. The eclipse is described in such detail that, with the assistance of NASA, we can determine that it was observed at Anyang in China on 27 December 1192BCE, between the hours of 21:48 and 23:30 (give or take 17 minutes).



# Answers to all the questions

## Chapter 2

Study of Diagon Alley: What else can you recognise from the Harry Potter books in the picture?

Answers may vary but can include the following items: astrolabe, grandfather clock, witches hat, magic umbrella, tea pot, cauldron, owl cage and many more.

Drawing exercise: animate an owl

Any good attempt is worth 20 House points.

Discover: Which constellation is the Dog Star part of?

Answer: Canis Major - the Great Dog.

Explore: Why do you think some characters in the books have the same name as constellations?

Answers may vary, but may include the conclusion that astronomy and constellations have always been linked with mysterious influences and power, even magic and inspire astrology where people believe stars influence their daily lives.

Invent: The Hubble Space Telescope was launched to take our fascination with observing stars and the night sky into space. Click [here](#) to find out what the Hubble saw on your birthday. Write some fiction - 200 words or less, about what the Hubble saw. Try and make it magical.

Answers may vary, but any good effort gets 10 House points.

## Chapter 3

Discover: In defence against the dark arts what, according to Geiler, does the likelihood of a werewolf attacking depend upon?

Answer: According to Geiler, the likelihood of an attack was influenced by the werewolf's age and its experience of eating human flesh.

Explore: Why do you think magic has been used across many cultures of the world to shield people against dark magic? What emotion do you think has triggered this behaviour?

Answers may vary, however people are afraid of things that they do not understand. Fear is the emotion that has triggered this behaviour.

Invent: Now it's your turn to create a magical world. You can do this with pen or pencil on paper, a drawing app or even Minecraft! It doesn't matter, it just matters that you create it.

Who lives in your magical world? What do they do? What do they wear? What is magical about it?

Answers may vary but any good effort deserves 20 House points.