

Bank of England Museum

Maths Trail for Ages 11 to 14



This is a maths trail for the Bank of England museum, when you work through the activities in this booklet you will:

- Follow the history of the Bank of England.
- See how government raises money in times of war.
- Understand the importance of the supply of money.
- Look at how numbers are used in different ways.
- Make sense of the price and value of gold.

There is a collection of different tasks. In each one you will collect some information.

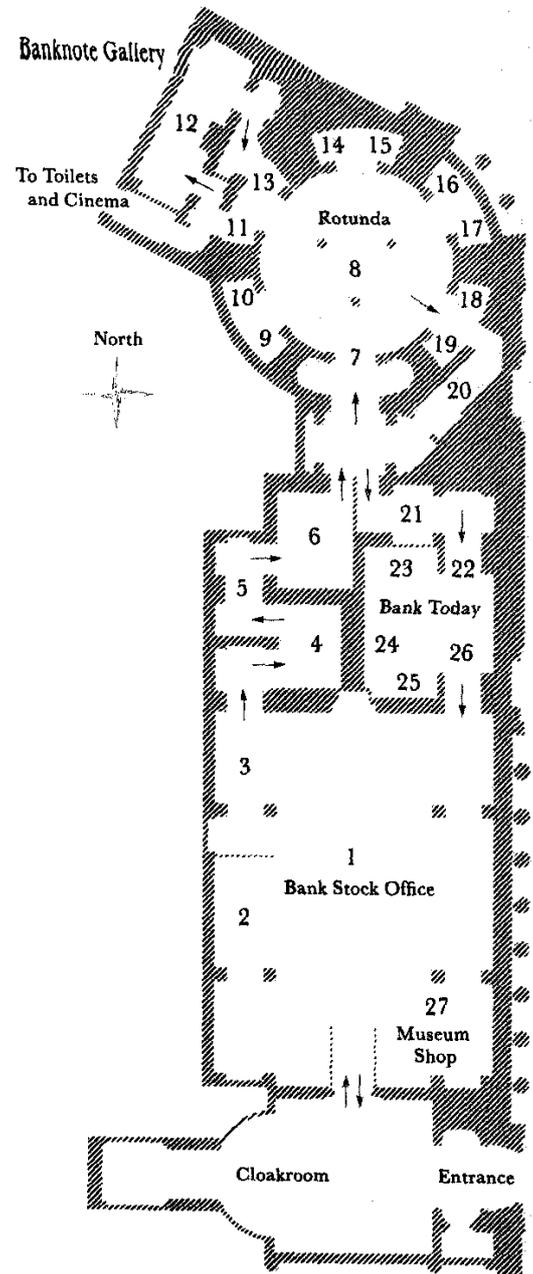
- The History of Banking and of the Bank of England
- The Government's Balance Sheet
- Money and War
- Different Numbers Different Uses
- Gold

At the top of the page it tells you which area the information can be found in. Check your map to see where they are.



At the end of the booklet there is a set of activities. These ask questions and give you things to do with the information you have collected.

You do not have to do this part during your visit.



The History of Banking and of the Bank of England

Look at display 3: Early Banking in England, display 4: the Bank of England founded, display 5: the Early Years, display 7: the Rotunda and display 17 the Interwar Years

There are many key dates in the history of the bank of England.

Read the displays carefully to find them.

Find as many interesting and important dates as you can.

Make sure you find these dates (two of them have been done for you).

Put your own interesting dates at the end.

Event	Year	Timeline box
When did the company of Goldsmiths start accepting deposits of gold and bullion coins ?		Goldsmith's accept deposits
When was the first central bank in Northern Europe started ?		First central bank
When did William III grant the Charter which established the Bank of England ?		Bank of England established
When did the bank of England leave the Grocer's Hall ?		Bank leaves Grocers hall
When did the 'restriction period' start ?		Restriction period starts
When did the bullion committee meet ?		Bullion Committee
When was the gold standard adopted ?		Start of gold standard
When did the 'restriction period' end ?		Restriction period ends
When did the first world war start ?	1914	Start of first world war
When did the first world war end ?	1918	End of first world war
When was the gold standard abolished ?		End of gold standard

What's it all about ?

- The first banks only issued notes in exchange for gold coins that were deposited.
- William III borrowed money to pay for a war. The *depositors* who lent the money became the founders of the bank of England.
- When French forces invaded Britain in 1793, investors were worried and rushed to get their gold coins back from the bank. The bank soon had to stop issuing gold.
- The link between gold and bank notes was broken. The value of the pound went down in Europe.
- The *gold standard* was introduced to make sure that bank notes could only be issued with the same value as the gold in the bank. This helped the British economy to remain stable and helped businesses to expand.

Money and War



Look at display 4: The bank of England Founded

The Bank of England was established when William III asked people to lend money to help pay for a war against the French.

How much money was raised ?

What percentage interest was paid to the *depositors* ?

Write down the name of some of the depositors and how much they lent

Name	Amount

Look at display 16: The First World War.

In January 1917 the government needed to raise money to help pay for the costs of the First World War.

How much money was raised ?

What percentage interest was paid to the depositors ?

Gold

Look at display 8: Gold Display

How much is 1 gold bar (a 1kg *kilobar*) worth today ?

How much does the *ten tola bar* weigh in ounces (oz) and grammes ?

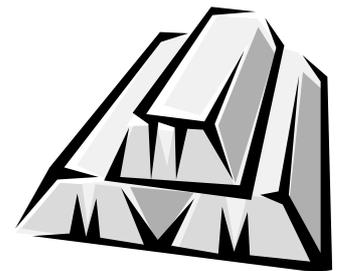
How much does the *London good delivery bar* weigh ?

How much of that is pure gold ?

What percentage of Roman gold bars of *first rate fine gold* are pure ?

There are two Roman gold bars. How much do they weigh ?

Look at the *coronation gold bar*. What does 9999 fine mean ?



Activities

The History of Banking and of the Bank of England

Put the events from your table onto the timeline on the next page.

Use the short 'timeline box' description.

The two examples have been done for you.

From your timeline work out:

- How long was the Bank based at the Butcher's hall ?
- How long after the first North European central bank was the bank of England established ?
- How long did the restriction period last ?
- How long was the gold standard in force ?

The Government's Balance Sheet

Make up a balance sheet of your own. Include all of the headings from the one you have copied. You must make sure that the value the bank notes exactly balances with the national debt, securities, gold and silver.

Money and War

Look at your list of depositors. Work out how much in interest each of them was paid.

What was the total amount paid in interest for the money raised in January 1917.

Different Numbers Different Uses

Design a bank note which contains examples of all three uses of numbers: (size, order and code). Explain the meaning and purpose of each of the numbers in your design.

Gold

- How much would 100g of gold have cost on the day of your visit ?
- With your answers for the *ten tola* bar, divide ounces (oz) by grammes (g) to find how grammes one ounce weighs in grammes.
- How much of the *London good delivery bar* is **not** pure gold ?
- What percentage of Roman *first rate fine* bars are **not** pure gold ?
- **How much** of each Roman bar is pure gold ?
- If a bar of gold is *9999 pure* what percentage of the bar is pure gold ?

Bank of England Timeline

