BLETCHLEY PARK **TEACHER NOTES** SELF GUIDED KEY STAGE 2

TOP SECRET



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PLAN FOR THE DAY

The entrance and exit to Bletchley Park is through Block C.

The Shop is in Block C, and is busiest after 1.30pm.

Toilets can be found in Block C, Hut 8 and in the Mansion. Drinking water is available from any of the cold taps onsite.

Food and drink is only allowed in designated eating areas or outside. Please don't eat in any of the exhibition spaces. There are two cafes onsite: Block C and Hut 4.

During your self-guided time, we suggest you divide into smaller groups to explore inside the buildings. Please stay with your student groups at all times for safeguarding and security.

CURRICULUM LINKS

- History
- Maths
- Computing

BLOCK C MUSEUM

Secrets Revealed

This exhibition explains the impact of the work at Bletchley Park, and is accessed through the red entrance sign.

'The geese that laid the golden eggs and never cackled'

is a quote that can be found on a large blackboard on an easel on the right hand side, visible as you enter the exhibition. Winston Churchill referred to the Codebreakers and their successes, which they managed to keep secret and did not receive recognition for at the time.

Moving through into the second part of the exhibition, you will see a dispatch rider's motorbike on your left. This was one of the ways that radio messages, intercepted from listening stations (Y-stations), arrived at Bletchley Park.

BLOCK B MUSEUM

Turn right out of Block C and walk up towards the next Block—B. The exhibition is down the stairs, and level access is via a ramp outside.

Enigma Machine

The machine pictured is an Enigma machine. The Germans were using Enigmas before and during WW2 to encrypt messages. It scrambles each individual letter of a message by a different setting. As you press down one of the keys on the keyboard, a rotor turns and a lamp on the lamp panel lights up. The Enigma machine did not send the message; the message was sent using Morse Code over radio and this was secretly listened to at Wireless Intercept Stations (Y stations).

• What are the differences between the Enigma machines on display?

• **Can you name these parts of the machine?** Use the information and diagram on the wall to help you. Keyboard, Lamp panel, and Rotor.

Encourage the children to use the Enigma interactive on the wall.

HUT 6

Please enter this Hut and find yourself in 28th February 1941.

• What happened on this day?

Hut 6 was focused on German Army and Airforce Enigma messages. On 28/2/41, a crucial enemy cipher was broken, from the light blue network—this was the German air force operational key in North Africa.

• What would it be like to work here?

Answers could include busy, stressful, frustrating, hot in summer, cold in winter, noisy, poorly lit conditions, smoky atmosphere.

• What was each room used for?

Registration Room: Intercepted messages are sorted.

Machine Room: ciphers settings are broken using pencil and paper.

Interception Control Room: staff communicate with Y-stations to ensure all radio stations are covered.

Netz and Crib Rooms: different methods are tried to help break the ciphers.

Decoding Room: once Enigma settings had been broken in the Machine Room the intercepted messages were typed into Typex machines (British cipher machines), adapted to work like Enigma machines. The decrypts were then pushed through a wooden chute with a broom into Hut 3.

HUT 3

The Watch: four watch keepers who were experts in German filled in the Gaps in the messages that had come through from Hut 6.

Duty Officers' Room: the messages were prioritised.

Advisers' Room: Hut 3 reports were checked for accuracy in military and technical details.

Intelligence Officers' Room: officers worked on cover stories to conceal the fact that Enigma was being broken.

Administration and Typing Room: reports were typed up and sent to MI6. They were often sent by a (fictitious) spy called Boniface.

Teleprinter Room: At the beginning of the War, Hut 3 sent their reports directly to MI6 and a small group of people who knew about the Bletchley Park secret. These messages were enciphered using a Typex machine and then sent by teleprinter.

HUT 8

Work as a team to find out what helped the codebreakers to break codes.

• What is cribbing?

One of the interactives allows students to try this. A 'crib' is a guess at some of the message content. Sometimes the Germans used predictable words and phrases, particularly to start and end their messages. This was extremely useful to the codebreakers as it helped them to work out some of the daily settings.

Try out the interactives to find out about each method.

• Circle the different methods used for Enigma codebreaking

Pinches, Banburismus, Cribbing, Eins Catalogue (each covered by one of the rooms in Hut 8).

Pupils can watch the following film in Hut 8 about the Petard Pinch: goo.gl/qkFHyW

• Why do you think Alan Turing chained his mug to the radiator?

Alan Turing was the head of Hut 8 until 1942, working on breaking Naval Enigma. His office can be found near the end of the Hut on the right hand side. He was rather eccentric and liked to ensure his mug was only used by him.

HUT 11A

On entering, head to the right hand side of the Hut and make your way to the model Bombe machine near the back.

• What does a Bombe machine do?

It checks the possible settings of Enigma messages for that day.

It does not break the cipher; it finds some of the possible settings after humans have done some of the initial work, such as finding a crib. They could then use this information to design a menu for the Bombe, allowing it to check possible Enigma settings for that day.

The Bombe machine was designed by Alan Turing and Gordon Welchman to assist with and speed up the codebreaking process. A set of three vertical drums on the Bombe machine represents three rotors in one Enigma machine.

Over 200 Bombe machines were built but most were destroyed after the war. The Bombe is not a computer: it carries out systematic searches rather numerical calculations.

MANSION

• Write 3 words to describe the Mansion.

Enter and turn left. Ahead is the Veterans' Stories exhibition. Students can read about or listen to veterans sharing their experiences of wartime work.

Turn left to enter the library.

How did people work differently during World War Two? Can you see any computers or mobile phones?

Pupils can stamp their cards using the embossing stamper on the desk to show they have completed their mission.

Turn left out of the library and you will see the bust of Churchill ahead. Winston Churchill was Prime Minister from May 1940. He visited Bletchley Park and was very proud of the work that was done by the Codebreakers.