

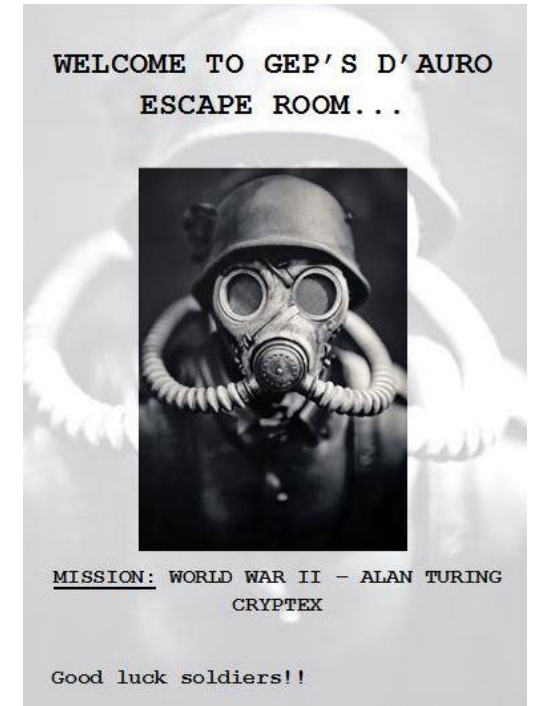
DECODING WWII



WWII BATTLE



CRYPTEX



ESCAPE ROOM



ALAN TURING

INS D'AURO

ANNA DE HARO (aharo4@xtec.cat)
OLGA PANO (opano@xtec.cat)
ANNA VENTURA (aventu3@xtec.cat)

Generació Plurilingüe (GEP)

Year 2

2018-2019

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PROJECT PLANNING TEMPLATE for CLIL and Content-Rich Environments

Identification of the GEP project:

Title	Decoding World War II
Authorship	Anna de Haro, Olga Pano, Anna Ventura
School	INS d'AURO
Students' CEFR Level (A1, A2...)	B1
Grade	4th ESO, 1st Baccaalaureate
Content area(s)	History, Maths and Technology
Number of sessions (4, 6 or 9)	9 + 1 extra session (Escape Room)
Teacher(s) involved	Anna de Haro, Olga Pano, Anna Ventura
Key words	History, Technology, Maths, WWII, Alan Turing, Cryptex, Cryptography

1. OUR PROJECT

Introduction:

The project that we want to present involves subjects like Maths, Technology and History. We have focused this project on WWII and Alan's Turing contribution to decode the Enigma machine and the End of the war.

All the activities are related to the Escape Room that is the final product.

Driving question:

How important was Enigma in the WWII?

Imagine that you are involved in the WWII and you have an important message which can change the history. How can you hide this message in front of the enemies?

Final product:

Cryptex . Making the decoding object inspired by Alan Turing's ideas.

Escape Room: Alan Turing and his Enigma machine are in danger

2. GOALS	2. HOW DO YOU KNOW STUDENTS ARE MAKING PROGRESS? (assessment criteria)
1. Understand the precedents of the WWII	1.1. They can explain the main points of the WWII. 1.2. They can draw a visual timeline with the main causes and consequences. 1.3. They can label the main causes and effects using the appropriate sequence connectors. 1.4. Relate the connection between characters, historical facts and their contribution.
2. Describe the main causes and consequences of the WWII	2.1: They can explain to other classes what the WWII is and its effects and consequences, using the material that they have previously created.
3. Explain causes and effects of the WWII	3.1: They can create a mind map to explain causes and effects of WWII and then, share it with an audience.
4. Create a relation between Enigma, Alan Turing and the end of the war	4.1: They are going to link Enigma, Alan Turing and cryptography in the WWII doing different activities: watching the movie, posters
5. How cryptex works and different types of cryptography	5.1: They make the cryptex and they show it to the other classes and those have to decode the message. 5.2. They will learn different methods to cipher/encipher messages

3. CURRICULUM CONNECTIONS SPECIFIC COMPETENCES AND KEY CONTENTS

Subject-matter curriculum		Foreign language curriculum	
Specific Competences	Key Contents	Specific Competences	Key Contents

<p>HISTÒRIA</p> <p>Dimensió històrica:</p> <ul style="list-style-type: none"> • Competència 1. Analitzar els canvis i les continuïtats dels fets o fenòmens històrics per comprendre'n la causalitat històrica • Competència 2. Aplicar els procediments de la recerca històrica a partir de la formulació de preguntes i l'anàlisi de fonts, per interpretar el passat <p>Dimensió geogràfica:</p> <ul style="list-style-type: none"> • Competència 7. Analitzar diferents models d'organització política, econòmica i territorial, i les desigualtats que generen, per valorar com afecten la vida de les persones i fer propostes d'actuació <p>TECNOLOGIA</p> <p>Dimensió objectes i sistemes tecnològics de la vida quotidiana</p> <ul style="list-style-type: none"> • Competència 9. Dissenyar i construir objectes tecnològics senzills que resolguin un problema i avaluar-ne la idoneïtat del resultat <p>MATEMÀTIQUES</p>	<p>HISTÒRIA</p> <ul style="list-style-type: none"> • CC3. Cronologia i temps històric • CC7. La memòria històrica • CC1. Textos de les ciències socials: descripció, explicació, justificació, interpretació i argumentació, i vocabulari propi. • CC17. Cerca, anàlisi i contrast d'informacions diverses <p>TECNOLOGIA</p> <ul style="list-style-type: none"> • Mecanismes tecnològics de transmissió i transformació del moviment • Objectes tecnològics de base mecànica, elèctrica, electrònica i pneumàtica • Disseny i construcció d'objectes tecnològics • Aparells i sistemes d'informació i comunicació. <p>MATEMÀTIQUES</p> <ul style="list-style-type: none"> • Sentit del nombre i de les operacions. • Patrons, relacions i funcions. • Llenguatge i càlcul algebraic. 	<p>Dimensió comunicació oral</p> <ul style="list-style-type: none"> • Competència 3. Interactuar oralment d'acord amb la situació comunicativa, utilitzant estratègies conversacionals. • Competència 2. Produir textos orals de tipologia diversa adequats a la situació comunicativa <p>Comprensió lectora</p> <ul style="list-style-type: none"> • Seleccionar i utilitzar eines de consulta per accedir a la comprensió de textos i per adquirir coneixement) 	<ul style="list-style-type: none"> • Comprensió oral: global, literal i interpretativa. • Estratègies de comprensió oral. • Estratègies de producció oral. • Estratègies d'interacció oral
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<p>Dimensió raonament i prova</p> <ul style="list-style-type: none"> • Competència 6. Emprar el raonament matemàtic en entorns no matemàtics. <p>Dimensió connexions</p> <ul style="list-style-type: none"> • Competència 8. Identificar les matemàtiques implicades en situacions properes i acadèmiques i cercar situacions que es puguin relacionar amb les matemàtiques concretes. 			
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4. 21st CENTURY COMPETENCES

Collaboration	X	Information, media and technology	X
Communication	X	Leadership & Responsibility	X
Critical Thinking and Problem Solving	X	Initiative & Self-direction	
Creativity & Innovation		Social & Cross-cultural	
Others:			

5. KEY COMPETENCES

Communicative, linguistic and audiovisual competence	X	Digital competence	X
Mathematical competence	X	Social and civic competence	X
Interaction with the physical world competence	X	Learning to learn competence	
Cultural & artistic competence	X	Personal initiative and entrepreneurship competence	

6. CONTENT (Knowledge and Skills)

CONTENT-RELATED KNOWLEDGE	CONTENT-RELATED SKILLS
<ul style="list-style-type: none">- WWII context (causes, consequences, the end, main and important personalities)- Alan Turing contribution in the WWII.<ul style="list-style-type: none">- Cryptography- How to create a cryptex.	<ul style="list-style-type: none">- Analyzing and explaining causes and effects of WWII- Describe situations in each period- Relate personalities and facts- Write and explain a biography

7. REFERENCES

Technology:

<https://learncryptography.com/encryption>

<https://en.wikipedia.org/wiki/Atbash>

https://en.wikipedia.org/wiki/Pigpen_cipher

https://en.wikipedia.org/wiki/Caesar_cipher

https://en.wikipedia.org/wiki/Polybius_square

Maths:

<http://famous-mathematicians.org/alan-turing/>

History:

https://www.history.com/topics/world-war-ii/world-war-ii-history#section_2

<http://time.com/3638649/world-war-ii-photos-we-remember/>

https://en.wikipedia.org/wiki/World_War_II

<https://www.britannica.com/event/World-War-II>

<http://www.bbc.co.uk/history/worldwars/wwtwo/>

http://www.bbc.co.uk/history/worldwars/wwtwo/ww2_summary_01.shtml

8. COMMENTS (optional)





9. ACKNOWLEDGEMENTS (optional)

Skills: R: reading , S:speaking, L: listening, W: writing, I: Interaction

Interaction: T-S: teacher-student, S-S: student-student, SG: small groups, WG: whole group, S-Expert, S-World

Assessment: PA: Peer assessment, SA: Self-assessment, TA: Teacher assessment, AT: Assessment tools

10. UNIT OVERVIEW

Session	Activities	Timing	Skills 	Interaction 	ICT 	Assessment 
1	Introduction and warm up	15 min	S, I	T-S WG	X	Teacher assessment
	Vocabulary game	20 min	S, I	T-S S-S SG		Peer assessment Teacher assessment
	Watch, think and answer: Video-RAP and Overview WWII and Plickers game	12 min 13 min	L, I	S-S	X	Assessment Tools
2	Dictogloss	30 min	R,S, L, W, I	T-S S-S SG	X	Teacher assessment Peer assessment

	Think, pair and share	25 min	S, I	T-S S-S SG		Peer assessment Teacher assessment
	Mind map (part 1, introduction)	5 min	R,W,S,I	S-S S-G	X	Teacher assessment Peer assessment
3	Mind map (part 2, development)	20 min	R,W, S, I	S-S SG	X	Teacher assessment Peer assessment
	Missing information	20 min	R,S,W,I	S-S		Teacher assessment Peer assessment
	Write a newspaper report	20 min	R, W, I	T-S S-S	X	Peer assessment Teacher assessment
4	Introduction and warm up	15 min	L, R	T-S	X	Teacher assessment
	Making a Poster	30 min	R, S,W	T-S S-S S-G	X	Teacher assessment Peer assessment
	Word art	15 min	W	T-S	X	Teacher assessment
5	Introduction and warm up	15 min	L	T-S		Teacher assessment

	Polynomials and how to divide secrets	30 min	L-W	T-S		Teacher assessment
	Mind map	15 min	L,W,S I	S-S S-G	X	Teacher assessment Peer assessment
6	Introduction and warm up	15 min	L, S	T-S	X	Teacher assessment
	Decoding the secret number using polynomials	30 min	S, W, I	T-S S-S S-G	X	Teacher assessment Peer assessment
	Plickers game	15 min	I	W-G	X	Assessment tools
7	Introduction and warm up	15 min	S, W, I	T-S		Teacher assessment
	Thinking and talking about coding	20 min	S, W, I	T-S S-S	X	Peer and teacher assessment
	Answer Garden	10min	W, I	T-S	X	Teacher assessment
	The Atbash cipher	15 min	W, S, I	T-S S-S		Peer and teacher assessment

8	The Pigpen cipher	20 min	W, S, I	T-S S-S		Peer and teacher assessment
	Caesar Shift	25 min	W, S, I	T-S S-S		Peer and teacher assessment
	Polybius Square	15 min	W, S, I	T-S		Teacher assessment
9	Cluedo	25 min	W, S, I	T-S S-S		Peer and teacher assessment
	Answer Garden	10 min	W,I	T-S	X	Teacher assessment
	The fish bowl	25 min	L, S, I	T-S		Teacher assessment
10	Building a cryptex	3 sessions	S, I	T-S S-S	X	Teacher assessment

11. SESSION PLANNING

SESSION 1: DISCOVERING WWII

Objectives of the session: Introduce the topic and discover different vocabulary, facts, battles and important people related to WWII

Content-obligatory language for the session: Important vocabulary related to WWII and the main facts, battles, for example: Axis Power, Allies, Appeasement, Holocaust, etc; also practise past simple and continuous, past perfect.

Activities



1.1	<p>Introduction and warm up</p> <p>This previous activity is important to approach and involve our students in the topic: World War II</p> <p>This introductory activity is divided in two parts:</p> <p>1. Image analysis. Through different images of WWII students, individually, need to remind some vocabulary related to the topic</p> <p>2. Word Art. Create a map with all the words that the students know and remember about WWII. Students are going to share they words with the whole class through <i>WordArt</i> app.</p> <p>Resource: https://wordart.com/241kr9zd7a5b/wwii_class1</p>	15'	S,I	T-S WG	X	TA
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1.2	<p>Vocabulary game</p> <p>This is a small group activity (3 students in each group). The teacher is going to spread in each group different cards with vocabulary. The aim of the students is match each vocabulary words with their explanations.</p> <p>At the first time, this activity could be a little bit difficult, the teacher will help the students with different clues.</p> <p>At the end of the activity and to assess the new knowledge, all the class is going to create an <i>Answer Garden</i> with all new words that they will learn.</p> <p>Resources: Worksheet 1 Answer https://answer garden.ch/901153</p>	20'	S,I	T-S S-S SG		PA TA
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1.3	<p>Watch, think and answer</p> <p>When the students know the specific vocabulary related to WWII it is important to introduce the topic through a general overview of different facts, important people, battles, significant dates, countries involved, the war... The best way to work in this way is watching two videos, the first one is a RAP (a type of music that is familiar for all of our students) and the second one is a review.</p> <p>After that, it's time to assess what they are capable to understand around WWII. Plickers app is a good resource and the students enjoy it a lot.</p> <p>Resources:</p> <p>Plickers: https://www.plickers.com/set/5c931f6c8781ac00042046fa</p> <p>Worksheet 2: Plickers images</p> <p>Video 1 (RAP): https://youtu.be/Fw6e9YBJUDc</p> <p>Video 2 (Review): https://youtu.be/HUqy-OQvVtI</p>	12'	L, I	S-S	X	AT
		13'				

SESSION 2: LEADING UP TO WWII

Objectives of the session: The aim of this session is understand the background of the war that started in 1939 and the causes and consequences, which countries were involved and the main leaders.

Content-obligatory language for the session: Discover the main causes of WWII using the [vocabulary](#) learnt in the previous session, [vocabulary](#) related to different events (for example: Treaty of Versailles), battles (example: Normandy) and leaders (example: Hitler, Mussolini. Use to describe all of them past simple and continuous and past perfect.

Activities



2.1	<p>Dictogloss</p> <p>This is a good cooperative and collaborative activity. The students need to work in groups of three members. This activity will stimulate their listening skills too.</p> <p>The teacher is going to give to each group two different sets of pairs of cards, with the first one, the students need to match the names with the descriptions (worksheet 4) and the second one, the students need to find the order of the information that the listening will give them (worksheet 3).</p> <p>They are going to listen to the information three times, enough to do all the activities.</p> <p>After this first part of the activity, the teacher with the students are going to discuss and agree with all the pairs matches. The teacher doesn't need to give them the answers, it is necessary to discuss with all group which are the best options and why.</p> <p>Resources: Worksheet 3 and 4</p> <p>BBC: http://downloads.bbc.co.uk/schools/gcsebitesize/audio/history/i4_the_causes_of_the_second_world_war.mp3</p>	30'	R,S, L,W, I	T-S S-S SG	X	TA PA
2.2	<p>Think, pair and share</p> <p>To assess the previous activity and check that the students understand all the information, in groups of 3, they are going to think about the questions that the teacher will give them in a worksheet. Their aim is discuss which is the best answer, related to the previous information, and justify them.</p> <p>After this first step, on the blackboard the teacher will write the group's name and they are going to share the answers like a TV programm.</p> <p>Resources: Worksheet 5</p>	25'	S,I	T-S S-S SG		TA PA

2.3	<p>Mind map (part 1, introduction)</p> <p>It is necessary to create a mind map to organise all new information that the students will discover through the different activities. The teacher is going to present what is a mind map and which essential information the students will include. Then, the teacher will give the students different online resources where they will find key information to develop their mind map.</p> <p>Resources: Worksheet 6</p> <p>Websites</p> <p>General information: https://www.britannica.com/event/World-War-II http://www.bbc.co.uk/history/worldwars/wwtwo/ https://www.history.com/topics/world-war-ii/world-war-ii-history#section_2</p> <p>Timeline: http://www.bbc.co.uk/history/worldwars/wwtwo/ww2_summary_01.shtml</p>	5'	R,W S,I	S-S SG	X	TA PA
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SESSION 3: SECOND WORLD WAR 1935-1945

Objectives of the session: In this session the students will organise all the information that they recap from the previous activities and related to the topic and they will discover more essential information about WWII.





Content-obligatory language for the session: WWII in an international context, causes, consequences, general facts and vocabulary related to all of them (previously they learnt), past simple and continuous, the passive, connectors of purpose, linking words.

Activities



3.1	<p>Mind map (part 2, development)</p> <p>It is necessary to create a mind map to organise all new information that the students will discover through the different activities. The teacher is going to present what is a mind map and which essential information the students will include. Then, the teacher will give the students different online resource where they will find different key information to develop their mind map. At the end of the activity, all the students are going to change their mapes and try to correct or add more information to their classmates' mind maps.</p> <p>Resources: Worksheet 6</p> <p>Websites</p> <p>General information: https://www.britannica.com/event/World-War-II http://www.bbc.co.uk/history/worldwars/wwtwo/ https://www.history.com/topics/world-war-ii/world-war-ii-history#section_2</p> <p>Timeline: http://www.bbc.co.uk/history/worldwars/wwtwo/ww2_summary_01.shtml</p>	20'	R,W S,I	S-S SG	X	TA PA
3.2	<p>Missing information</p> <p>The students need to work in pairs. One member is going to work with worksheet 7 and the other one with worksheet 8. Both of them are different, in the first one there is a text related to the causes of WWII and in the second one there are different sentences that it is necessary to complete with the information from worksheet 7.</p> <p>This activity requires concentration and ability with the vocabulary and the speaking. The first student have to describe the information to the other student that need to fill all the gaps on their worksheet. The aim is to work like a teamwork and fill all the information with their cooperative and collaborative work.</p> <p>After the pair activity, the teacher and the students are going to check and discuss about the missing information.</p> <p>Resources: Worksheet 7 and 8</p>	20'	R,S W,I	S-S		TA PA

3.3	<p>Write a newspaper report</p> <p>It is known that the press had an important role during the WWII. Now, it is the moment that our students will start to use this media tool.</p> <p>The teacher will provide them an example and a Newspaper Template and the students are going to create news related to WWII: the End of the War, Outbreak of WWII, WWII leaders... To write a good report, the students need to use linking words (they will find some examples in worksheet 10) and they need to follow different steps to write a good report (worksheet 11).</p> <p>Resources: Worksheet 9 (Newspaper example) Newspaper Template Worksheet 10 Worksheet 11</p>	20'	R,W I	T-S S-S	X	PA TA
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<h2>SESSION 4: WHO IS ALAN TURING ?</h2> <p>Objectives of the session: Introduce the topic and discover some vocabulary.</p>						
<p>Content-obligatory language for the session: Specific vocabulary: common factor, factoring, degree of a polynomial, numerical value, system of equations, encryption, decoding; use of past simple.</p>						
<p>Activities:</p>						
						
4.1	<p>Introduction and warm up</p> <p>We present Alan Turing by watching the trailer of the film "The imitation game"</p>	15'	L, R	T-S	X	TA

4.2	<p>Making a poster</p> <p>Students work in small groups. They need to visit the website http://famous-mathematicians.org/alan-turing/, and get the information to make the poster: Birthday, death, nationality, famous for, awards... To make the poster they'll have to use the computer Outline of biographical sketch: https://drive.google.com/open?id=1LLU_xvN1OjJGhwUE918QRcmDR3Ow1fV1</p> <p>Rubric</p>	30'	S,W	T-S S-S S-G	X	TA
4.3	<p>Word art</p> <p>Create a map with all the words that the students have learnt.</p> <p>Alan Turing</p>	15'	S-W	T-S S-S	X	TA

SESSION 5: Decoding secrets using polynomials

Objectives of the session: Decode a secret number using polynomials. Students will need to know how to do it for the escape room.





Content-obligatory language for the session: numerical value, system of equations, polynomial, encryption, decoding. Explain a process, linkers: first of all, after that...

	Activities					
5.1	<p>Decoding a secret number using polynomials</p> <p>One of the properties of polynomials is that we can divide secrets using them. The teacher explain step by step how to do it.</p> <p>Resources: Worksheet 1</p>	30'	L-W	T-S		TA
5.2	<p>Mind map</p> <p>It is necessary to create a mindmap to organise all new information. We'll use "padlet".</p> <p>Padlet</p>					

SESSION 6: Decoding the secret number using polynomials

Objectives of the session: Students will have to decode a secret number using polynomials.

Content-obligatory language for the session: numerical value, system of equations, polynomial, encryption, decoding. Explain a process, linkers: first of all, after that...

	Activities					
6.1	<p>Introduction and warm up</p> <p>Remembering vocabulary using flashcards</p> <p>https://www.gocongr.com/es/p/17400811-Sin-t-tulo-flash_card_decks</p>	15'	L,S	T-S		T-S
6.2	<p>Decoding the secret number</p> <p>Students work in small groups. Teacher gives three cards to each group, corresponding to different numerical values of the polynomial. They have to solve the equations system.</p> <p>https://drive.google.com/open?id=1zOkX2HqL9aiVWve4NovmS4Vul3rMOpGr</p>	30'	S,W, I	T-S S-S S-G	X	T-A P-A
6.3	<p>Plickers game</p> <p>We'll use this game to know who got the right number.</p> <p>https://drive.google.com/open?id=1EGZ8mQiblAMrjzBovqhE7S5rB2xDYIVa</p>	15'	W,S	T-S S-S S-G	X	A-T

SESSION 7: INTRODUCTION TO CRYPTOGRAPHY





Objectives of the session: Introduce cryptology and different ways to decode a message

Content-obligatory language for the session: Coding, Cipher, Encipher, Decoding, Passive sentences and prep. (each letter **is replaced by**), substitution method, message, to be+ participle (it **is hidden** ...)

Activities



7.1	Introduction and warm up. Activity 0: The teacher gives the activity sheet and learners have to write down basic words to express what all of them have in common	15'	S, W, I	T-S		TA
7.2	Thinking and talking about coding: they need the computer Activity 1 Vocabulary: https://www.goconqr.com/es/p/17212526-criptografia-flash_card_decks	20'	S, W, I	T-S S-S	X	PA TA
7.3	Answer Garden: they need the computer. https://answergarden.ch/892444	10'	W, I	T-S	X	TA
7.4	The Atbash cipher. Activity 3 It is considered one of the easiest ciphers to use. The first letter of alphabet is replaced by the last letter, the second letter is replaced by the second from last, and so on.	15'	W, S, I	T-S S-S		PA TA

SESSION 8: SUBSTITUTION CIPHERS						
Objectives of the session: Understand different ways to decipher or cipher a message						
Content-obligatory language for the session: Coding, Cipher, Encipher, Decoding, verb+prep, grid, coordinates, Passive sentences and prep						
Activities						
8.1	The Pigpen cipher Activity 4 It is a simple Substitution Cipher that works by replacing each letter of the message with a symbol.	20 '	W, S, I	T-S S-S	PA TA	
8.2	Caesar Shift. Activity 5. Julius Caesar used a simple Substitution Cipher to send messages to his troops. He replaced each letter by another letter.	25'	W, S, I	T-S S-S	PA TA	
8.3	Polybius Square. Activity 6 You need a grid in order to cipher the message. Each letter is represented by its coordinates in the grid	15'	W, S, I	T-S	TA	

SESSION 9: CIPHER METHODS RECAP and INTRODUCTION TO CRYPTEX

Objectives of the session: Summarizing the different cipher methods and introducing one of the most important devices to hide a message such as Cryptex

Content-obligatory language for the session: Coding, Cipher, Encipher, Decoding, verb+prep, Passive sentences and prep.

Activities



9.1

Cluedo. [Activity 7](#)

Summarizing all the ciphers methods, here it is the typical cluedo game.

25'

W,
S, I

T-S
S-S

PA
TA

9.2

Answer Garden

<https://answergarden.ch/892446>

10'

W, I

T-S

X

TA

9.3

The fish bowl [Activity 9](#)

25'

L, S,
I

T-S

TA

<h2>SESSION 10: BUILDING A CRYPTEX</h2> <p>Objectives of the session: Create a Cryptex, see how it works and design one to print it with the 3D printer.</p>					
Content-obligatory language for the session: -					
Activities					
10.1	<p>Cryptex</p> <p>Building a cryptex</p> <p>Designing and building a cryptex. Firstly with cardboard and then, if they have time and work on it at home, with the 3D printer.</p>	3 h	S, I	T-S S-S	X TA

SESSION 11: ESCAPE ROOM_OPERATION TURING

Objectives of the session: Students need to link all the information that they have learned in History, Maths and Technology class about WWII, Codification, Cryptex and Alan Turing to lead the OPERATION TURING and help him to save his life and his important machine, Enigma.

Content-obligatory language for the session: All vocabulary and language learnt through different activities.

Activities



11.1	<p>ESCAPE ROOM</p> <p>Introduction:</p> <p>Alan Turing and his Enigma machine are in danger.</p> <p>It is 1945. Nazi Germany is on the verge of defeat after being invaded by Russian forces from the East and Allied forces from the West. You are a group of top-secret codebreakers at Bletchley Park, England. Thanks to Alan Turing and you the Enigma codes of the Nazi high command were broken. However, our celebrations have been cut short because we have received an anonymous phone call that Alan Turing has been kidnapped and has a nuclear bomb planted in his body by an enemy spy.</p> <p>The caller is a double agent who was pretending to help this spy with their evil work. He is keen to help you disconnect the bomb and find Alan Turing's position but had to hide clues in the room so as not to blow his own cover.</p> <p>The bomb is locked in a suitcase in the room.</p> <p>Your job is to crack the code of the lock so you can open the case, defuse the bomb and find Alan Turing's position. You have only 60 minutes. Alan Turing's life, the human being and all the planet need your help.</p> <p>GOOD LUCK!</p>	1h	R,S, L,W, I	S-S	X	TA
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	<p>We are going to create and Escape Room where we are going to involve our three subjects: History, Maths and Technology.</p> <p>As we can read in the previous introduction, our students have a mission: OPERATION TURING. Their aim is save Alan's Turing life and his important machine Enigma but, first of all, they need to solve different problems/tests related to WWII (all of them were previously work in class). The mission will be a success if they release Alan Turing and Enigma machine.</p>					
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ESCAPE ROOM GUIDE

ROOM 303	ROOM 304
<p>1. Before to go in the room two servicemen are going to present the Escape Room and the participants are going to read the mission and the rules.</p>	<p>In this room the soldiers need to do different games to find the Cryptex and to save Alan's Turing life.</p>

<p>2. The servicemen are going to tie all the group members with a chain and a lock.</p>	<p>1. They need to find a board with different colour stickers. To find a name of one of the most important cities in WWII they need to use this board and different wood sticks with colours that they will find in different boxes. They need to find KIEV.</p>
<p>3. They need to find a telescopic pole with a magnet to take the key and open the lock.</p>	<p>2. With the map with a whole and the newspaper, they need to find another important city, CHERBOURG.</p>
<p>4. Before to go out the room and open the door, they need to find a map with a whole, a name is missing, and a newspaper information with name that matches with the map. They need to take it with them.</p> <p>In the same map, they are going to find a year (1944) that is the key to open a small box with different objects.</p>	<p>3. They will find a box, that it is close, with a key inside. They need to remove the key with a paper and open another box.</p>
<p>5. When they will open the box, they will find inside a small part of a syringe, a piece of an image and a rubber band.</p>	<p>4. Inside the box that they will open, they will find a UV lantern. They need to find BELGRAD with this lantern in the window. It will be write with a UV marker</p>

<p>6. They need to find another box with the key to open the class. If they want to open it they need to work with the two glasses with water and they need to do a subtraction with the numbers inside. They will get a number to open the box and get the key to go out the room.</p>	<p>5. In the chessboard they will find different chess pieces and they need to discover a code to open a small box. Inside this box, they will find a clue and a part of image. The clue is related to a big map inside the class. They need to find a latitude and longitude of ROME.</p>
<p>7. When they will go out, the serviceman will direct them to the other room</p>	<p>6. They need to solve a riddle to find BERLIN.</p>
	<p>7. They need to count each letter of the cities and order them in alphabetical order to find the Cryptex code and save Alan's Turing life and Enigma machine. They need to shout "ENIGMA" and the game will end.</p>

RUBRIC	3	2	1
<p>ENGAGEMENT</p> <p>33.3%</p>	<p>Student was fully engaged in the escape room challenges by offering ideas and solutions. Student was consistently on task throughout the entire process.</p>	<p>Student was fully engaged in the escape room challenges by offering ideas and solutions. Student was on task for most of the time.</p>	<p>Student was not engaged in the escape room challenges and rarely offered ideas and/or solutions. Student had trouble staying on task for most of the time.</p>
<p>BEHAVIOR</p> <p>33.3%</p>	<p>Student never displayed any disruptive behavior during any of the escape room challenges.</p>	<p>Student rarely displayed disruptive behavior during the escape room challenges.</p>	<p>Student almost always displayed disruptive behavior during the escape room challenges.</p>
<p>LISTENING</p>	<p>Student listened when other group members shared their thoughts or ideas. Student incorporated the ideas of others into the challenges.</p>	<p>Student listened when other group members shared their thoughts or ideas.</p>	<p>Student was not listening when other group members shared their thoughts or ideas. Student often interrupted others.</p>

HISTORY WORKSHEETS

PRESENTATION

LESSON PLAN: WORLD WAR II



LESSON PLAN – SESSION 1

- 1) BRAINSTORMING
- 2) VOCABULARY GAME
- 3) WATCH, THINK AND ANSWER

1. BRAINSTORMING

- WWII IMAGES...





2. VOCABULARY GAME

WHICH VOCABULARY , RELATED TO THE
WWII, WE KNOW?

ANSWER GARDEN:

<https://answergarden.com/901183>

3. WATCH, THINK AND ANSWER

Whatch a video and answer the questions

-RAP: <https://www.be/ExdeSYBUDe>

-OVERVIEW: <https://www.be/Hilgw-0DyWl>

-PLICKERS game

<https://www.plickers.com/en/5-9510-9781a-2018-2019>

LESSON PLAN – SESSION 2

1) DICTOGLOSS

2) THINK, PAIR, SHARE

3) MINDMAP

1)DICTOGLOSS

http://downloads.dlc.ac.uk/schools/gran-biblioteca/audio/history/4_the_causes_of_1/1a_around_world_war_1.m4a

LESSON PLAN – SESSION 3

- 1) MINDMAP
- 2) MISSING INFORMATION
- 3) WRITE A NEWSPAPER

WORKSHEET 1: VOCABULARY

ADOLF HITLER	The German Nazi dictator during World War 2 (1889-1945)
ALLIES	The countries that fought against the Axis. The main Allied powers were Britain and the Commonwealth countries, the US, the Soviet Union, France, China, and Poland
ATOMIC BOMB	An atomic bomb is an extremely destructive type of bomb which produces a gigantic cloud shaped like a mushroom. An atomic bomb can destroy a city.
AXIS POWERS	The three major Axis powers—Germany, Japan, and Italy— were part of a military alliance on the signing of the Tripartite Pact in September 1940, which officially founded the Axis powers. At their height of power, the Axis powers ruled empires that dominated large parts of Europe, Africa, East and Southeast Asia and the Pacific Ocean. In World War II they were defeated which brought an end to the Axis Powers.
BENITO MUSSOLINI	Was the leader of Italy from 1922 to 1943. He allied Italy with Nazi Germany and Japan in the Second World War.
DINGHY	A type of small boat, often carried or towed by a larger vessel
HATCHES	The covering of an opening on the deck of a ship. People would open these to get to the lower decks

HOLOCAUST	The genocide of European Jews and others by the Nazis during World War 2
NAZI	A German member of Adolf Hitler's political party
NEUTRAL COUNTRIES	Countries who were not involved in the war
NEVILLE CHAMBERLAIN	The British Prime Minister of the United Kingdom from May 1937 to May 1940. Chamberlain signed of the Munich Agreement in 1938, giving part of Czechoslovakia to Nazi Germany. When Adolf Hitler continued his aggression, Britain declared war on Germany on 3 September 1939, and Chamberlain led Britain through the first eight months of the Second World War
SERVICEMAN	A member of the armed forces
SWASTIKA	A symbol of a cross with its arms bent in right directions. This symbol was used on the Nazi flag
VE-DAY	'Victory in Europe' or VE-Day was May 7 and May 8, 1945, the

	<p>dates when the World War II Allies formally accepted the unconditional surrender of the armed forces of Nazi Germany and the end of Adolf Hitler's Third Reich.</p>
VJ-DAY	<p>'Victory over Japan' Day is a name chosen for the day on which Japan surrendered, effectively ending World War 2.</p>
WINSTON CHURCHILL	<p>A British politician known chiefly for his leadership of the United Kingdom during World War II. He served as Prime Minister of the United Kingdom from 1940 to 1945 and again from 1951 to 1955.</p>
APPEASEMENT	<p>This was the policy of many countries when Hitler first started to take over Austria and parts of Czechoslovakia. They gave in to Hitler's demands in order to avoid going to war. When Hitler invaded Poland, they realized that appeasement would not work and France and Great Britain declared war on Germany.</p>
AXIS POWERS	<p>An alliance formed by Germany, Italy, and Japan. These countries wanted to expand and conquer other countries. They were opposed by the Allied Powers.</p>
BLITZKRIEG	<p>This means "lightning war" in German. Hitler would attack quickly and try to take over a country before it had time to fight back.</p>
CONCENTRATION CAMP	<p>A place where the Germans put people they did not like such as Jewish people.</p>

D-DAY	The day that United States and British forces attacked the German forces on the shores of Normandy, France. A turning point in the war as the Allies defeated the Germans.
EASTERN FRONT	The Germans called the war with the Soviet Union the Eastern Front.
FASCISM	A type of government ruled by a dictator. Germany with Hitler and Italy with Mussolini were fascist governments.
FUHRER	The title Adolf Hitler gave himself. It means "leader" in German.
FINAL SOLUTION	A term used by the Nazis which meant the extermination of the Jews.
GESTAPO	The Nazi police force. They were mean and very powerful in Germany during WWII. They hunted down enemies of the Nazi party as well as Jewish people.
HOLOCAUST	A term used to describe the murder of 6 million Jewish people by the German Nazi Party.

KAMIKAZE	A term used to describe how Japanese pilots would intentionally crash their planes into US battleships. The planes were sometimes full of explosives and the pilots knew they were going to die.
LUFTWAFFE	The name for the German air force.
MANHATTAN PROJECT	The code name for the research and development program where scientists invented the atomic bomb.
PACT OF STEEL	A treaty signed by Germany and Italy. It was later signed by Japan and called the Tripartite Pact. This pact created the Axis Powers alliance.
RAF	The air force of Great Britain. It stands for the Royal Air Force.
WEHRMACHT	The name for the German army.
ARMISTICE	A state of peace agreed to between opponents
NATIONALIST	One who loves and defends his or her country
REARMAMENT	The act of arming again

WORKSHEET 2: PLICKERS GAME

What was the treaty that ended WWI that laid some of the unrest that would later explode into WWII?

- A Paris Peace Accords
- B Treaty of Brest-Litovsk
- C Treaty of Versailles
- D Geneva Conference



Hitler became the essential dictator of Germany in which decade?

- A 1920s
- B 1950s
- C 1940s
- D 1930s

2

What war during the 1930s greatly influenced the development of military tactics that were used in WWII?

- A The Spanish-American War
- B The Boer War
- C The Spanish Civil War
- D The Korean War

3

What was the last major attempt at a peaceful resolution with Germany prior to the outbreak of WWII?

- A The Geneva Convention
- B The Washington Naval Conference
- C The 1936 Olympic Conferences
- D The Munich Conference

4

Which event began World War II?

- A Pearl Harbor
- B Assassination of Arch Duke Ferdinand
- C Invasion of Poland
- D Battle of Britain

The Battle of Britain consisted of

- A A Sea-borne landing operation
- B Unrestricted submarine warfare
- C Strategic bombing campaign
- D The largest tank battles in history

Who was the leader of the Soviet Union during World War II?

- A Stalin
- B Lenin
- C Trotsky
- D Khrushchev

The decisive city battle of the Eastern European Front was

- A Kursk
- B Stalingrad
- C Kharkov
- D Kiev

When did Pearl Harbor occur?

9

- A December 11th, 1941
- B December 7th, 1942
- C December 8th 1940
- D December 7th, 1941

What was the most significant early U.S. victory in the Pacific theatre?

10

- A Battle of the Coral Sea
- B Wake Island
- C Iwo Jima
- D Midway

True or False: The Japanese never occupied U.S. Territory.

11

- A True
- B False
- C
- D

Who was the Commanding General of the German Afrika Korps nicknamed 'The Desert Fox'?

12

- A Von Manstein
- B Goering
- C Von Rundsted
- D Rommel

The main Axis powers of WWII consisted of

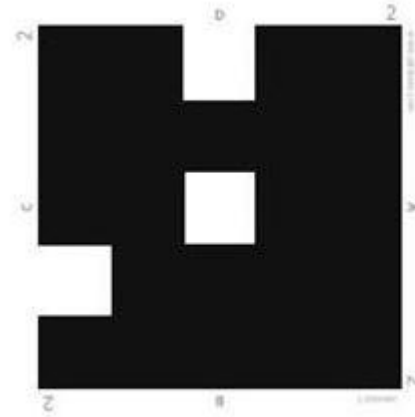
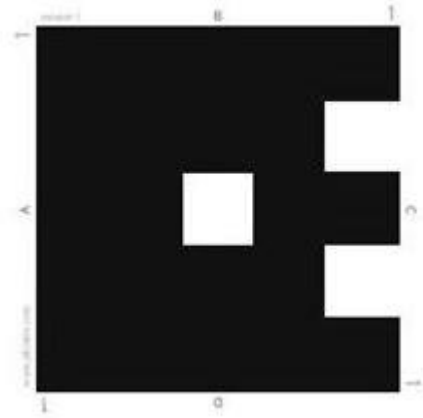
13

- A Germany, Russia, Japan
- B Germany, Italy, Romania
- C Germany, Finland, Japan
- D Germany, Italy, Japan

The term "D-Day" refers to

14

- A The Soviet Invasion of Germany
- B The Allied Invasion of Italy
- C The Allied invasion of the coast of Normandy
- D The Allied Invasion of Southern France



WORKSHEET 3: DICTOGLOSS¹

THE CAUSES OF THE SECOND WORLD WAR

- Chairman I'm here with four trainee teachers to discuss the question: 'Who was to blame for the Second World War?' Well, ladies and gentlemen – you're going to have to teach this next year: what do you think?
- John Obviously it was Hitler! He SAID in *Mein Kampf* in 1924 he would go to war. In 1935, he told his generals to get ready to do it in four years time. And then he went ahead and did it: 1935: rearmament rally – 1936: remilitarisation of the Rhineland – March 1938: *Anschluss* with Austria. In September 1938 he bullied Chamberlain into giving him the Sudetenland, and in March 1939 he took the rest of Czechoslovakia and *dared* the world to stop him. Then in September 1939 he did the same again in Poland and ... surprise, surprise ... there's a war. Open and shut case: Hitler!
- Andrea I know that Hitler SAID he was destroying Versailles to get the support of his own people. But the Treaty of Versailles was dead long before Hitler. The allies had killed it already. They had renegotiated reparations in 1924, and allowed Hindenburg to deny war guilt in 1927. In 1935 the British had even made a naval arms agreement with Germany – they *cooperated* in overturning Versailles. And then they GAVE him the Sudetenland at Munich! So we can't be surprised if Hitler thought it would be OK to attack Poland.
- John Wasn't Chamberlain at Munich simply trying to buy time for Britain to rearm?
- Andrea Rubbish! If Britain was militarily weak in the 1930s, Germany was weaker. Remember that the German army had orders to retreat if it met ANY resistance in the Rhineland in 1936. No – we ENCOURAGED Hitler to do what he did. Loads of people in Britain actually SUPPORTED what he was doing. And NOBODY thought Chamberlain would ever *keep* his promise to defend Poland – not even Stalin, who gave up on Britain and made the Nazi-Soviet Pact with Hitler in August 1939. Appeasement ENCOURAGED Hitler to go too far and – for me – you've got to blame the appeasers.

- Peter I don't think I blame *a person* at all. I blame the Great Depression of the 1930s. While the economy was booming in the 1920s, everybody was happy to sign up to peace. But when the economy fell apart in the '30s, and people were starving, suddenly it was: 'I need that and I'm taking it, war or no war'. That's why Japan marched into Manchuria; their Pacific empire was called the 'Japanese Co-Prosperity Sphere' ... it can't be any clearer than that. That's why Italy invaded Abyssinia. And that's what *lebensraum* was all about – expanding into Russia to secure food and raw materials.
- Paula But surely that's nonsense? The invasion of Poland was not about Germany ATTACKING Russia, it was about Germany and Russia allying and splitting Poland between them. That's politics, not economics. For me, if you're looking for a scapegoat for starting World War II, what about Stalin? Hitler would NEVER have dared to attack Poland without Russia's consent.
- Chairman Can you sort this out in terms of long-term, short-term and trigger causes? Long-term, you've got Germany's anger at the Treaty of Versailles.

¹ Source: <https://www.teachingenglish.org.uk/article/clil-history-causes-second-world-war>

Shorter-term you have the economic depression, and all the tensions caused by Japan, Italy and Germany, and appeasement.
And then the Nazi-Soviet Pact of August 1939 sort of releases a trigger and ... everything explodes into war.

- John Yes, but that doesn't *assess* the causes – it doesn't say which was the most important.
For me, it's got to be Hitler. He set the agenda. He was – in Churchill's words – 'insatiable in his lust for power'. Look at the history of Europe. It's happened often – one nation becomes too powerful, and the others get together and knock it back into line. It just happened again in 1939.
- Andrea Can't agree. If a child is *allowed* to misbehave, you can't blame him for being naughty. If you're looking for a cause of World War Two, try appeasement. At best Chamberlain allowed Hitler to go too far. At worst, he actively LURED Hitler into war, hoping he would attack Russia so Fascism and Communism would fight each other to the death.
- Paula NA! ALL that happened without there being a war.
Economic depression: Manchuria – Abyssinia. No war.
Nazi expansionism: Austria – Czechoslovakia. No war.
Appeasement: Sudetenland. No war.
And yet – Hitler makes the Nazi Soviet Pact with Stalin on 23rd August ... and one week later, 1st September 1939, BANG! Germany invades Poland. War!
LOOK AT THE DATES!!! It's Stalin, I blame for World War Two.
- Chairman Hmmm. I wonder which of you is right? I suppose I need to go back to look at the facts and the events and the dates ... and decide for myself what I think.

WORKSHEET 4: DICTOGLOSS

LISTEN AND MATCH

NAME	DESCRIPTION
Hitler	The Chancellor of Germany before and during WWII
Mein <u>Kampf</u>	A book written by Hitler about his life and Nazism
Chamberlain	British Prime Minister from 1937 to 1940
Versailles	A peace treaty signed at the end of World War I
Hindenburg	President of Germany from 1925 to 1934
Manchuria	An area in North-East China, including parts of Russia and Mongolia
Abyssinia	Other name for The Ethiopian Empire in North-East Africa
Stalin	Leader of the Soviet Union during WWII
Churchill	British Prime Minister during most of WWII
Appeasement	A policy of compromising to avoid war

WORKSHEET 5: THINK, PAIR AND SHARE

Listen to a discussion about the causes of the Second World War and answer the following questions.

1. What was the first possible cause of WWII mentioned?

- a) Appeasement
- b) Hitler
- c) Stalin
- d) the Great Depression

2. What was the second possible cause of WWII mentioned?

- a) Appeasement
- b) Hitler
- c) Stalin
- d) the Great Depression

3. What was the third possible cause of WWII mentioned?

- a) Appeasement
 - b) Hitler
 - c) Stalin
 - d) the Great Depression
-

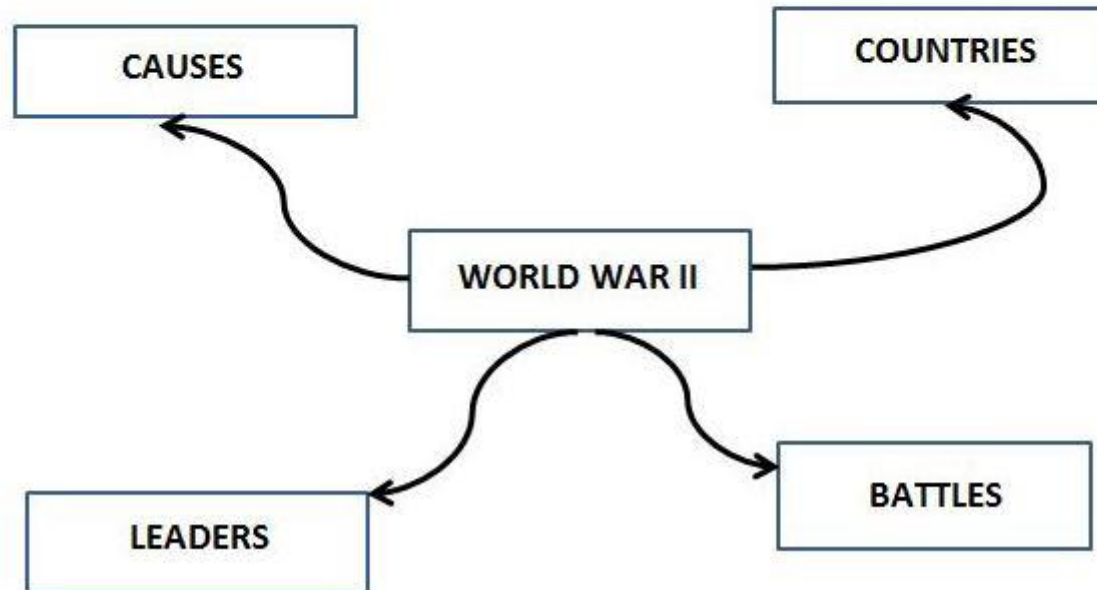
4. What was the fourth possible cause of WWII mentioned?

- a) a. Appeasement
- b) b. Hitler
- c) c. Stalin
- d) d. the Great Depression

Answer these questions.

- 5. Why was the Great Depression a cause of WWII?
- 6. Why was Appeasement a cause of WWII?

WORKSHEET 6: MIND MAP



WORKSHEET 7: CAUSES OF WWII

Background

After Germany lost WWI, they were treated very harshly by the Allies, specifically England and France. **The Treaty of Versailles**, which is the peace agreement that ended WWI, did many things to hurt Germany, such as limiting the size of their army, taking land away from Germany, and forcing Germany to pay large amounts of money to Allied countries. Although many thought these were appropriate ways to consequence Germany, it also left the Germany economy in ruins. The country was out of money and in an economic depression, the citizens were poor and some were starving, and the government was a mess.

All of this turmoil and chaos in Germany created a perfect situation for a man named **Adolf Hitler** to rise to power. Hitler was a soldier for Germany during WWI and, after the war, got into politics. While in politics, he realized he was extremely good at giving speeches and making people support what he was saying. This allowed him to rise quickly in the German government. Hitler presented a clear message to the country: others were to blame for the country's depression and hard times, not Germany. The citizens of Germany loved this message and support Hitler all the way to him becoming the country's Chancellor and **Fuhrer**, or leader.

As Hitler was rising to power in the German government, he joined, and soon became the leader of, the **Nazi** political party. Hitler and his Nazi government allied themselves with Italy and their leader, **Benito Mussolini**. Mussolini and Hitler believed in **fascist** governments where the leader becomes a dictator, or someone who has complete control over their country. They also wanted to expand their countries by attacking other countries and taking their land. Hitler began to rearm Germany, increasing their military power and creating a larger army, which was against the Treaty of Versailles. In 1935, Italy invaded and took over Ethiopia. Then, in 1938, Hitler took over Austria. Not the League of Nations or any other country did anything to stop him, so, in 1939, Hitler took over Czechoslovakia.

During this time, Japan was also taking over countries in Asia. Despite all of this aggression European countries and America did very little to stop it. European countries were tired from WWI, only 30 years earlier, and did not want to get involved in yet another conflict. As a result, they took an approach known as **appeasement**. This meant that, instead of fighting Hitler and engaging in another war, they would give him what he wanted to keep him happy. The hope was that once Hitler got what he wanted he would stop and war would be avoided. Instead, this only made Hitler more confident and gave him more time to build a stronger army. During this time America was experiencing **The Great Depression**. This was an extremely difficult time for America and, as a result, they had no desire to go all the way over to Europe and fight in another war.

Finally, on **September 1st, 1939**, Hitler invaded Poland. At this point, Great Britain, France, and other countries declared war on Nazi Germany, officially starting WWII. America though did not declare war until 1941 when Japan bombed Pearl Harbor, an American naval base. Russia also did not declare war on Germany until 1941 when Germany broke their **non-aggression agreement**, which said they would not attack each other.



WORKSHEET 8: CAUSES OF WWII

Fill-In-The-Blank

Use the information provided about World War II to fill in the blank in each sentence.

- 1) European countries, specifically England and France took an approach known as _____ when dealing with Germany's aggression.
- 2) The Treaty of Versailles left Germany's economy in _____.
- 3) Hitler allied himself with _____, Italy's Fascist dictator.
- 4) On September 1st, _____ Hitler invaded Poland and World War II officially began.
- 5) After getting into politics, _____ realized he was extremely talented at giving speeches.
- 6) After WWI and the treaty of Versailles, Germany was in an economic _____, some citizens were starving, and the government was a mess.
- 7) In 1938, when Hitler took over Austria, the _____ did nothing, so he attacked Czechoslovakia.

8) America did not join WWI until _____ bombed an American naval base at Pearl Harbor.

9) As Hitler rose to power, he became the leader of the _____ political party.

10) Russia and Germany had _____ agreement which said they would not attack each other.

WORKSHEET 9: NEWSPAPER

THE OLD POST
ILLUSTRATED WEEKLY NEWSPAPER

Member of the Associated Press
Assens comanda ligitu egiu dolet
Assens. Assens comanda ligitu egiu
dolet. Assens. Assens. Assens. Assens.

Est. 1869 Wednesday, September 1st, 1939 Price 6d

LEADING UP TO WORLD WAR II

Outbreak of World War II (1939)
In late August 1939, Hitler and Soviet leader **Joseph Stalin** signed the **German-Soviet Nonaggression Pact**, which incited a frenzy of worry in London and Paris. Hitler had long planned an invasion of Poland, a nation to which Great Britain and France had guaranteed military support if it was attacked by Germany. The pact with Stalin meant that Hitler would not face a war on two fronts once he invaded Poland, and would have Soviet assistance in conquering and dividing the nation itself.

On September 1, 1939, Hitler invaded Poland from the west; two days later, France and Britain declared war on Germany, beginning World War II.

On September 17, Soviet troops invaded Poland from the east. Under attack from both sides, Poland fell quickly, and by early 1940 Germany and the Soviet Union had divided control over the nation, according to a secret protocol appended to the Nonaggression Pact. Stalin's forces then moved to occupy the Baltic States (Estonia, Latvia and Lithuania) and defeated a resistant

Finland in the Russo-Finnish War. During the six months following the invasion of Poland, the lack of action on the part of Germany and the Allies in the west led to talk in the news media of a "phony war." At sea, however, the British and German navies faced off in heated battle, and lethal German U-boat submarines struck at merchant shipping bound for Britain, sinking more than 100 vessels in the first four months of World War II.



WORKSHEET 10: LINKING WORDS

<p>RESULT Function: To provide the result of what has been stated or has occurred</p> <p>As a result As a consequence (of) Therefore Thus Consequently Hence For this reason Due to</p>	<p>EMPHASIS Function: To put forward a point or idea more forcefully</p> <p>Undoubtedly Indeed Obviously Particularly / in particular Especially Clearly Importantly Absolutely Definitely Without a doubt Never It should be noted Unquestionably Above all Positively</p>	<p>ADDITION Function: To add to what has been previously stated</p> <p>Additionally / an additional Furthermore Also Too As well as that Along with Besides In addition Moreover Not only...but also In addition to this Apart from this</p>
<p>REASON Function: To provide reasons for what has been stated or has occurred</p> <p>Because of With this in mind In fact In order to Due to</p>	<p>GIVING EXAMPLES Function: To provide examples</p> <p>For example/ For instance Such as Including Namely In this case Proof of this Like To demonstrate/ To clarify</p>	<p>CONTRAST Function: To show how things are different</p> <p>Unlike Nevertheless On the other hand Nonetheless Despite / in spite of In contrast (to) While</p>

<p>REASON Function: To provide reasons for what has been stated or has occurred</p> <p>Because of With this in mind In fact In order to Due to</p>	<p>GIVING EXAMPLES Function: To provide examples</p> <p>For example/ For instance Such as Including Namely In this case Proof of this Like To demonstrate/ To clarify</p>	<p>CONTRAST Function: To show how things are different</p> <p>Unlike Nevertheless On the other hand Nonetheless Despite / in spite of In contrast (to) While Whereas Alternatively Conversely Even so Differing from Contrary to</p>
<p>COMPARISON Function: To show how things are similar</p> <p>Similarly Equally Likewise Just as Just like Similar to Same as Compare / compare(d) to (with) By the same token In the same way Correspondingly</p>	<p>ORDER Function: To indicate the order of what is being said</p> <p>First/ firstly Second/ secondly Third/ thirdly Finally At this time Following Previously Before Subsequently</p>	<p>ORDER Function: To mark the end of an ascending order</p> <p>Above all Lastly and most importantly Last but not least</p>

<p>SUMMARY Function: To sum up what has been previously stated</p> <p>In conclusion To summarise Altogether In short To sum up In summary Briefly To conclude</p>	<p>CONDITION Function: To provide a condition to what has been stated</p> <p>If In that case In case Unless</p>	<p>GENERALISATION Function: To make a general statement</p> <p>As a rule For the most part In general/ Generally On the whole Overall In most cases</p>
<p>RESTATEMENT Function: To express an alternative to what has been previously stated</p> <p>In other words To put it differently</p>		

WORKSHEET 11: A NEWSPAPER REPORT

In a newspaper report, we provide the basic facts (what happened, when and where it happened and who was involved). We give further details about the event and what is happening now.

Language it is very important. When writing a newspaper report, we often use the passive to describe actions because the actions are more important than the person who did them. We also often use *connectors of purpose* like *to, in order to, and so that*.

This chart and this model could help you in your task:

PARAGRAPH 1 Event Location Time Who was involved
PARAGRAPH 2 Details
PARAGRAPH 3 What is happening now

Daily News

THEFT AT NEWTOWN GALLERY

The Newtown Art Gallery on Constable Street was broken into in the middle of the night. Fifty works of art were stolen from the gallery. Apparently, a number of thieves worked together so that they could finish quickly.

The theft was discovered by the gallery's manager, Mr Edward Anderson, when he arrived at work this morning. A window was broken in order to enter the gallery. Forty paintings and ten sculptures were reported missing. According to police, a van was seen as it was leaving the gallery at about three o'clock this morning. The van was grey and the name of a local shop was written on it.

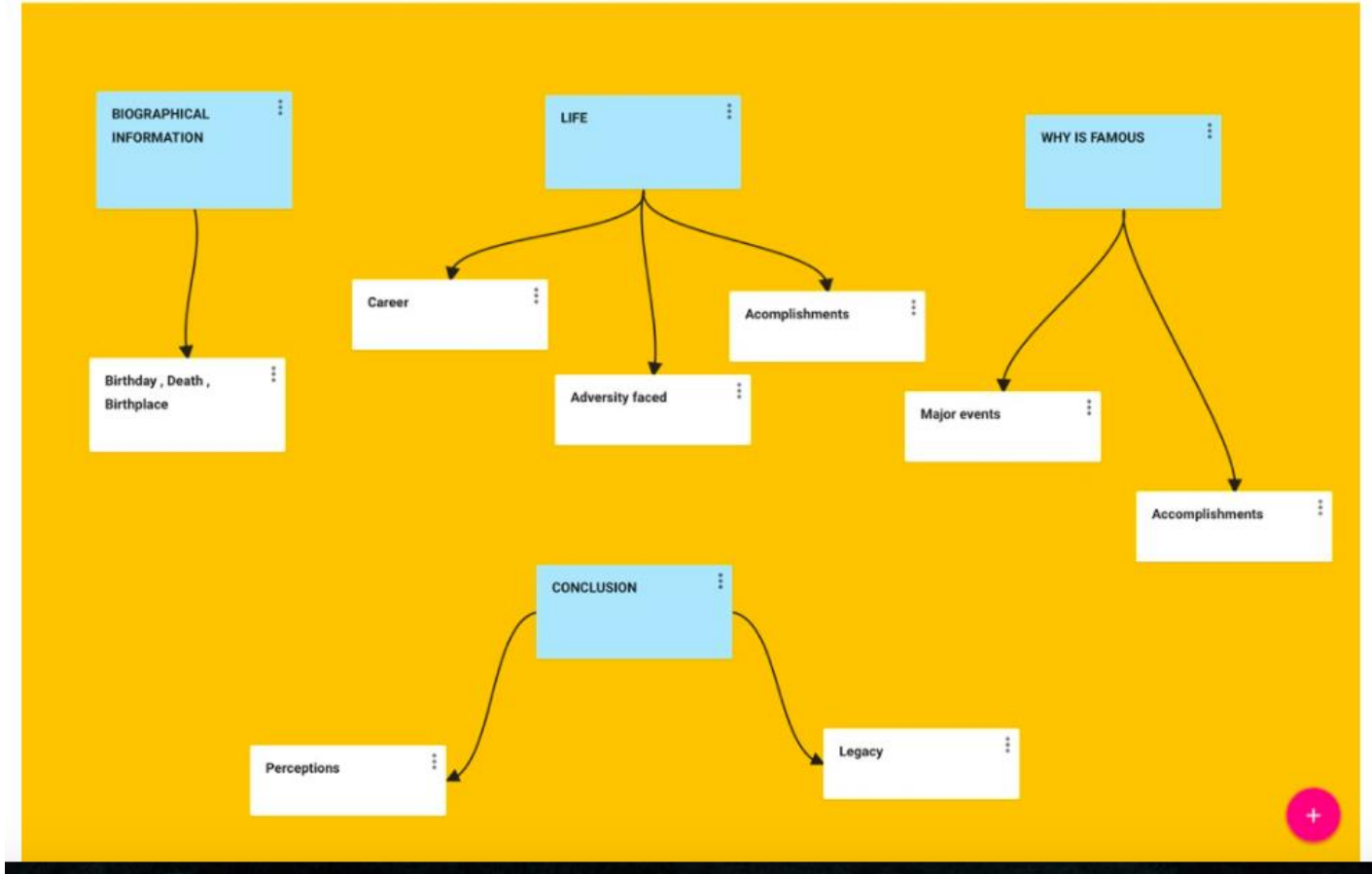
Police are investigating at the moment. They are also questioning the gallery's workers to collect additional information.

TOP TIPS FOR WRITING

1. Use a catchy title to get people interested
2. Ask direct questions to get the reader's attention
3. Use opinion adverbs to introduce your points.
4. Give a real-life example or talk about personal experience
5. Choose a neutral or informal style, depending on the audience.
6. Divide your ideas into clear paragraphs.

WORKSHEET 2

ALAN'S TURING BIOGRAPHICAL SKETCH



WORKSHEET 3

Poster rubric	4	3	2	1
REQUIRED ELEMENTS 25%	The poster includes all required elements as well as additional information.	All required elements are included on the poster.	All but 1 of the elements are included on the poster.	Several of required elements are missing.
ATTRACTIVENESS 25%	The poster is exceptionally attractive in terms of design, layout, and neatness.	The poster is attractive in terms of design, layout and neatness.	The poster is acceptably attractive though it may be a bit messy.	The poster is distractingly messy or very poorly designed. It is not attractive.
GRAMMAR 25%	There are no grammatical mistakes on the poster.	There is 1 grammatical mistake on the poster.	There are 2 grammatical mistakes on the poster.	There are more than 2 grammatical mistakes on the poster.
USE OF CLASS TIME	Used time well during class period. Focused on getting the project done.	Used time well during class period. Usually focused on getting the project done and never distracted others.	Used some of the time well during class period. There was some focus on getting the project done but occasionally distracted others.	Did not use class time to focus on the project, often distracted others.

WORKSHEET 4



$$P(1) = 1374$$



$$P(2) = 1322$$



$$P(3) = 1292$$



$$P(x) = 11x^2 - 85x + 1448$$

$$P(1) = 11 \cdot 1 - 85 \cdot 1 + 1448 = 1374$$

$$P(2) = 11 \cdot 2^2 - 85 \cdot 2 + 1448 = 1322$$

$$P(3) = 11 \cdot 3^2 - 85 \cdot 3 + 1448 = 1292$$

$$P(1) = 1374$$

$$P(2) = 1322$$

$$P(3) = 1292$$

$$P(x) = ax^2 + bx + c$$

$$a \cdot 1^2 + b \cdot 1 + c = 1374 \rightarrow$$

$$a \cdot 2^2 + b \cdot 2 + c = 1322 \rightarrow$$

$$a \cdot 3^2 + b \cdot 3 + c = 1292 \rightarrow$$

$$a + b + c = 1374$$

$$4a + 2b + c = 1322$$

$$9a + 3b + c = 1292$$

$$\left. \begin{aligned} a+b+c &= 1374 \\ 4a+2b+c &= 1322 \\ 9a+3b+c &= 1292 \end{aligned} \right\}$$

$$a = 1374 - b - c$$

$$\left. \begin{aligned} 4(1374 - b - c) + 2b + c &= 1322 \\ 9(1374 - b - c) + 3b + c &= 1292 \end{aligned} \right\}$$

$$\left. \begin{aligned} 5496 - 4b - 4c + 2b + c &= 1322 \\ 12366 - 9b - 9c + 3b + c &= 1292 \end{aligned} \right\}$$

$$\left. \begin{aligned} 5496 - 2b - 3c &= 1322 \\ 12366 - 6b - 8c &= 1292 \end{aligned} \right\}$$

Aïllo la c

$$\left. \begin{aligned} 4174 - 2b &= 3c \\ 11074 - 6b &= 8c \end{aligned} \right\}$$

$$\frac{4174 - 2b}{3} = c$$

$$\frac{11074 - 6b}{8} = c$$

✂

$$\frac{4174 - 2b}{3} = c \quad \frac{11074 - 6b}{8} = c$$

If c is equal to c , then:

$$\frac{4174 - 2b}{3} = \frac{11074 - 6b}{8}$$

$$8(4174 - 2b) = 3(11074 - 6b)$$

$$33392 - 16b = 33222 - 18b$$

$$18b - 16b = 33222 - 33392$$

$$2b = -170$$

$$b = -\frac{170}{2} = -85$$

$$b = -85$$

$$\frac{4174 - 2 \cdot (-85)}{3} = c$$

$$\frac{4174 + 170}{3} = c$$

$$c = 1448$$

$$a = 1324 - b - c = 1324 + 85 - 1448 = 11 \quad a = 11$$

The
secret
number!

WORKSHEET 5

de Haro Anna · 3 minuts

Solving the system

SOLVE THE FIRST EQUATION FOR a
 $a = 1374 - b - c$

$a + b + c = 1374$
 $4a + 2b + c = 1322$
 $9a + 3b + c = 1292$
 $a = 1374 - b - c$

SUBSTITUTE THE NEW EQUATION INTO THE SECOND AND THE THIRD ONES FOR a

$4(1374 - b - c) + 2b + c = 1322$
 1322
 $9(1374 - b - c) + 3b + c = 1292$
 1292

$4(1374 - b - c) + 2b + c = 1322$
 $9(1374 - b - c) + 3b + c = 1292$
 $5(1374 - b - c) + 2b + c = 1322$
 $12366 - 9b - 9c + 3b + c = 1292$

MOVE c INTO THE RIGHT HAND SIDE IN BOTH EQUATIONS

I move c into the right hand side
 $4(1374 - b - c) + 2b + c = 1322$
 $5(1374 - b - c) + 2b + c = 1322$

IF c = c, THEN:

$4(1374 - b - c) + 2b + c = 1322$
 $5(1374 - b - c) + 2b + c = 1322$
 If c is equal to c, then:

$4(1374 - b - c) + 2b + c = 1322$
 $5(1374 - b - c) + 2b + c = 1322$

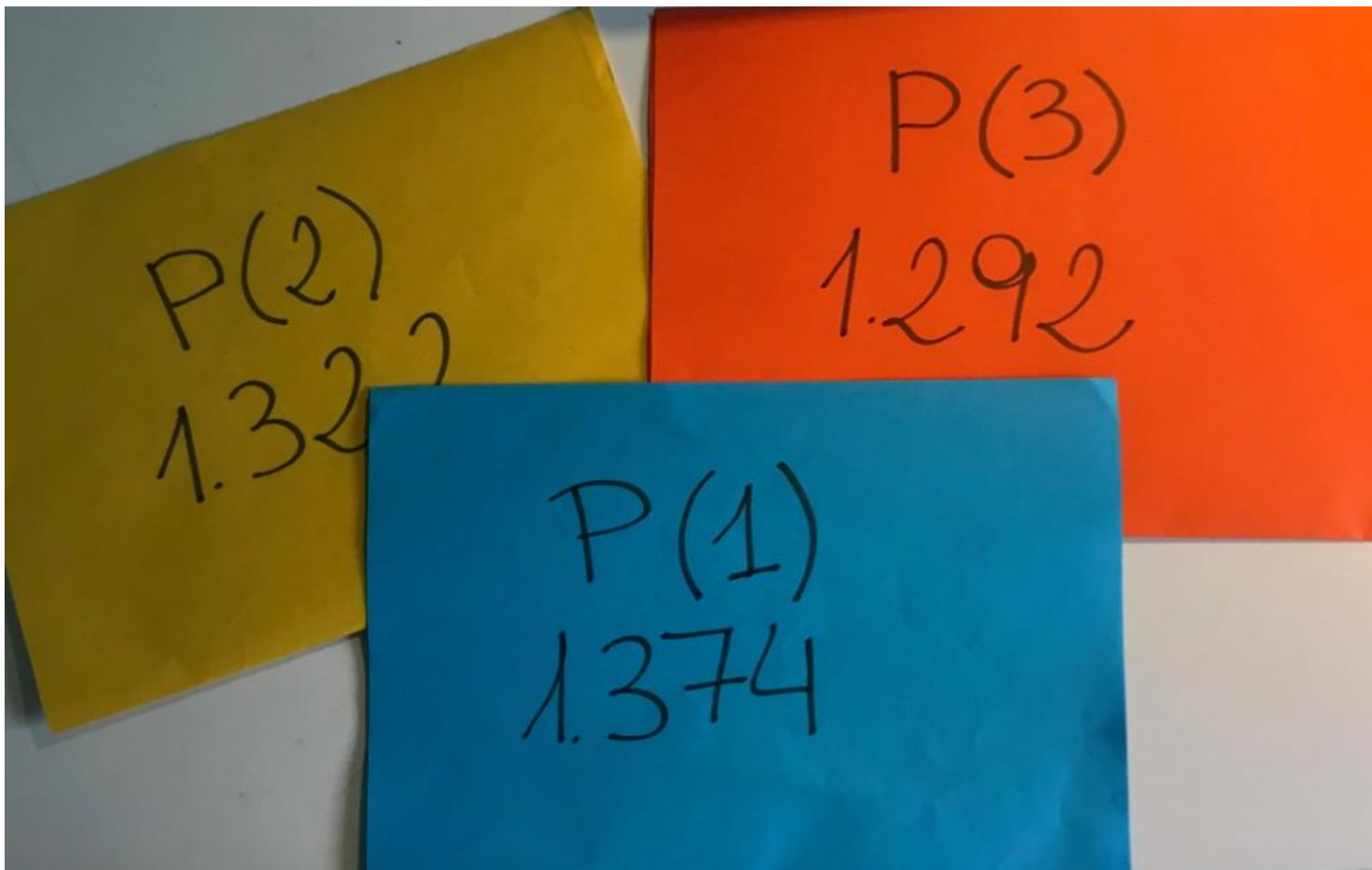
SOLVE FOR b

$5(4(1374 - b - c) + 2b + c) = 5(1322 - 12b)$
 $33392 - 16b + 33222 - 12b$
 $13b - 16b = 33222 - 33392$
 $-3b = -170$
 $b = \frac{170}{-3} = -85$
 $b = -85$

SUBSTITUTE THE VALUE FOR b TO FIND THE VALUE OF c

$a + b + c = 1374$
 $4a + 2b + c = 1322$
 $9a + 3b + c = 1292$
 $a = 1374 - b - c$
 $4(1374 - b - c) + 2b + c = 1322$
 $5(1374 - b - c) + 2b + c = 1322$
 $5(1374 - (-85) - c) + 2(-85) + c = 1322$



WORKSHEET 6



WORKSHEET 7

PLICKERS

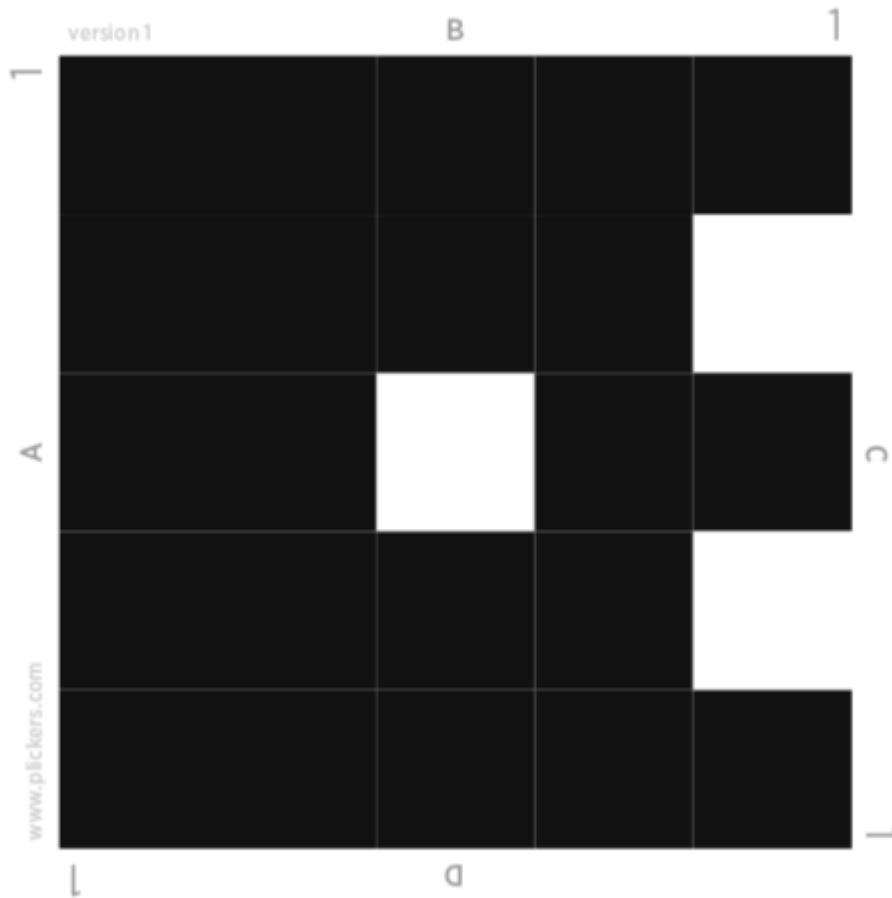
LIVE 4rt ESO GEP

Student List Display Options  

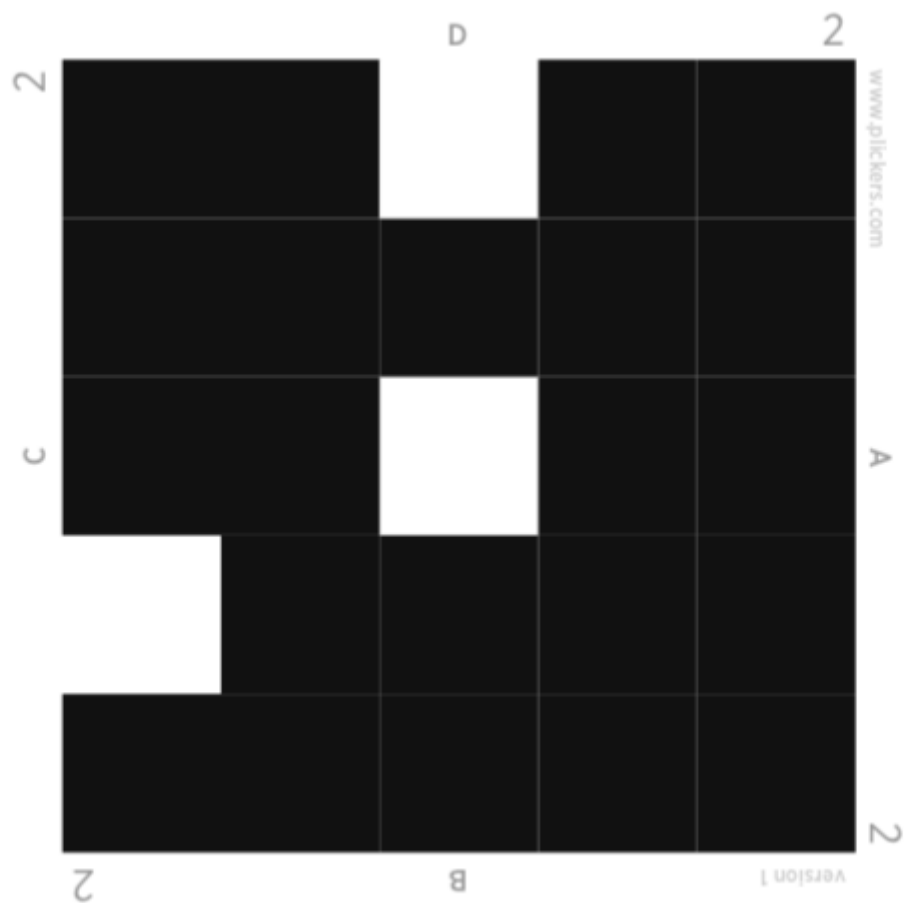
Show Graph Reveal Answer

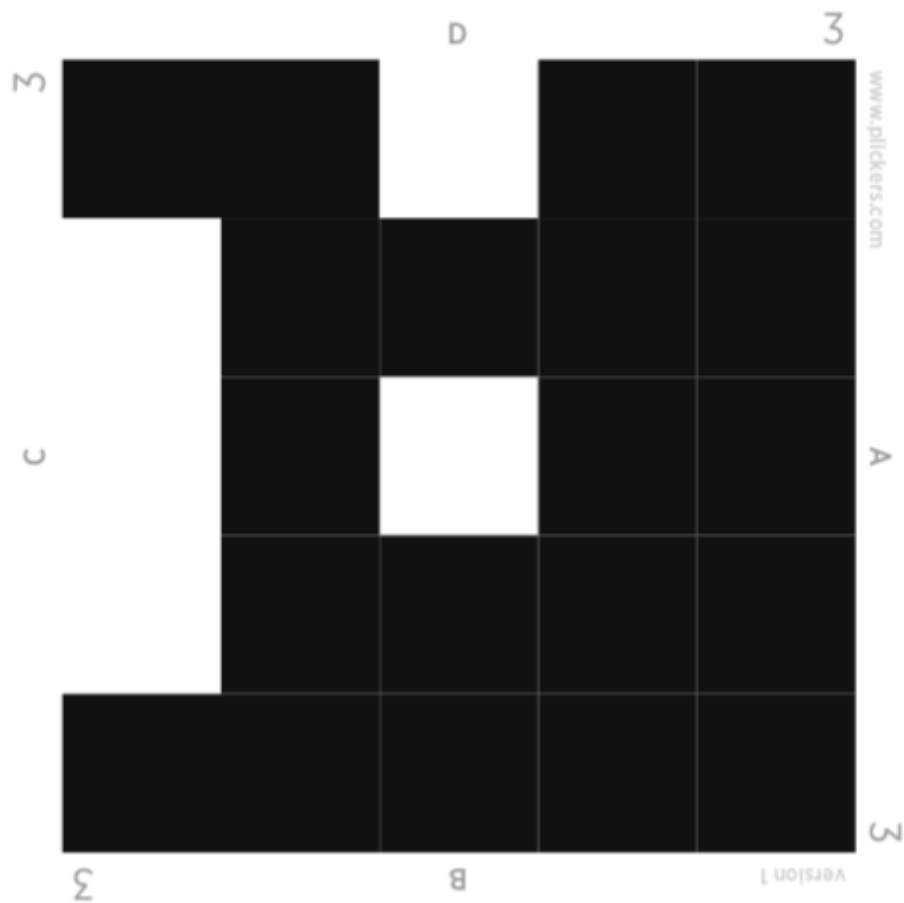
The code is:

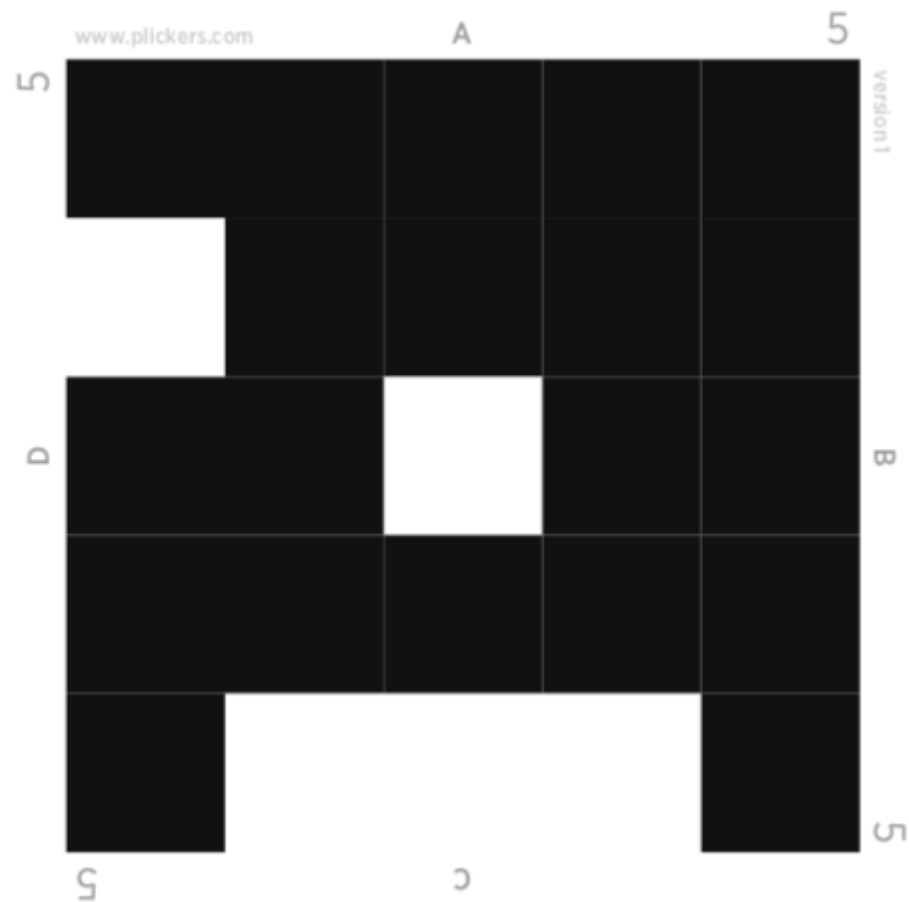
- A 11
- B 1448
- C 1944
- D 1648

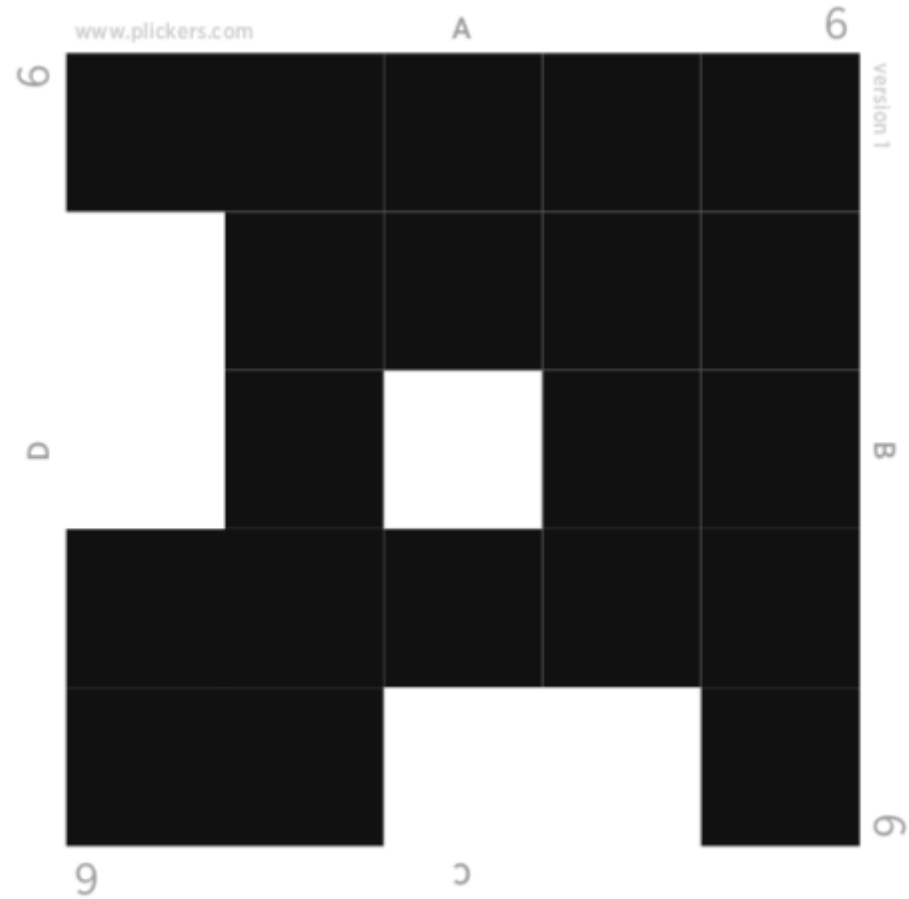


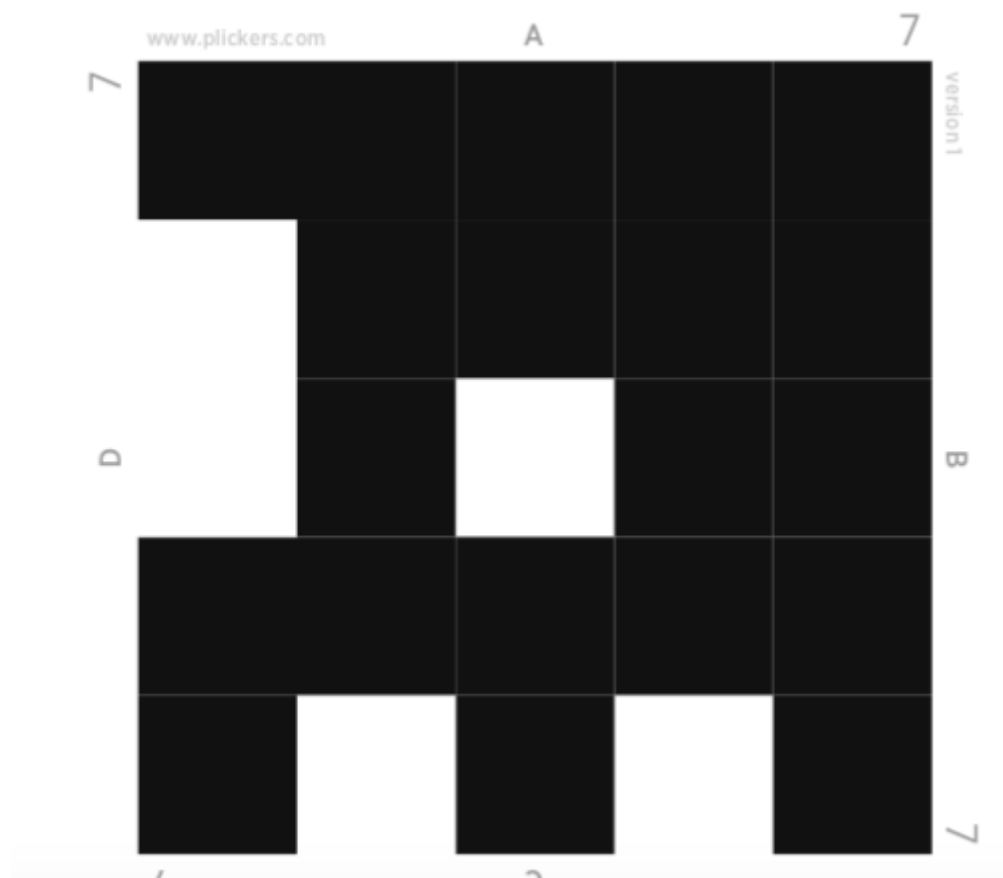
www.plickers.com

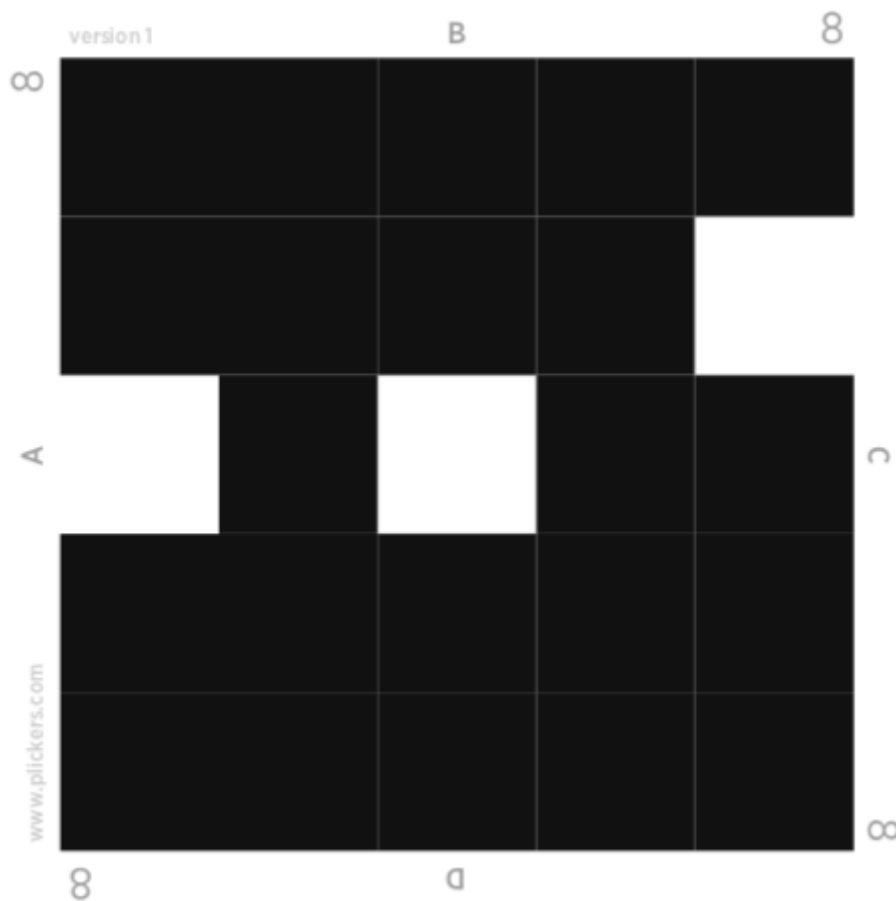


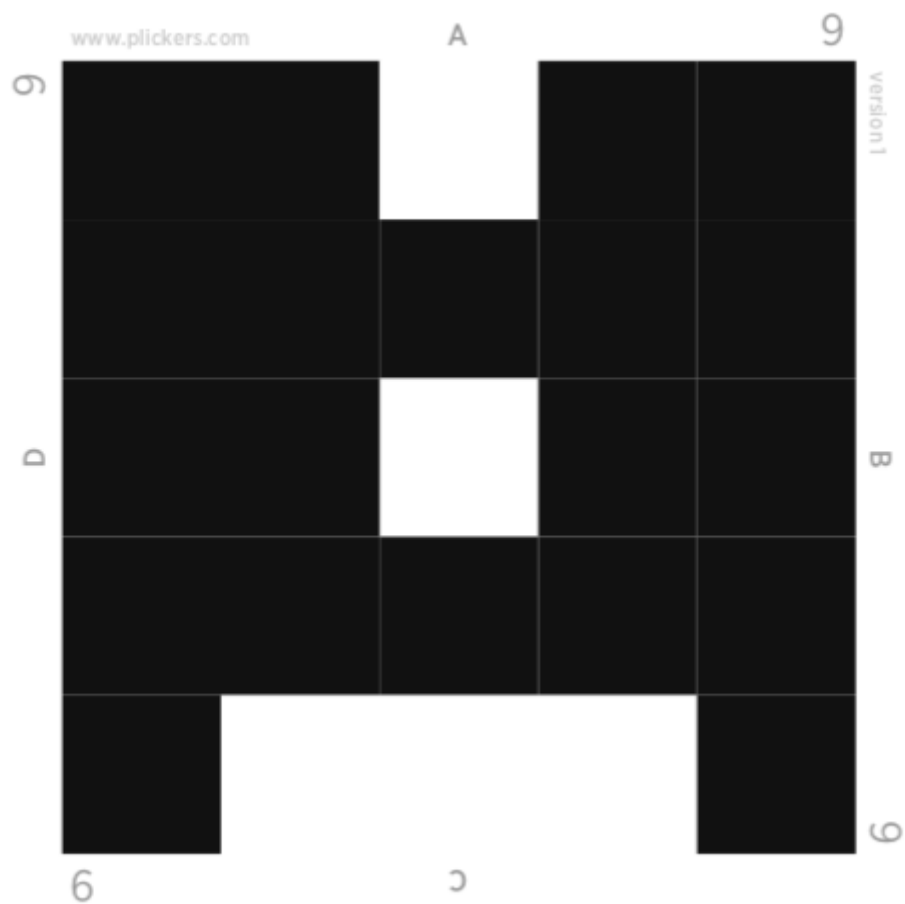


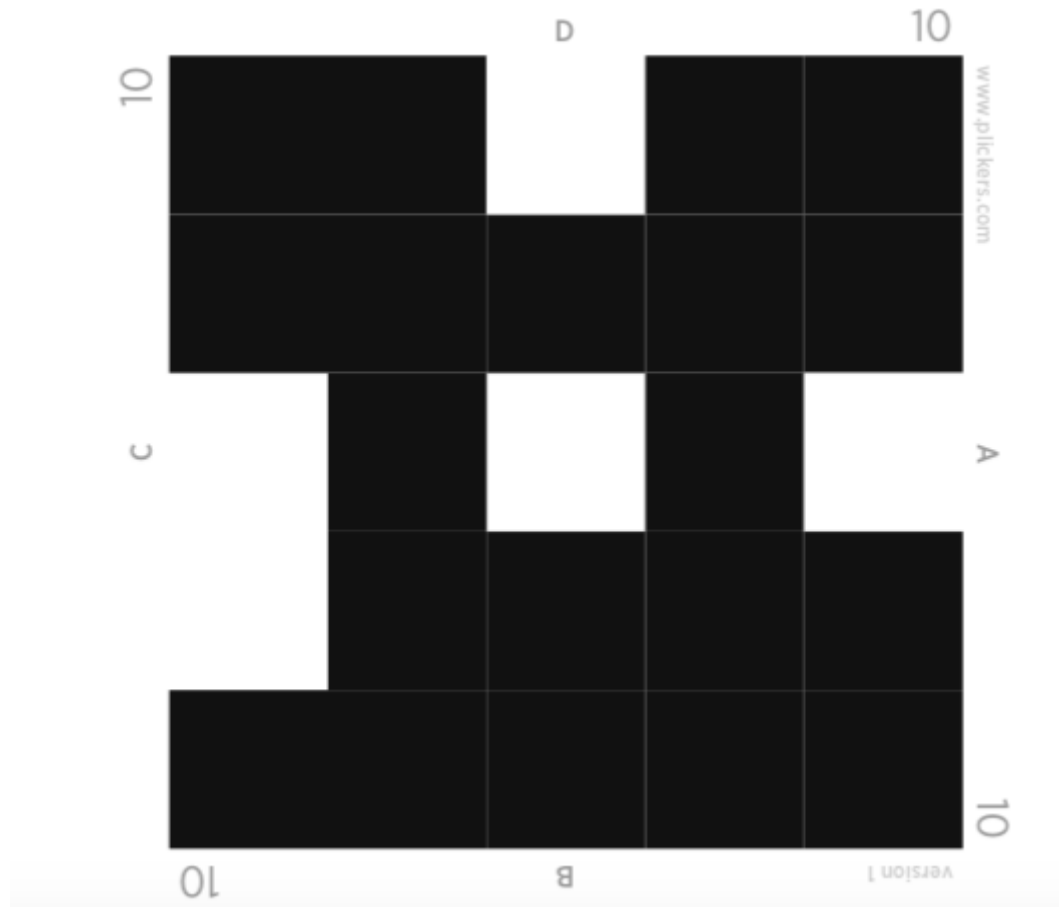


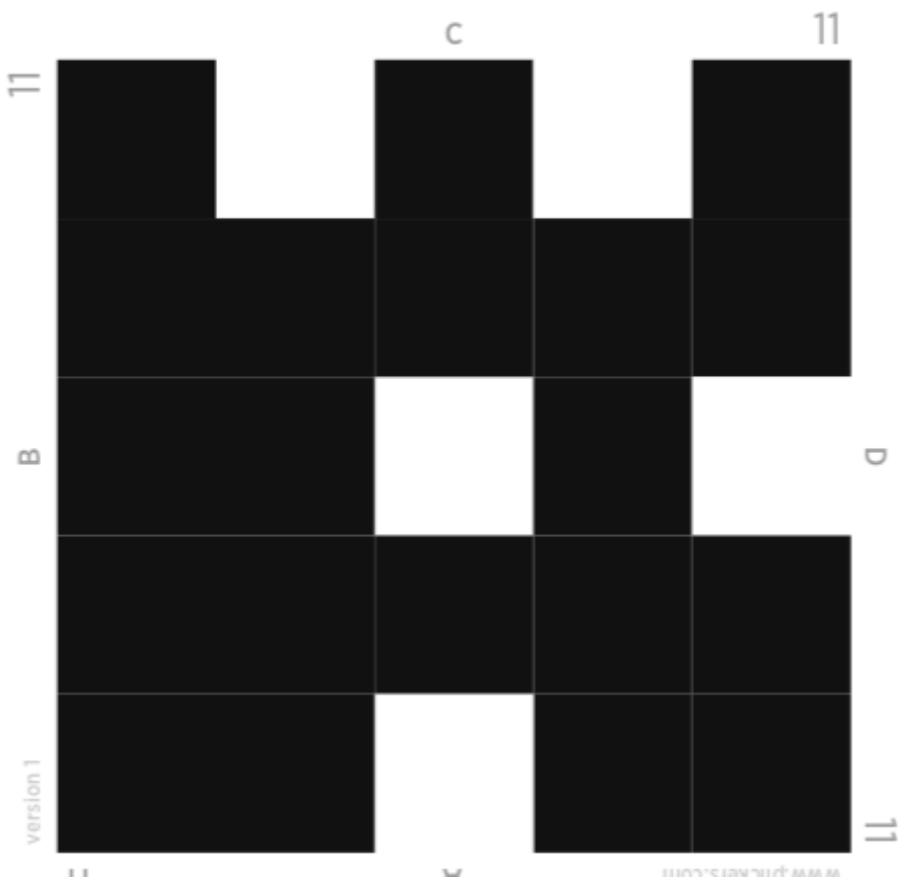


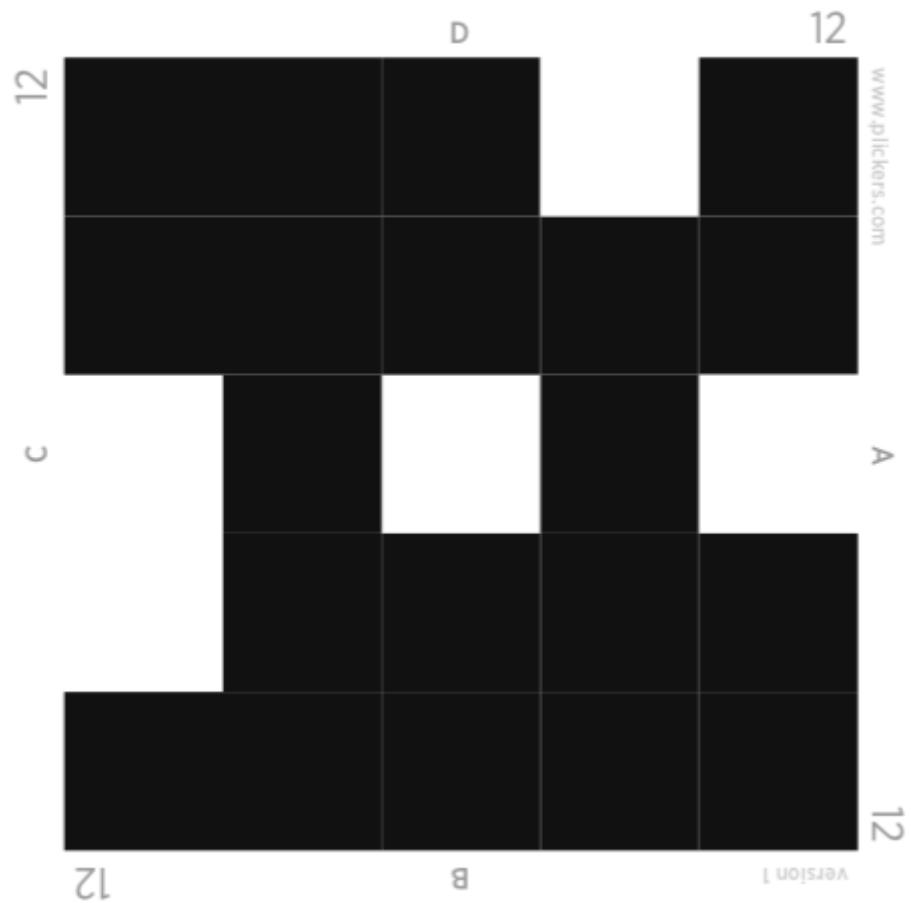


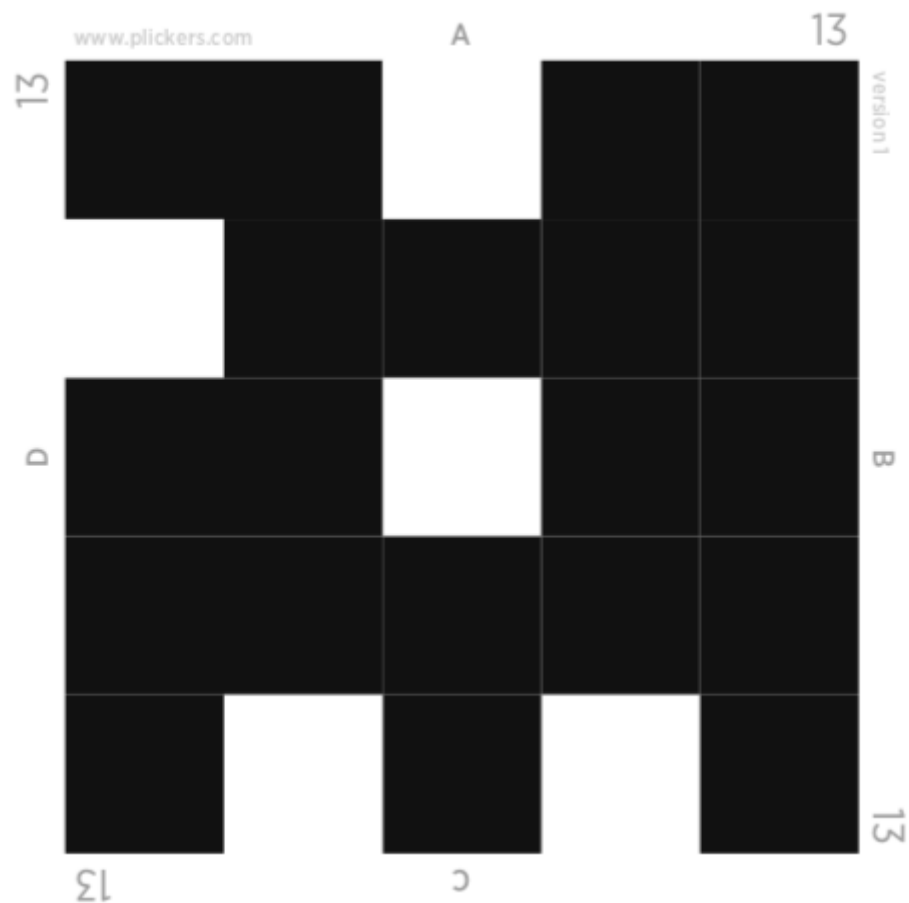


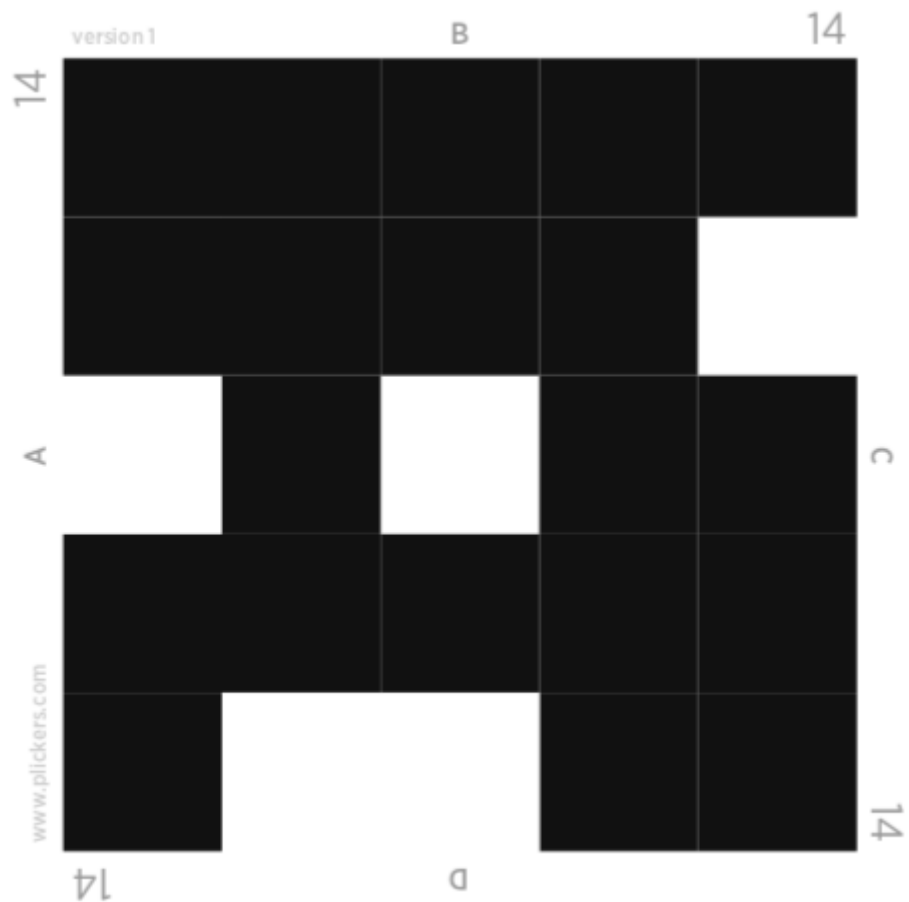


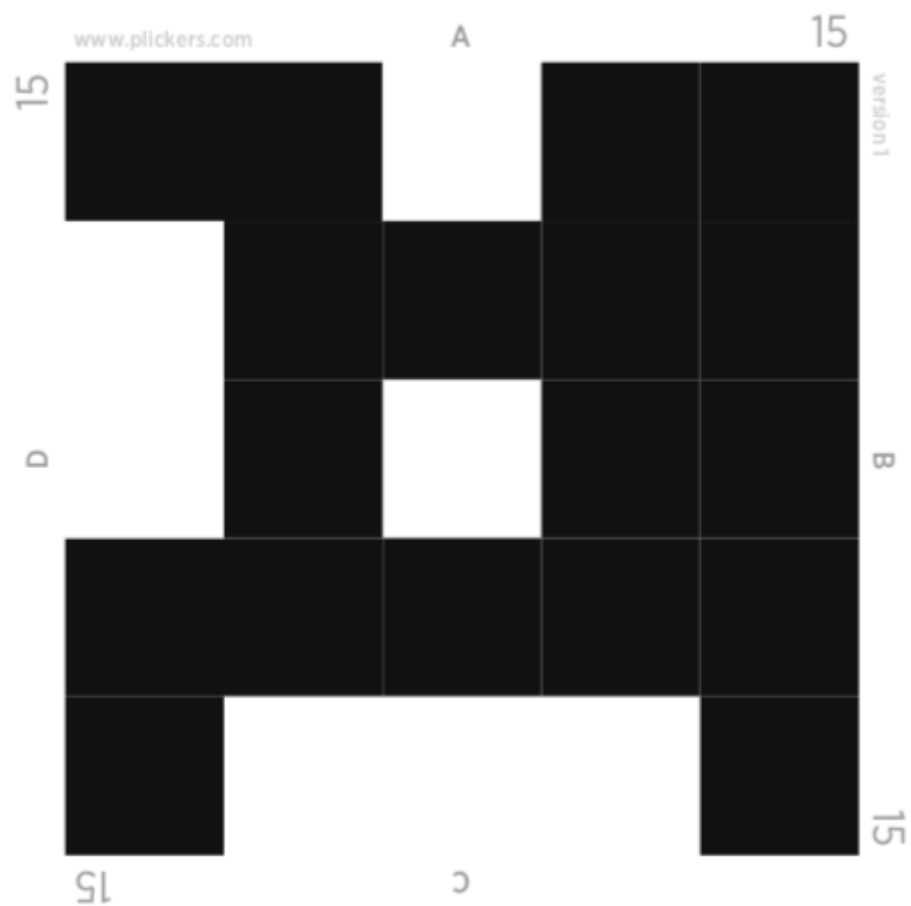


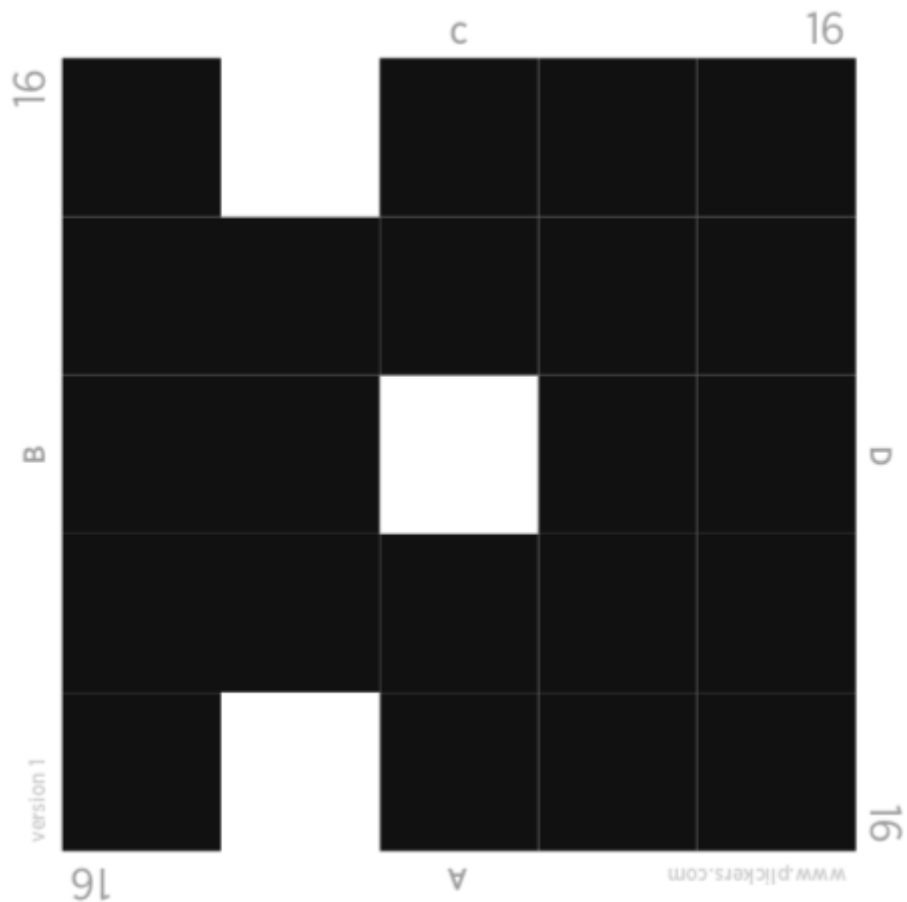


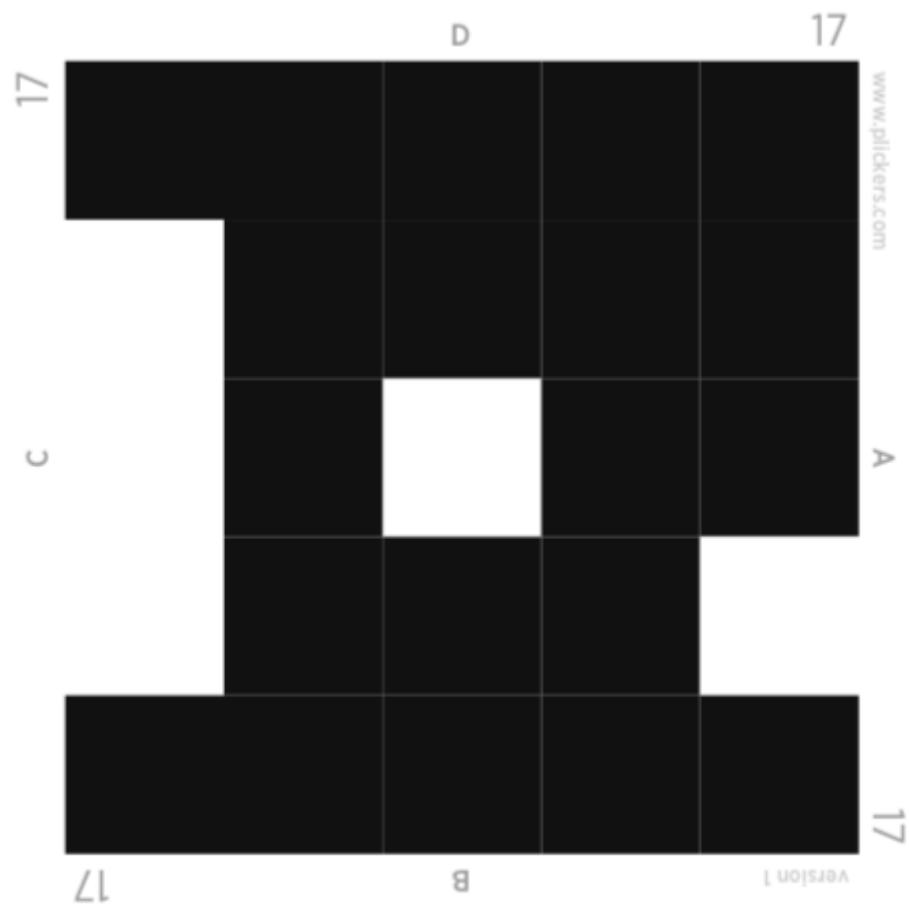


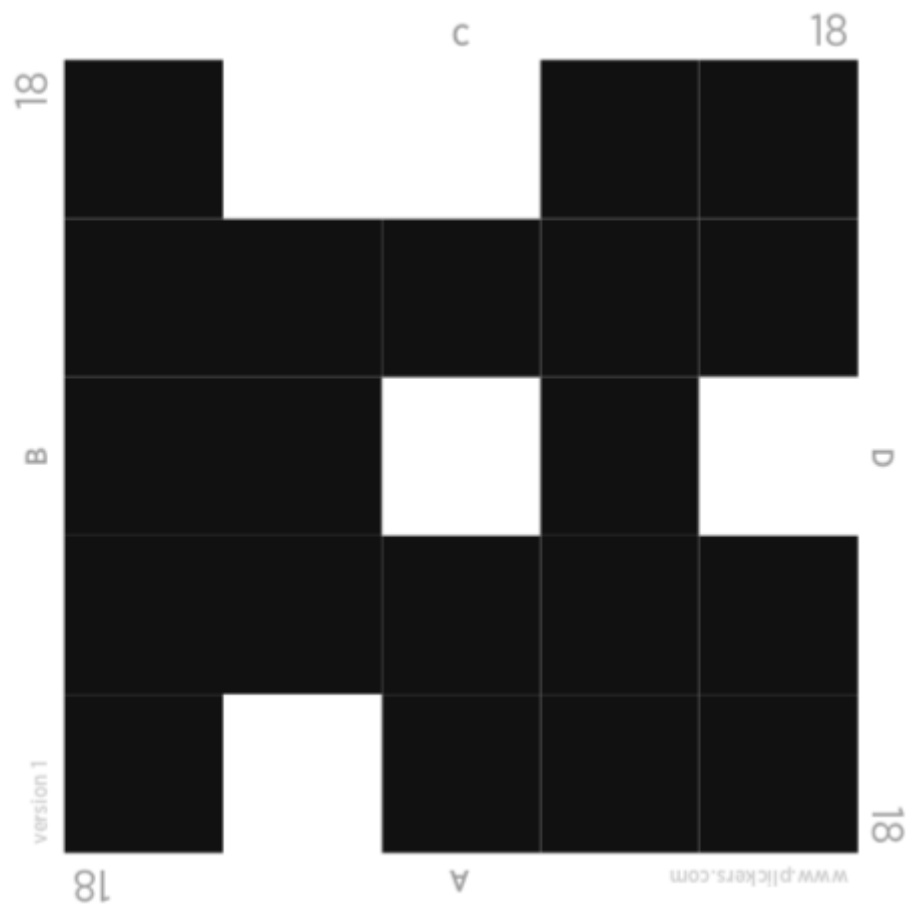


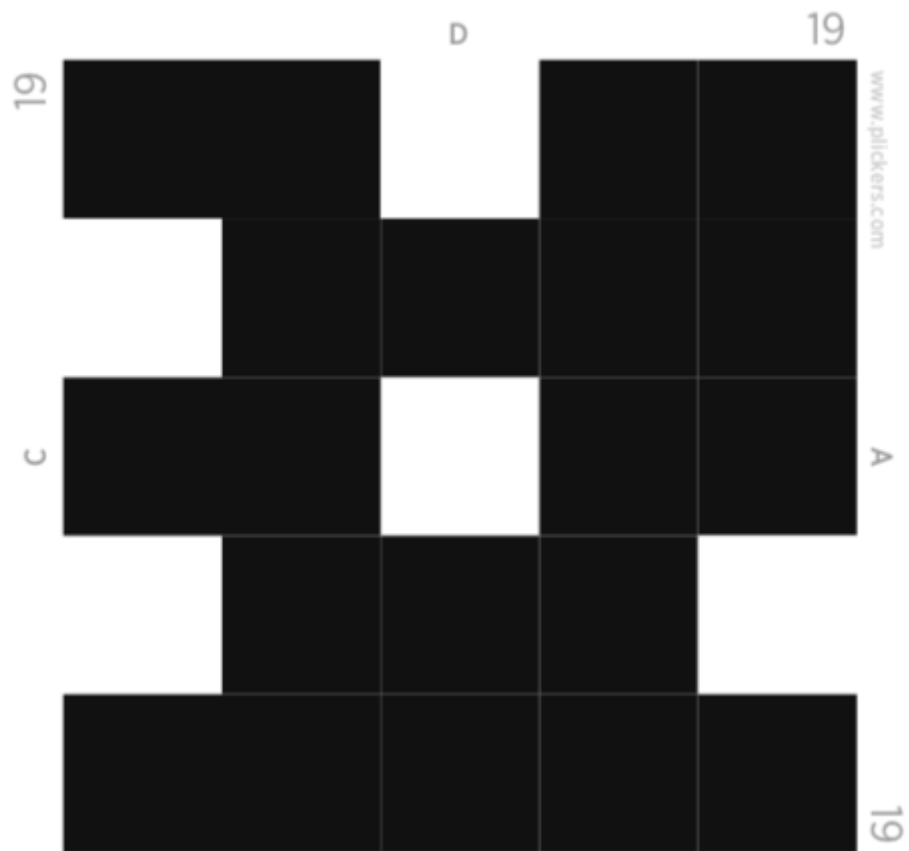


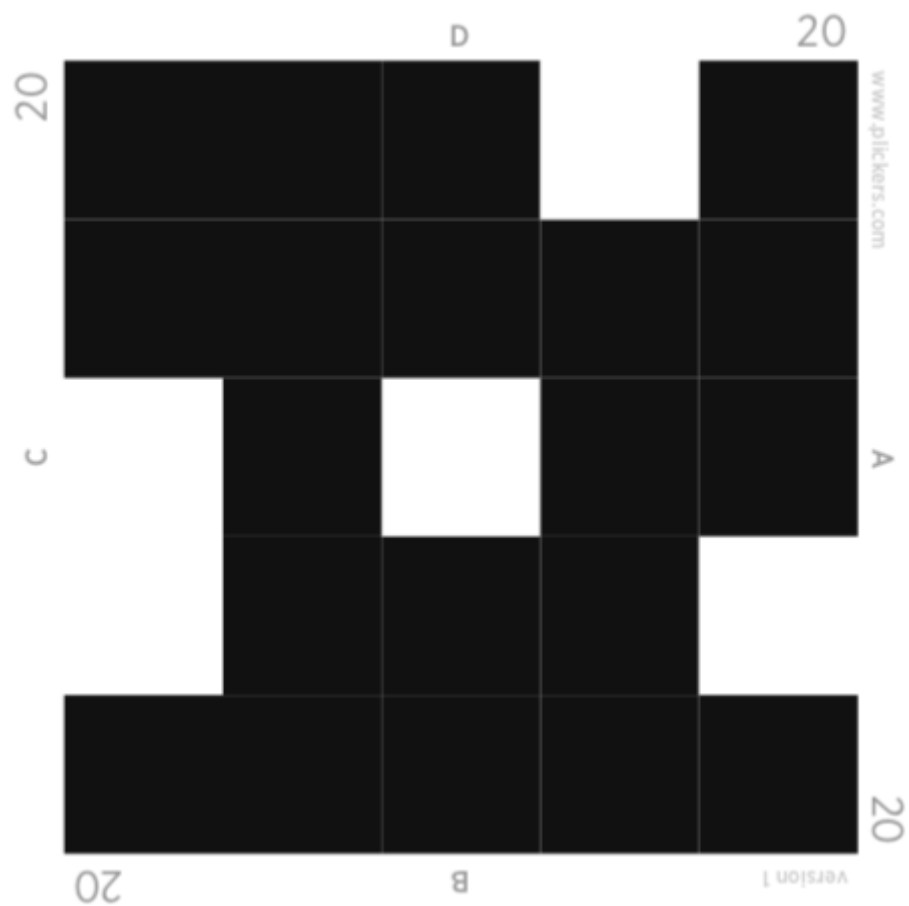


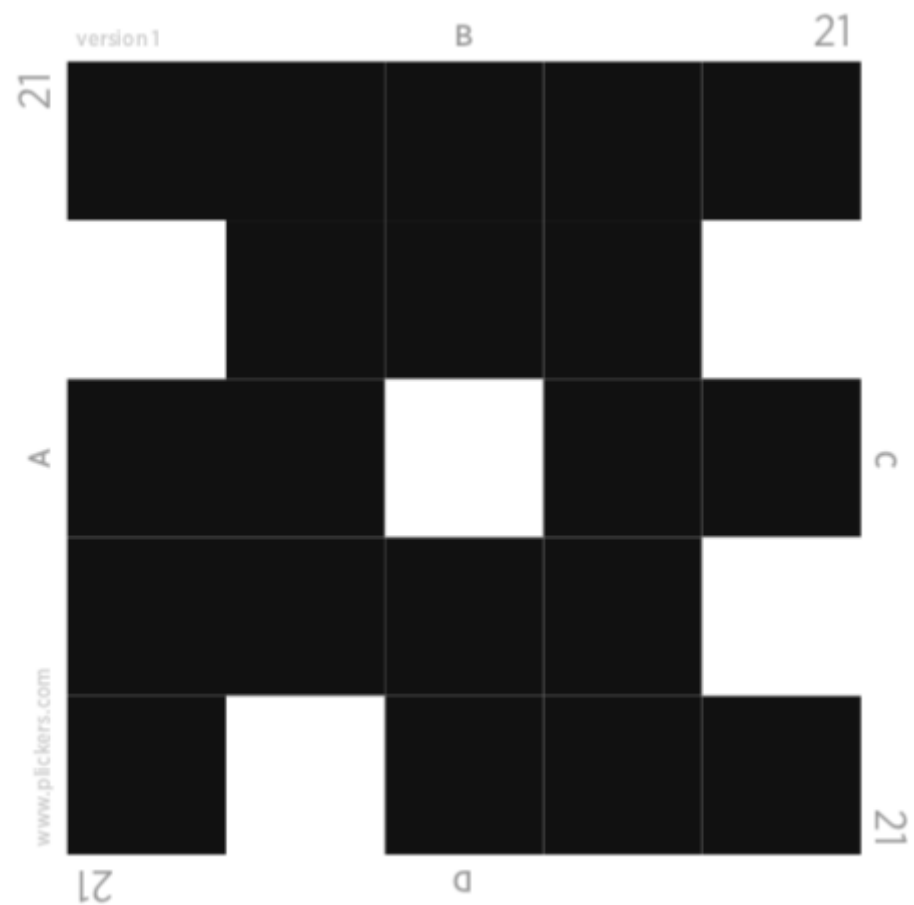


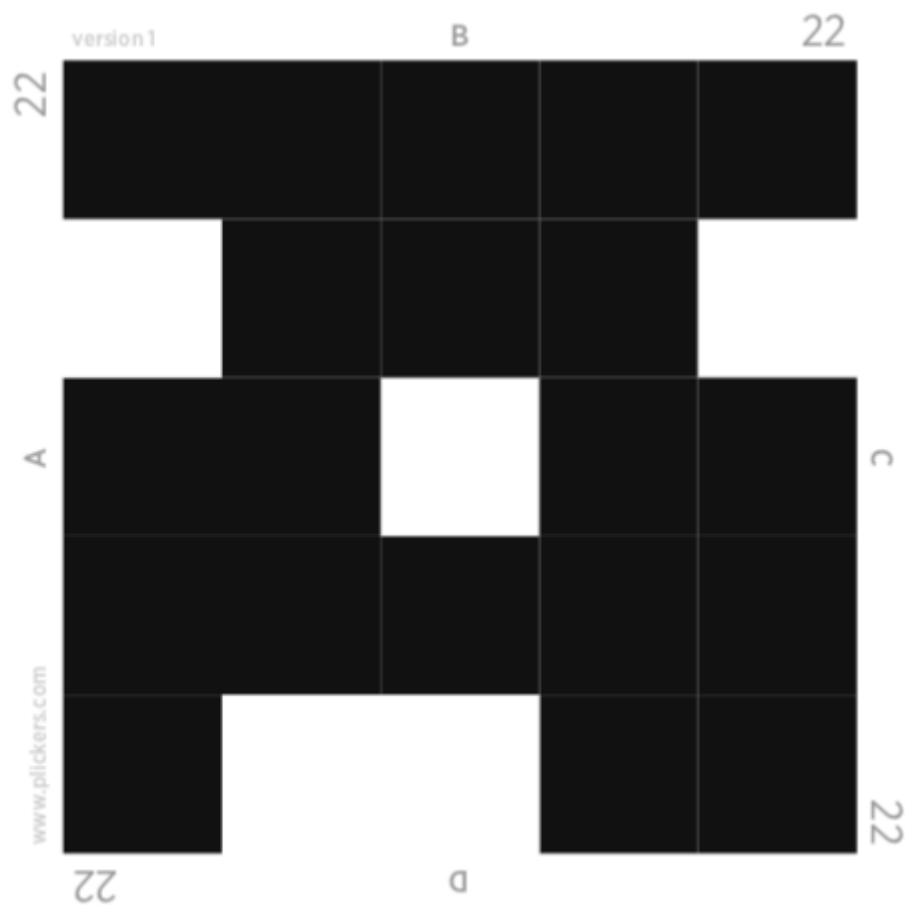


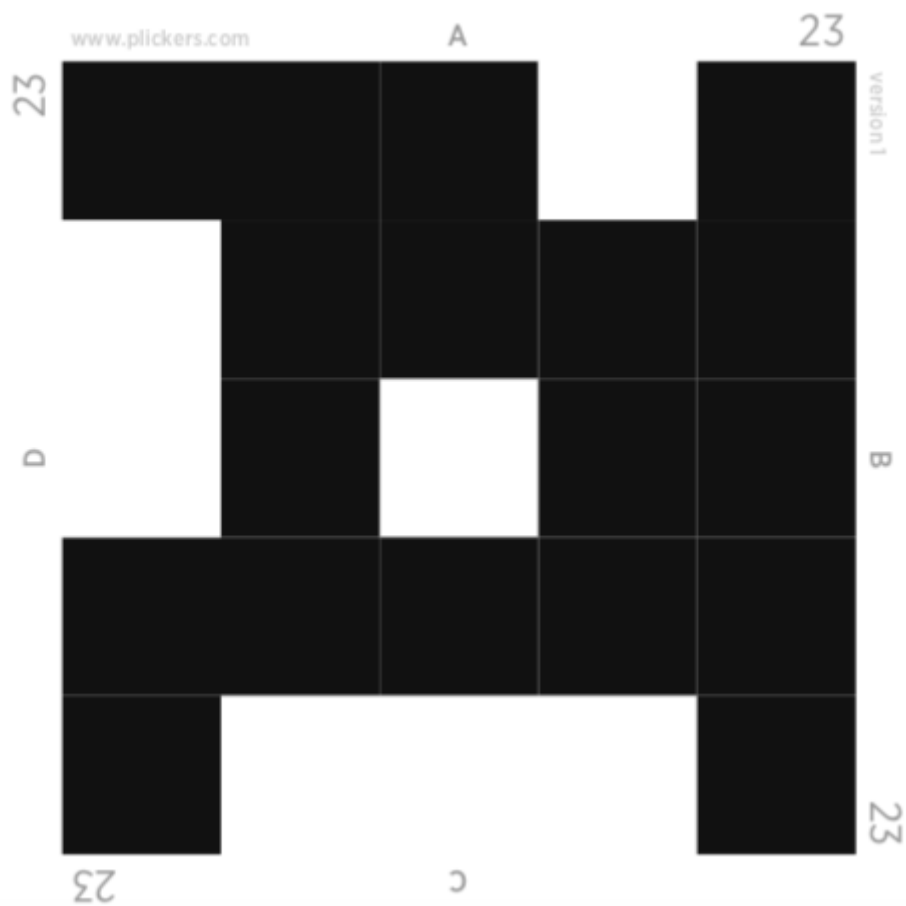


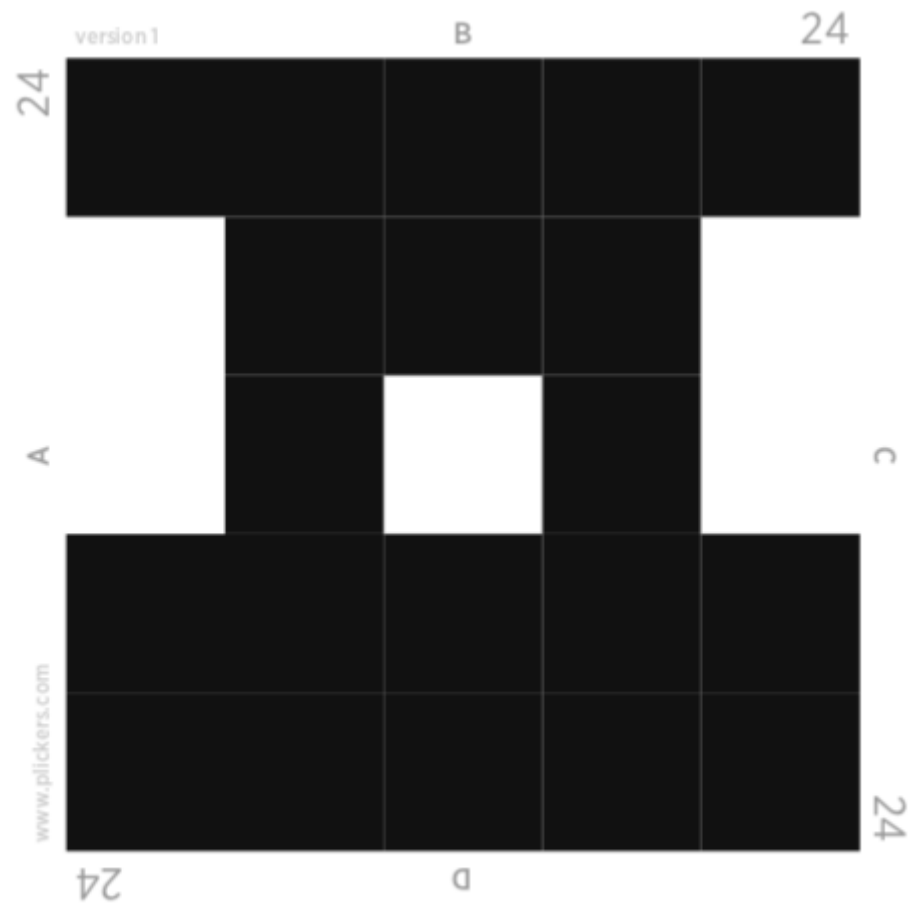


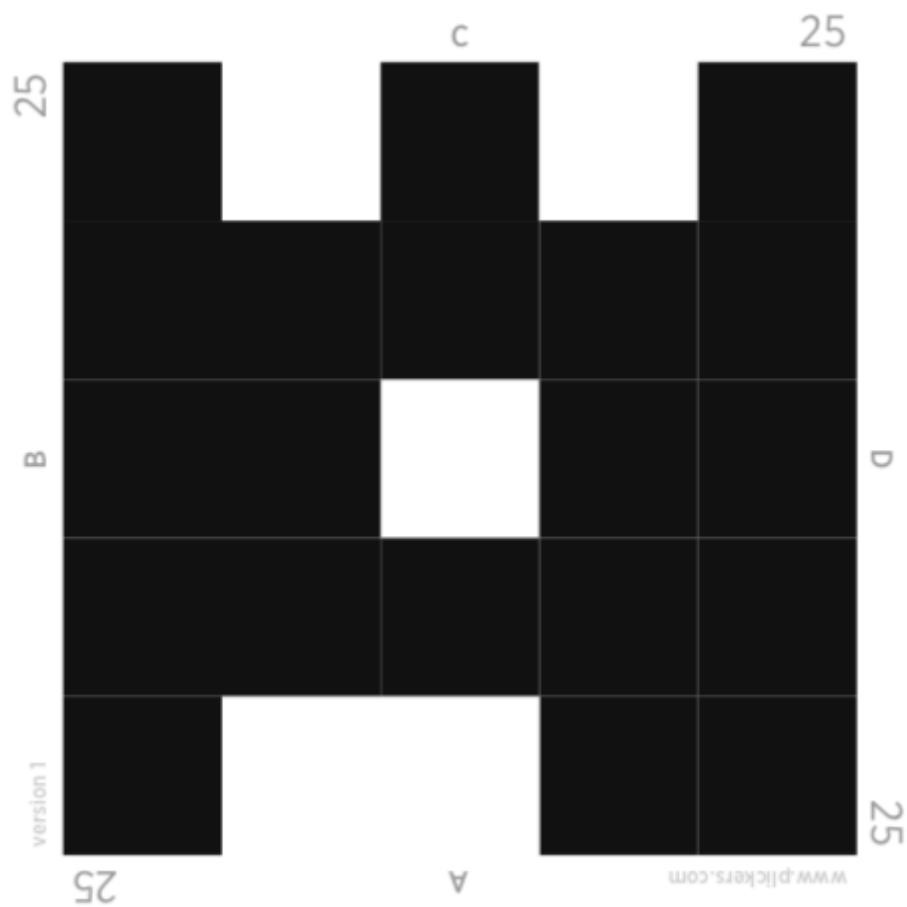


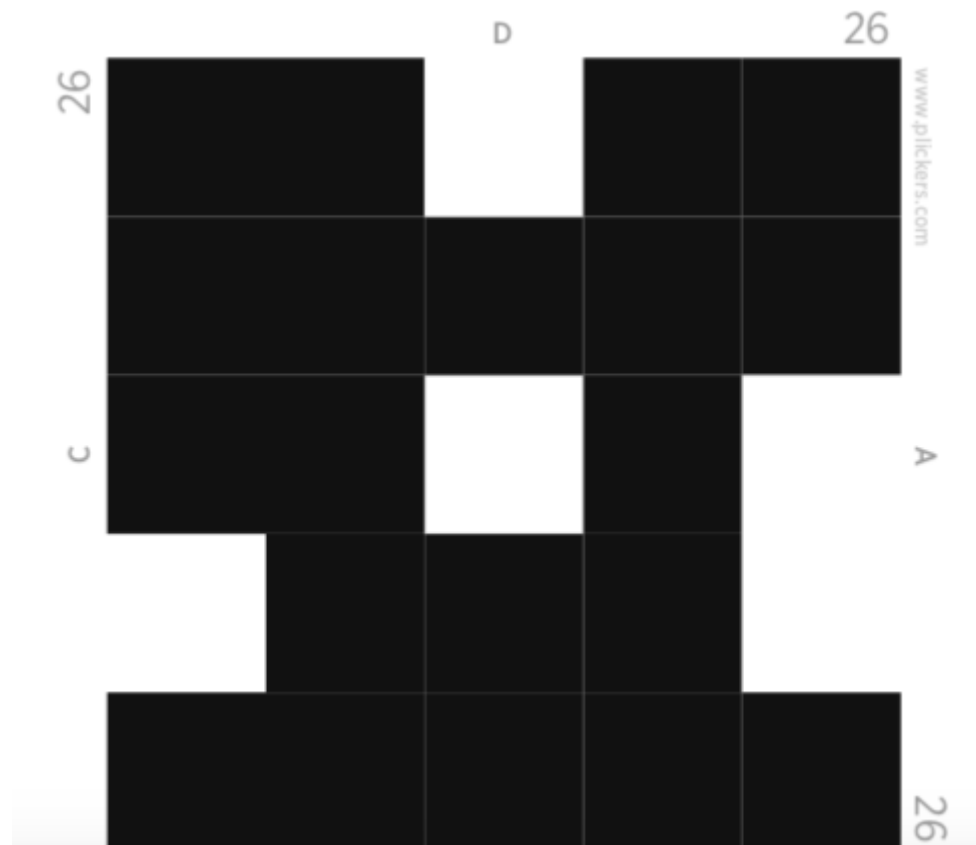


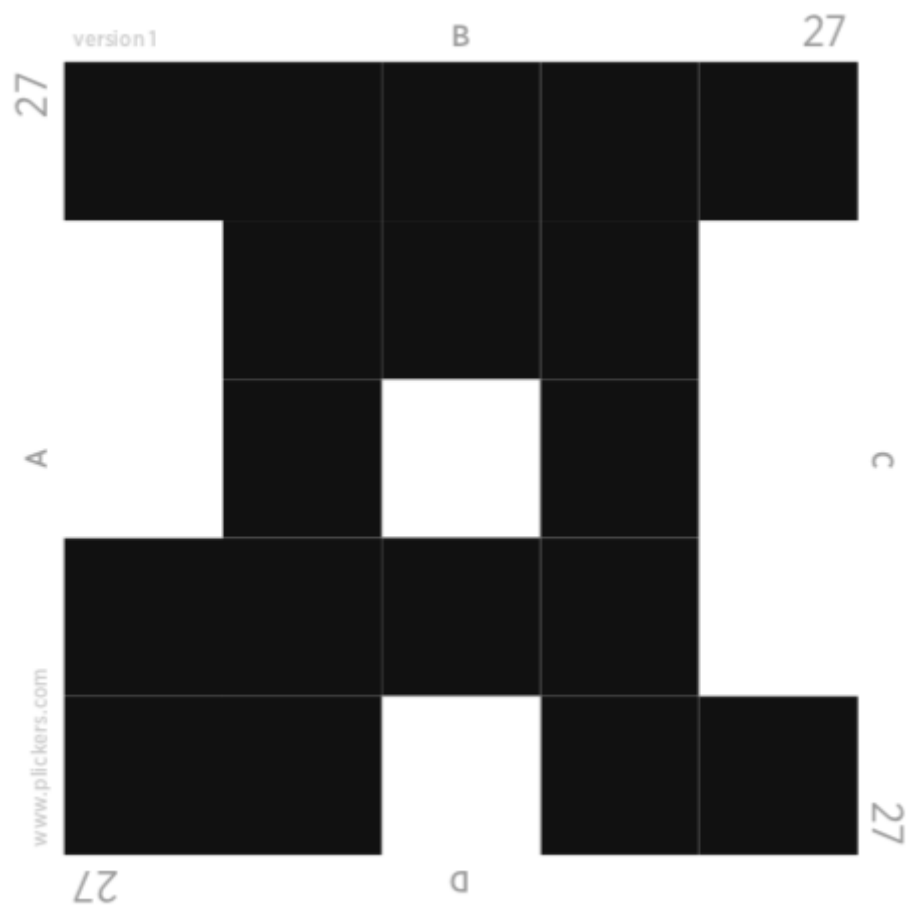












TECHNOLOGY WORKSHEETS

ACTIVITY 0: Introduction and Warm Up (VISUAL and WRITTEN INPUTS)

Mode of interaction

The teacher gives this sheet and learners have to write down basic words to express what all of them have in common

Look at carefully these pictures



A ● -	J ● - - -	S ● ●
B - ● ● ●	K - ● -	T -
C - ● - ●	L ● - ● ●	U ● ●
D - ● ●	M - -	V ● ●
E ●	N - ●	W ● ●
F ● ● - ●	O - - -	X - ●
G - - ●	P ● - - ●	Y - ● ●
H ● ● ● ●	Q - - ● -	Z - -
I ● ●	R ● - ●	

>Π0 FEE3 ΠJV J 0<3L

Código ASCII

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127



ACTIVITY 1: Thinking and talking about coding. (SPOKEN, VISUAL and WRITTEN INPUTS)

Encourage students to discuss their ideas about how coding and decoding work. Motivate them to start thinking about the topic.

Mode of interaction

Individually, each student writes down their answer to a key question. Next, in pairs, students compare and discuss their answers with each other. Finally, we do a short plenary discussion of some of the groups' answers.

Take a look at this ciphers.

```
ⲚⲚⲚⲚ ><ⲚⲚⲚⲚ ⲚⲚ ⲚⲚⲚⲚ>ⲚⲚⲚⲚⲚⲚ ⲚⲚ ⲚⲚ  
ⲚⲚ ⲚⲚⲚⲚⲚⲚ ⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚ ⲚⲚⲚ ⲚⲚ ⲚⲚⲚⲚⲚⲚⲚⲚⲚⲚ  
Ⲛ ⲚⲚⲚⲚⲚⲚ
```

GSV ILLN MFNYVI RH Z NFOGRKOV LU GSIW

and

KYV DLIUVIVIJ ERDV NZCC KVCC PFL R TZKP FW TRKRCFEZR

1. What do you think these three messages mean?
2. Is there any relation between the first message and the second one? And the second with the third?
3. Is it difficult to decipher them?
4. Is there any science that studies these ciphers?
5. Before going further, let's take a look at these flashcards:
https://www.goconqr.com/es/p/17212526-criptografia-flash_card_decks

ACTIVITY 2. Answer Garden

https://answergarden.ch/892444

AnswerGarden

In one word, what is Cryptography?

Type your answer here...

20 characters remaining

Submit

ACTIVITY 3. The Atbash Cipher

The Atbash Cipher is considered one of the easiest ciphers to use. The first letter of alphabet is replaced by the last letter, the second letter is replaced by the second from last, and so on.

Write down your alphabet and below the Atbash Cipher.

Can you decode these two words?

VMRTNZ

ZOTVYZ

If someone wants to intercept your message, how easy would it be for them to decipher the code and read the message?

ACTIVITY 4. The Pigpen Cipher

It is a simple Substitution Cipher that works by replacing each letter of the message with a symbol.

It was the chipper of choice for use by the Freemasons, a secret society in the 18th Century. They substituted each letter of the alphabet with a picture.



Discuss in pairs how the cipher works.

Write a short message of your own using the Pigpen Cipher, and ask the person sitting next to you to decode it.

Is it easy to decode it? Can you think of any ways to make it harder?

ACTIVITY 5. The Caesar Shift

Julius Caesar used a simple Substitution Cipher to send messages to his troops. He replaced each letter by another letter.

Complete the table below:

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
D	E	F																							

Could you encode the name of your school? Compare with the person next to you.

Is it easy to decode it? Can you think of any ways to make it harder?

With the Caesar Shift wheel, write a short message. Give the message to your partners and get them decipher it.

Debate: In groups, then in four persons and then all the class, discuss how good or bad this cipher is at protecting messages.

ACTIVITY 6. Polybius Square

Using the grid below, can you encipher the message?

We will save Alan Turing

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I/J	K
3	L	M	N	O	P
4	Q	R	S	T	U
5	V	W	X	Y	Z

Is it easy to decode it?

How could we make the cipher better?

ACTIVITY 7. CLUEDO: Murder in INS d'Auro

A murder has been committed in INS d'Auro High School. Your job is to decode the clues to find the identity of the murderer, the murder weapon and the room in which the murder took place.

The seven suspects are:

Miss de Haro Mr Capdevila Mr Prat Miss Prat
 Miss Valls Miss Ventura Miss Pano

The possible murder weapons are:

Compass Chair Scissors Textbook Table Ruler

The room in which the murder was committed could be:

Laboratory 003 007 108 202 303 308 Bathroom

Code 1: Pigpen

Try to decode the following messages:



>no f e e e e n j v j 0 < 3 u o f

Code 2: Polybius Square

	1	2	3	4	5
1	A	B	C	D	E
2	F	G	H	I	J
3	K	L	M	N	O
4	P	Q	R	S	T
5	U	V	W	X	Y/Z

(4,5)(2,3)(1,5) (3,3)(5,1)(4,3)(1,4)(1,5)(4,3)(1,5)(4,3) (1,4)(3,5)(1,5)(4,4)(3,4)(4,5)
 (2,3)(1,1)(5,2)(1,5) (1,1)(3,4) (1,5) (2,4)(3,4) (4,5)(2,3)(1,5)(2,4)(4,3)
 (3,4)(1,1)(3,3)(1,5)

Code 3: Letters-numbers

20,8,5 13,21,18,4,5,18 23,1,19,14,20 9,14 1 16,18,9,13,5 14,21,13,2,5,18,5,4
 18,15,15,13

Code 4: Look at the image below:



8430687337093276603637680428302074277063825072780

ACTIVITY 8. Answer Garden

<https://answergarden.ch/892446>

AnswerGarden

What do you think a Cryptex is?

Type your answer here...

20 characters remaining

Submit

ACTIVITY 9. The fish bowl

PAPER 1 (THE EXPERT)

The student is going to explain what a cryptex is for him/her and where it comes from.

PAPER 2 (INTERVIEWER 1)

The interviewer 1 is going to make some questions whenever he/she wants and according the expert explanations.

- *Have you ever seen a cryptex? If the answer is yes, could you find the message hidden inside?*
- *Which are the parts of a cryptex?*
- *Why was so important to decode in the Second World War?*
- *Can you explain how cryptex works?*
- *Invent a question!*

PAPER 3 (INTERVIEWER 2)

The interviewer 2 is going to make different questions whenever he/she wants and according the expert explanations.

- *Which relation is there between the Enigma machine and the Cryptex?*
- *Why was Alan Turing so important?*
- *Can you explain the relation between maths and coding/decoding?*
- *Do you think we live in an encoded society?*
- *Invent a question!*

ACTIVITY 10. Let's build a Cryptex

Design and construction of our own Cryptex. It will be used in the Escape Room