



Escape Room EDU Teacher Instructions



Print out all of the level cards



Make copies of the recording sheet for each student or group
– **Print answer key to check student answers**



Digital Escape room: <http://bit.ly/2mZH2vc>



[Click here](#) for a Force copy of the Google Form. You will be able to change the settings to collect student responses (e-mails).



Escape Room for Teams:

Version 1: Place each level at different stations – Requires each team to cycle at predetermined times

Version 2: Place all levels at each station – Requires students to remain at one station



Escape Room for Individual Students:
– **Each student receives all levels**





Escape Room EDU

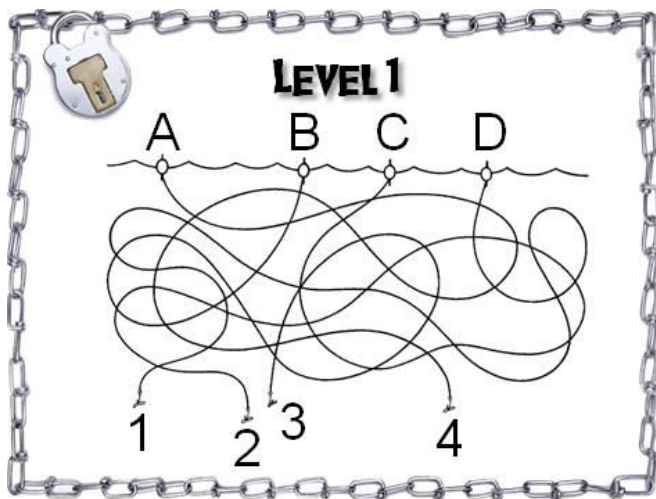
Decoding the Puzzles



How to solve Level 1



Students first solve the answer to the 4 multiple choice questions
Students then use the A, B, C, D answers with the decoder for that level



- The answers to level 1, in order, are **BDAC**
- Using these answers with the **Level 1** puzzle:
 - **B** leads to **3**
 - **D** leads to **1**
 - **A** leads to **4**
 - **C** leads to **2**
- If you put these in the same order it becomes **3142**, which is the code for level 1.



Escape Room EDU FAQ



My school's internet does not allow me to use shortened links.

Long Link:

https://docs.google.com/forms/d/e/1FAIpQLSf2G8UQX5ghHr44rg_5TrJX4ClnTIU0h_D0bZWpg6UJYwYRew/viewform



How can I see what they did based off the Google form?

Answer: You can't. Students must input the correct answer to move on.



Are electronic devices needed to complete this activity?

Answer: No, this can be done without a device



Does this require Google Classroom?

Answer: No, just access to the internet



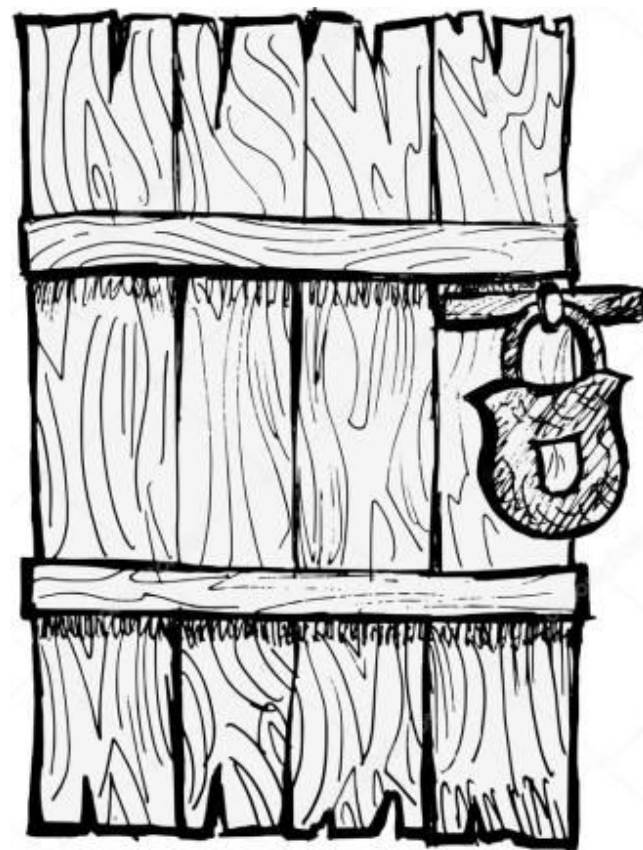
How long does this take to set up?

Answer: Hardly any time at all; just print the Question cards, Level cards and recording sheet, the Google form is already ready to use



ESCAPE ROOM EDU

NAMING IONIC COMPOUNDS



Digital Link: <http://bit.ly/2mZH2vc>



Mission Objective

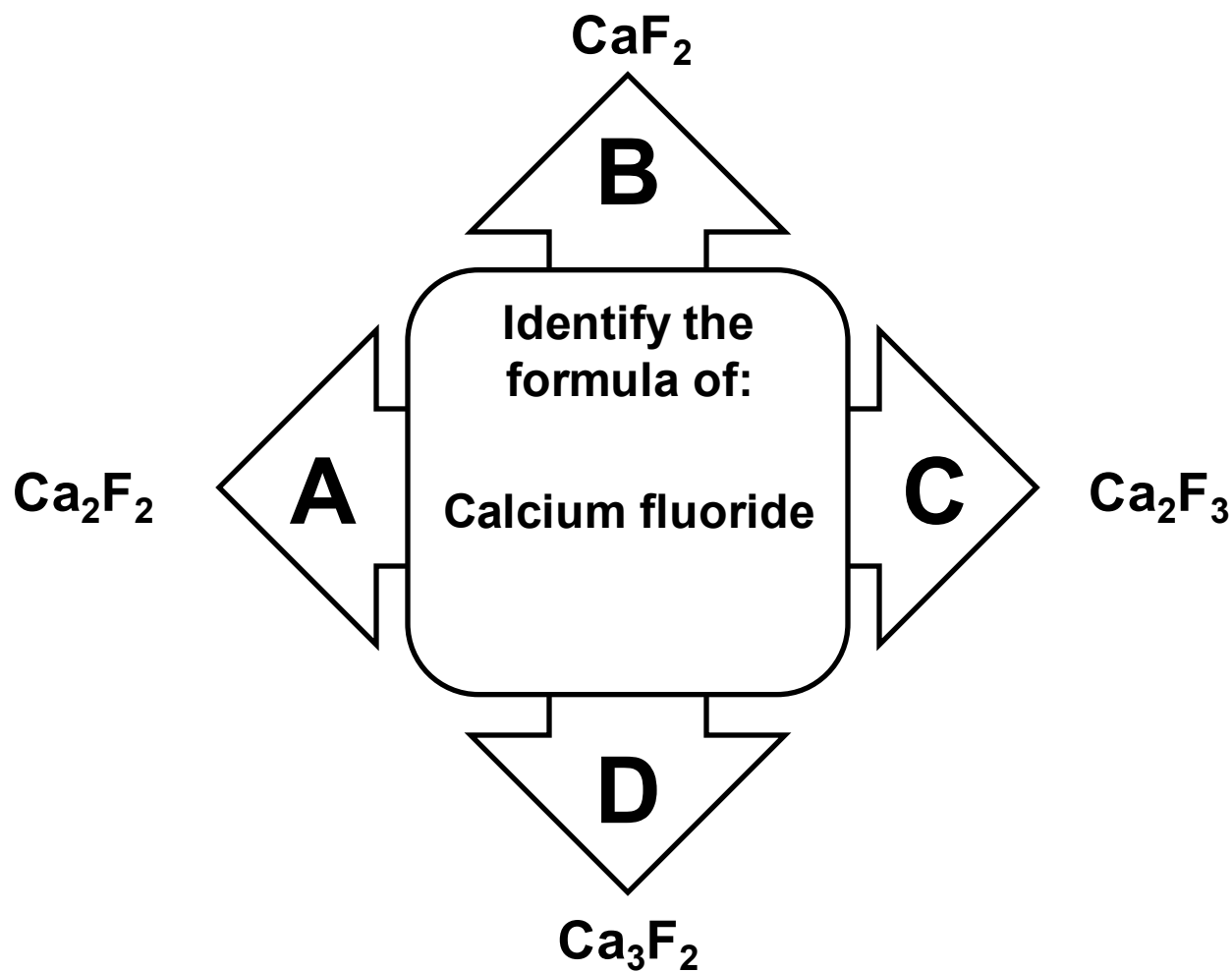
A MAD CHEMIST TRAPPED YOUR WHOLE CLASS IN THE CLASSROOM. IN ORDER TO ESCAPE, YOU MUST USE YOUR KNOWLEDGE OF IONIC COMPOUNDS TO CONVINCE HIM TO LET YOU GO. ANSWER THE QUESTIONS AT EACH LEVEL AND BE SURE TO RECORD EACH ANSWER. ONCE ALL LEVELS ARE COMPLETE, YOU CAN BREAK OUT AND SAVE THE DAY. YOU MUST HURRY AND ESCAPE BEFORE YOU REMAIN TRAPPED IN CHEMISTRY CLASS FOREVER!





LEVEL 1

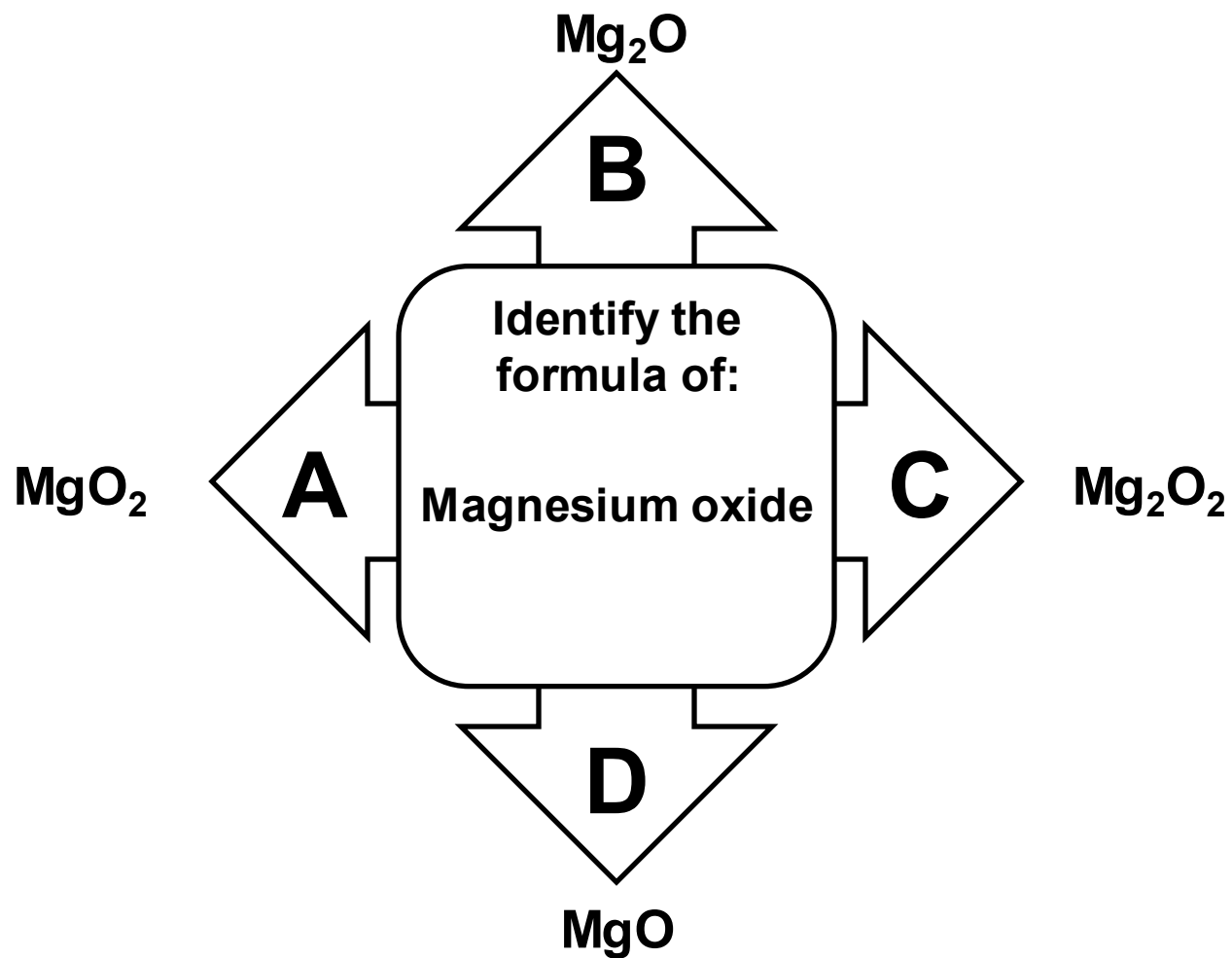
Q1





LEVEL 1

Q2





LEVEL 1

Q3

Calcium hydroxide

B

Identify the
name of:



D

Calcium dihydroxide

Calcium hydride

A

C

Calcium dihydride



LEVEL 1

Q4

Sodium trinitride

B

Identify the
name of:



A

Trisodium nitride

C

Sodium nitride

D

Sodium (III) nitride



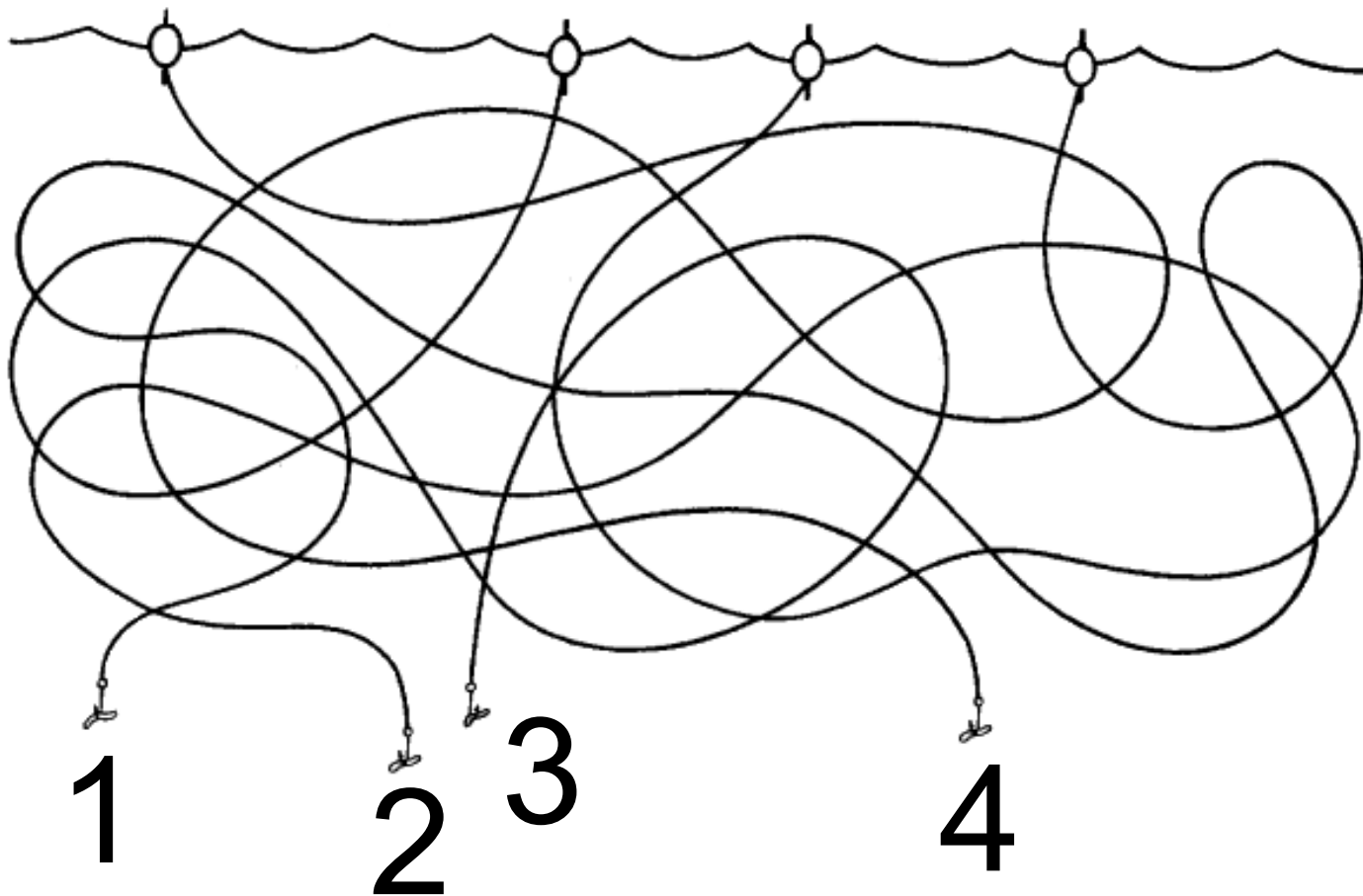
LEVEL 1

A

B

C

D





LEVEL 2

Solve each problem and write the matching letter on the blank above the answer.

S Iron (III) oxide

D Lead (IV) oxide

I Lead (II) Oxide

U Iron (I) Oxide

H Iron (III) hydroxide

T Iron (IV) oxide

R Iron (II) Oxide

G Lead (I) Oxide

O Lead (II) hydroxide

N Iron (I) hydroxide

A Lead (III) hydroxide

PbO

FeO₂

Fe(OH)₃

Pb(OH)₃

FeOH

Pb₂O

Fe₂O₃

Pb(OH)₃

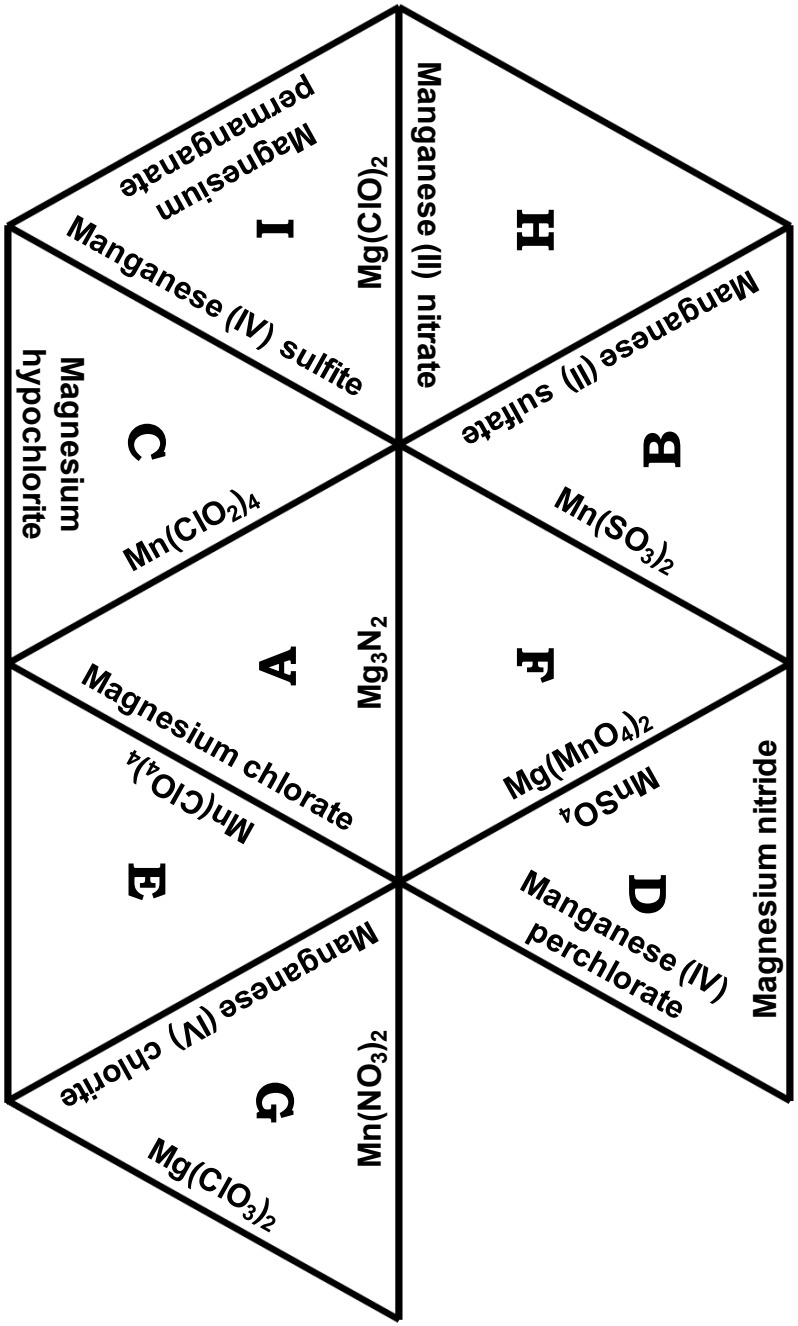
FeO


Pb(OH)₂

Fe₂O

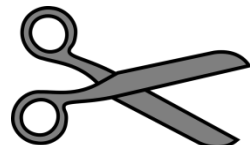
FeOH

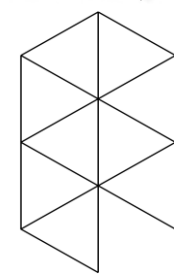
PbO₂





LEVEL 3

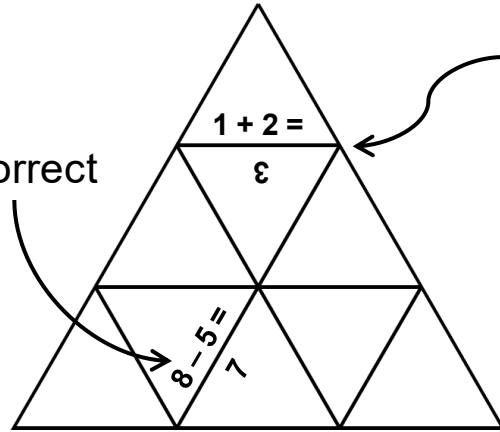


1.  apart.

2. Solve the 9 problems.

3. Build a triangle so that each edge has the same answers facing each other.

Incorrect



Correct



MAKE YOUR ESCAPE!

NAMING IONIC COMPOUNDS

Name _____

Digital Link: bit.ly/2mZH2vc

LEVEL 1

Codes Answers

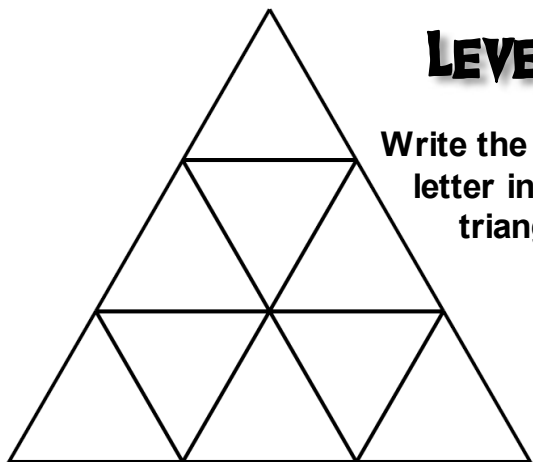
Q1	Q2	Q3	Q4
Digit 1	Digit 2	Digit 3	Digit 4

LEVEL 2

What does a wall clock do after it stops ticking?

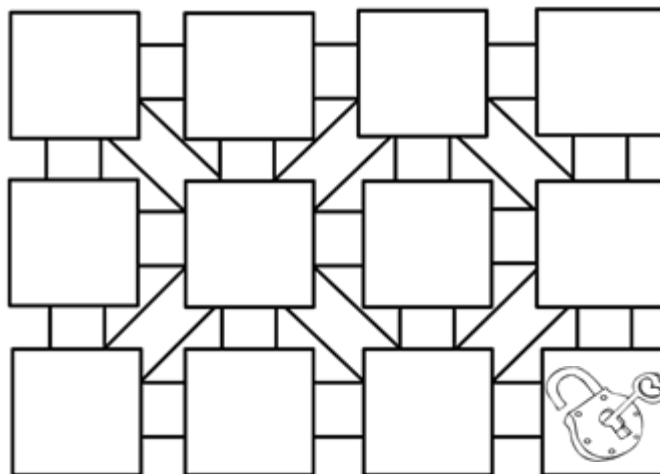
LEVEL 3

Write the correct letter in each triangle



LEVEL 4

Write the correct pathway of letters to the finish line
Draw arrows between each box



CONGRATULATIONS,
YOU ESCAPED!

KEY: NAMING IONIC COMPOUNDS

LEVEL 1

Codes Answers

B Q1	D Q2	A Q3	C Q4
3 Digit 1	1 Digit 2	4 Digit 3	2 Digit 4

LEVEL 2

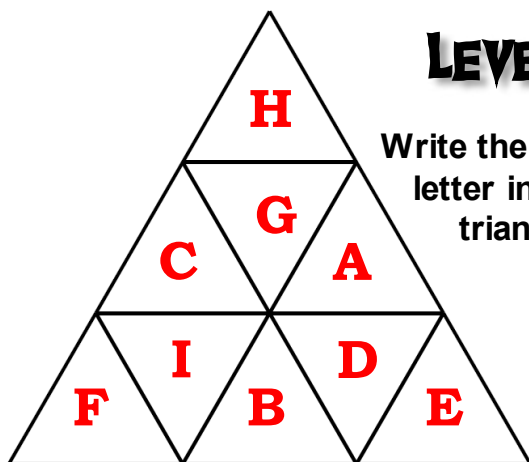
What does a wall clock do after it stops ticking?

I T H A N G S

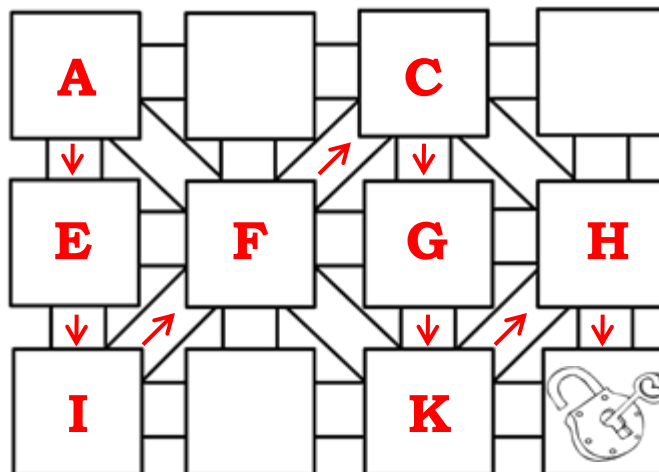
A R O U N D

LEVEL 3

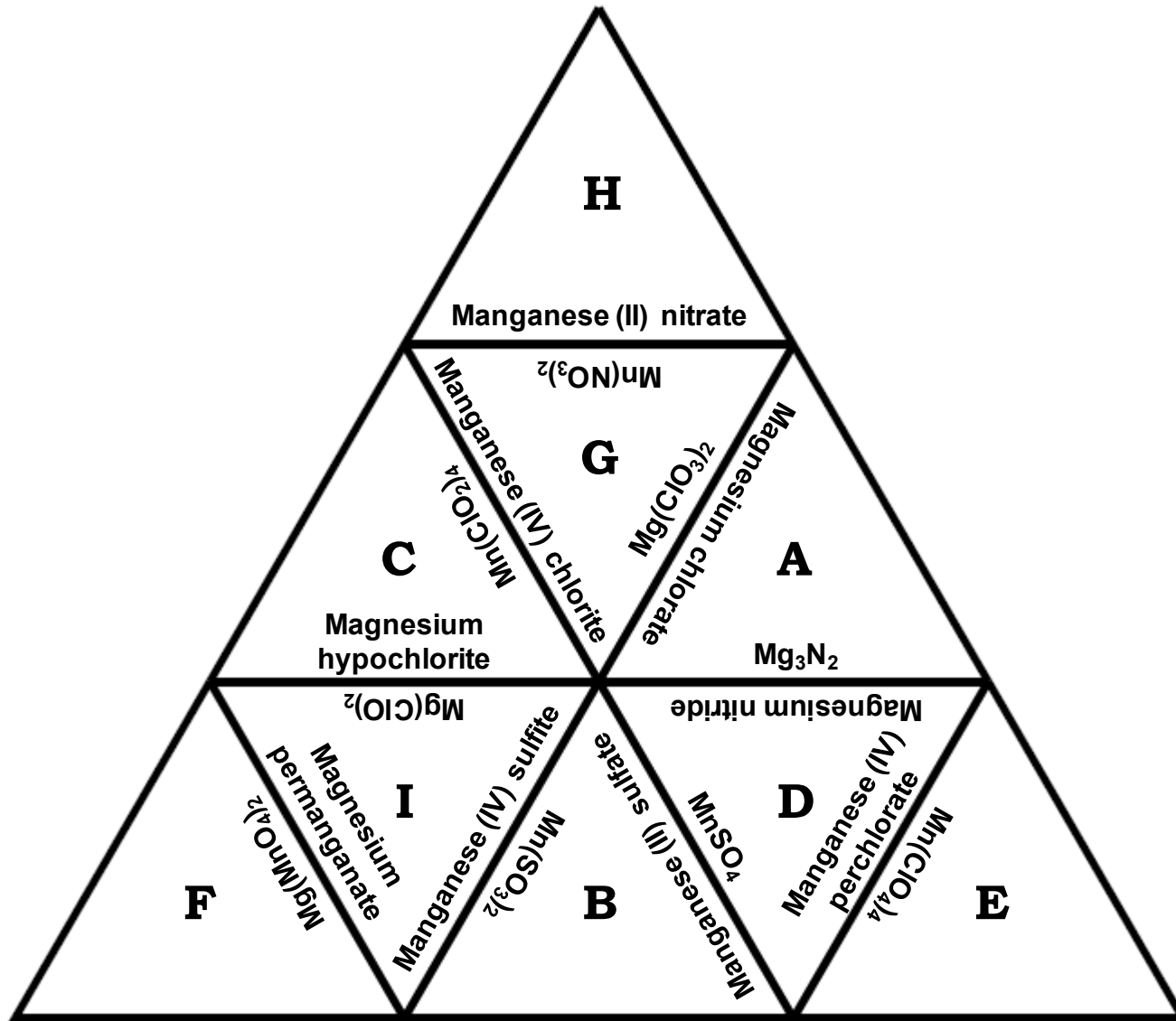
Write the correct letter in each triangle



LEVEL 4



Tarsia Puzzle Key





Polyatomic Ions:

$\text{C}_2\text{H}_3\text{O}_2^-$ $\text{C}_2\text{H}_3\text{COO}^-$	Acetate	ClO^-	Hypochlorite
CO_3^{2-}	Carbonate	NO_3^-	Nitrate
ClO_3^-	Chlorate	NO_2^-	Nitrite
ClO_2^-	Chlorite	ClO_4^-	Perchlorate
CrO_4^{2-}	Chromate	MnO_4^-	Permanganate
CN^-	Cyanide	PO_4^{3-}	Phosphate
$\text{Cr}_2\text{O}_7^{2-}$	Dichromate	SO_4^{2-}	Sulfate
OH^-	Hydroxide	SO_3^{2-}	Sulfite



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