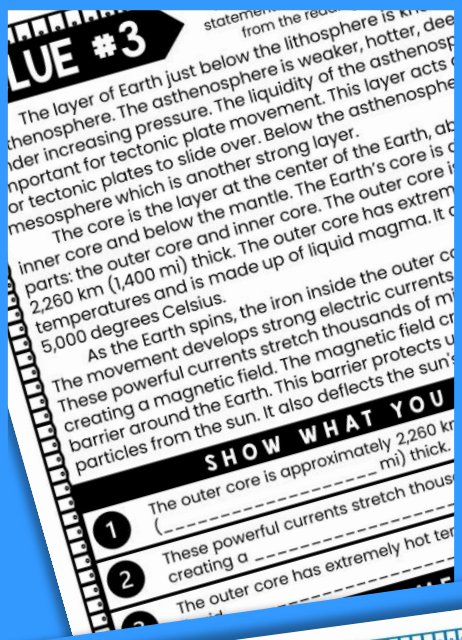
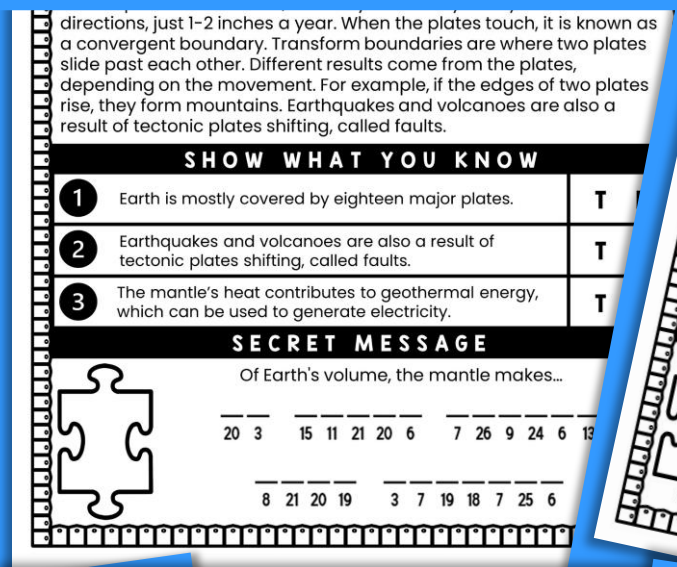
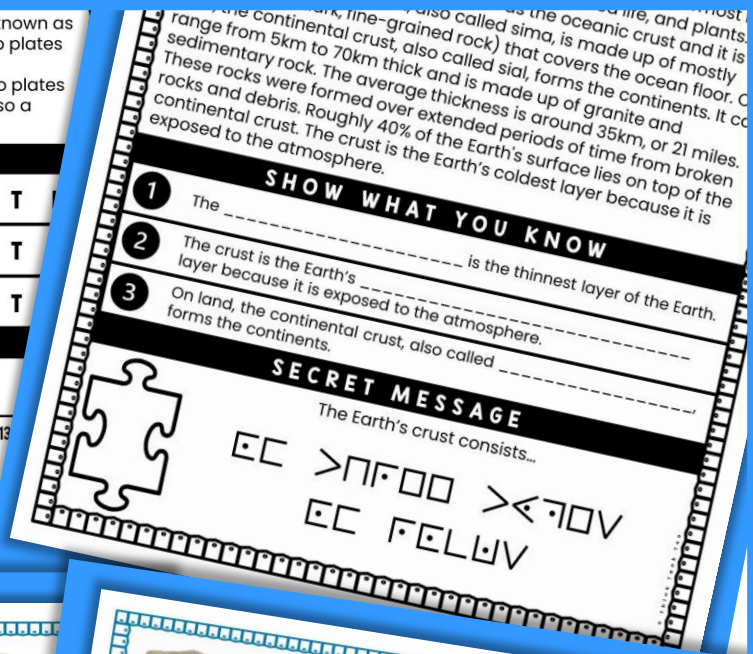
EARTH'S LAYERS

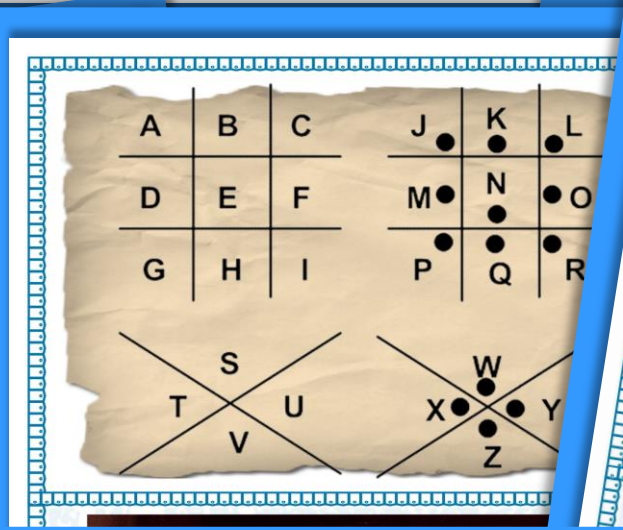
ESCAPE ROOM

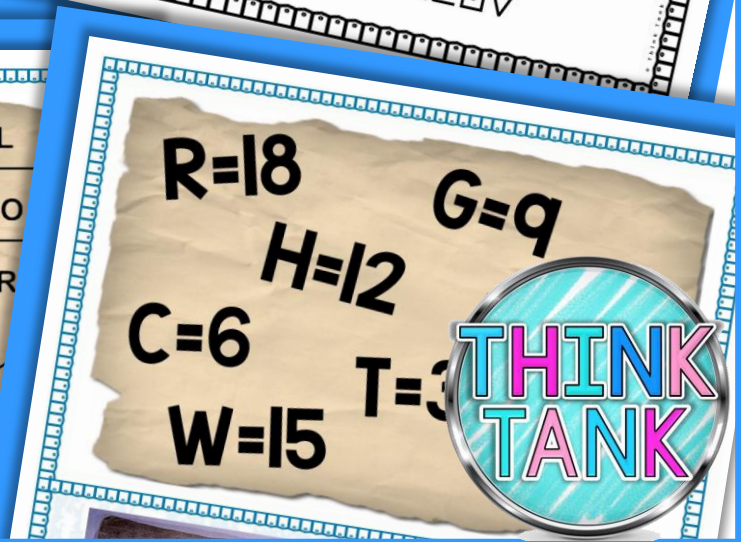








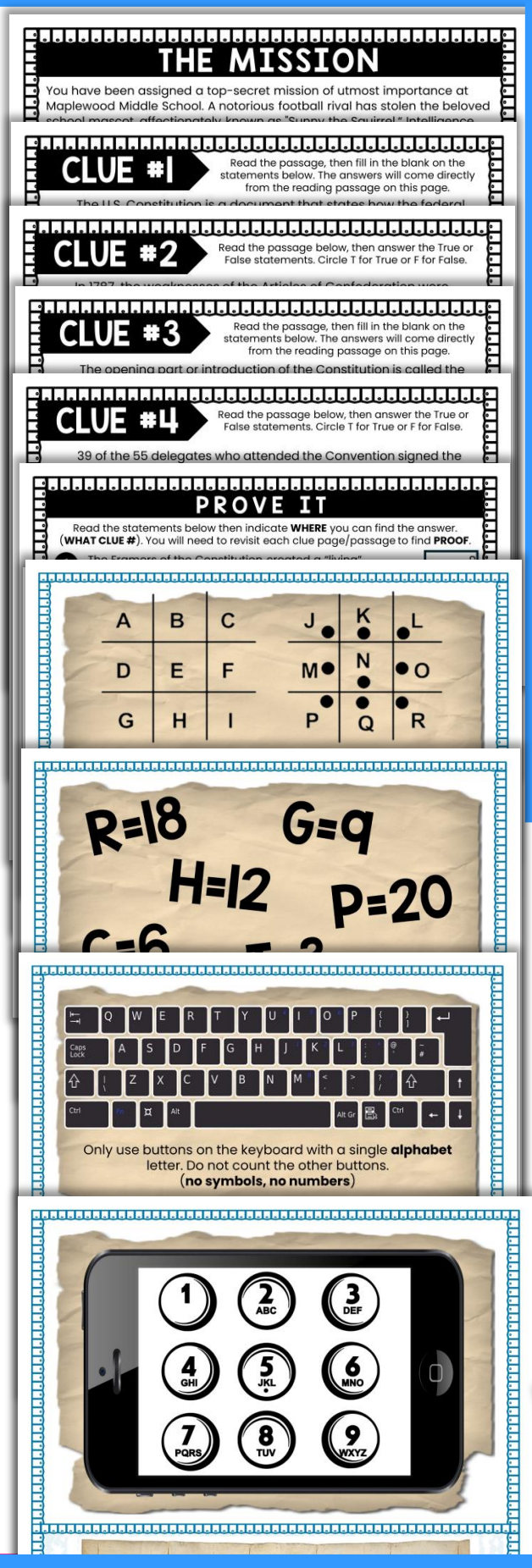


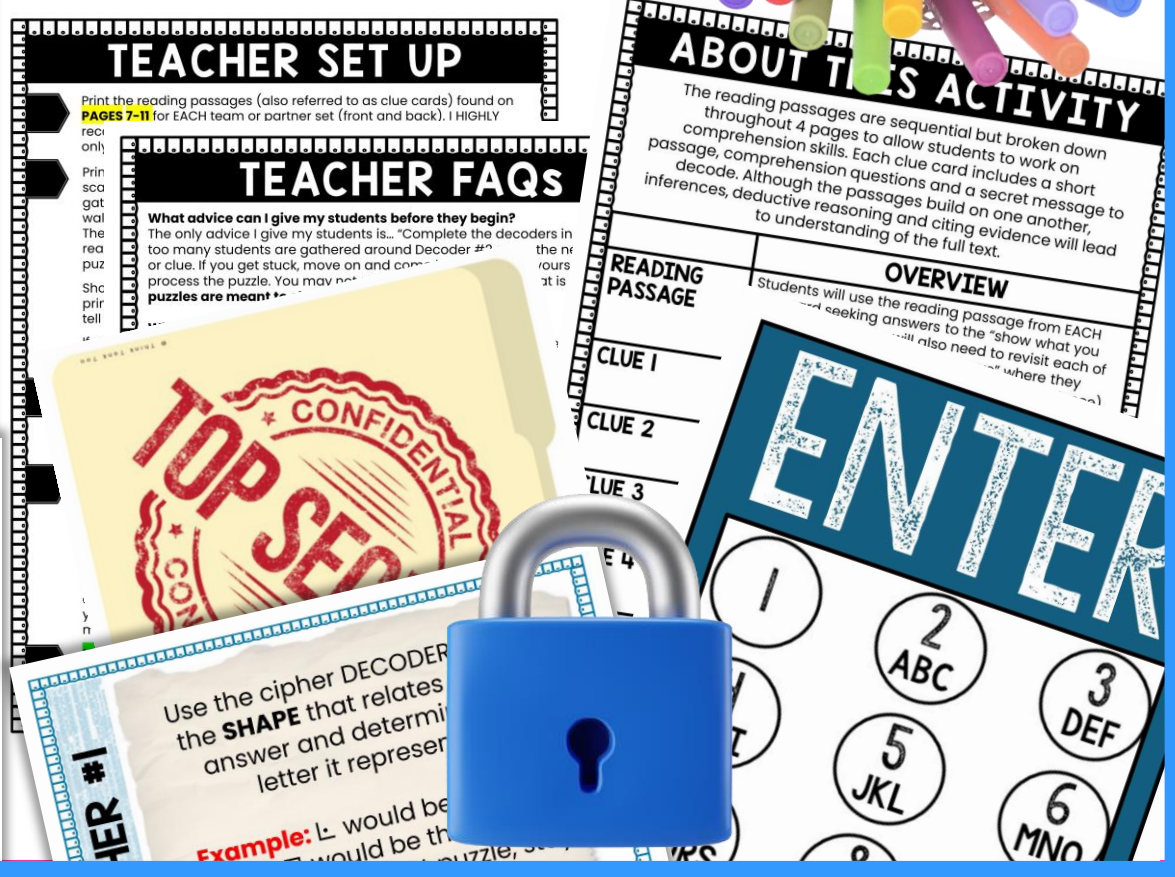


WHAT'S INCLUDED?

- 4 SHORT READING PASSAGES
- 4 PUZZLE DECODERS (UNLABELED)
- 4 PUZZLE DECODERS (LABELED)
- 18 COMPREHENSION QUESTIONS
- TEACHER SET UP
- STUDENT DIRECTIONS
- HINT CARDS
- FAQS
- ANSWER KEY
- PROP SIGNS







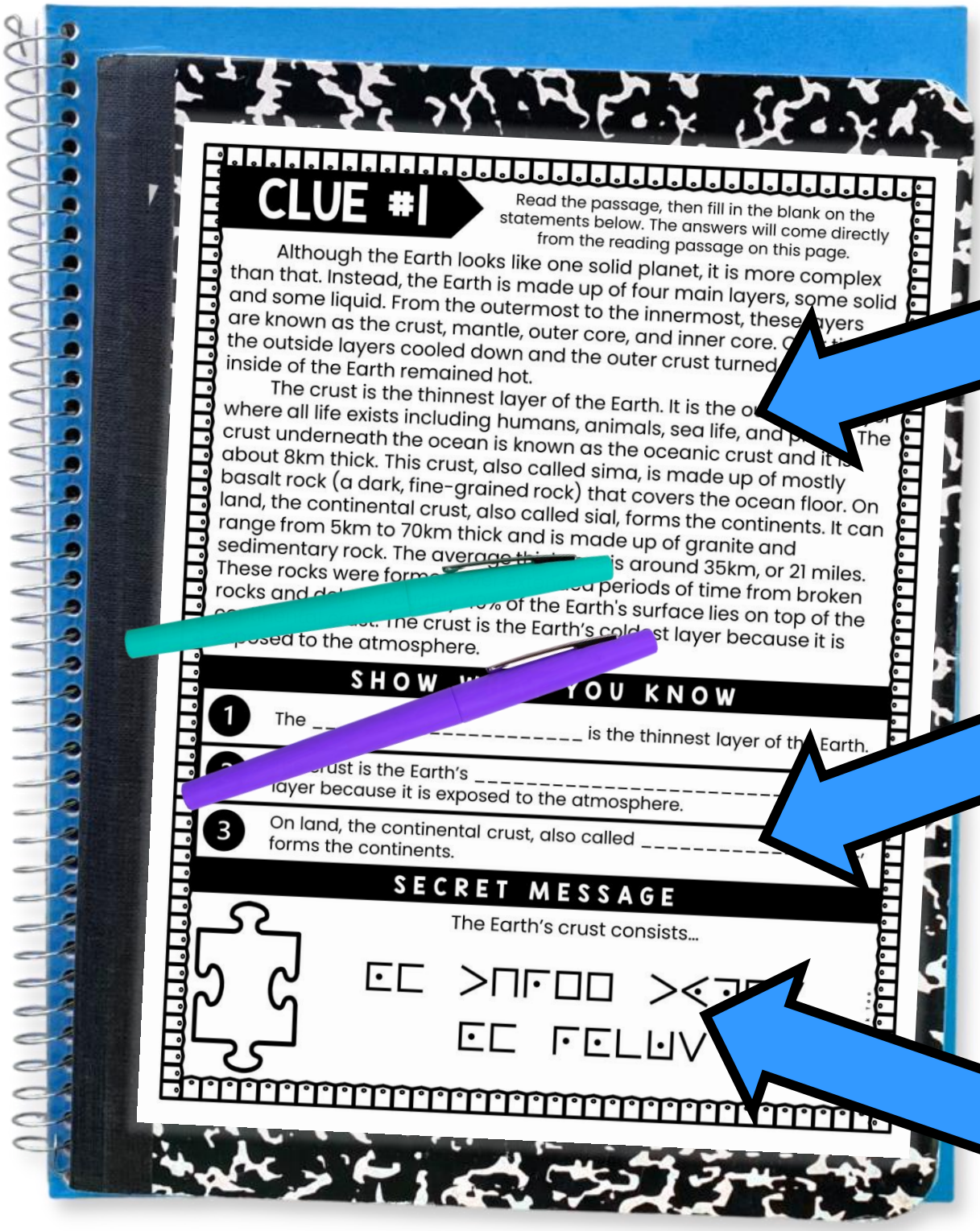
4 CLUE CARDS


CLUE #1
Although the Earth looks like one solid planet, it is more complex than that. Instead, the Earth is made up of four main layers, some solid and some liquid. From the outermost to the innermost, these layers are known as the crust, mantle, outer core, and inner core. Over time, the outside layers cooled down and the outer crust turned hard. The inside of the Earth remained hot.
SECRET MESSAGE
CLUE #2
The mantle is the next layer. It is much thicker than the crust and is about 1800 miles deep. The mantle is composed of melted iron, minerals, and other semi-solid rocks that flow under pressure. This flow is due to a large temperature difference between the bottom and the top of the mantle. The mantle is the heaviest layer and m
most of the Earth's weight
rich in iron and magnes
geothermal energy, wh
The lithosphere i
Where those two
mostly covered
broken pieces
directions, jus
a convergen
slide past e
depending
rise, they f
result of t
KNOW
Earthquakes and volcanoes
tectonic plates shifting, called faults.
The mantle's heat contributes to geothermal energy, which can be used to generate electricity.
SECRET MESSAGE
Of Earth's volume, the mantle makes...
20 3 15 11 21 20 6 7 26 9 24 6
8 21 20 19 3 7 19 18 7 25 6
SHOW WHAT YOU KNOW
Lehmann's hypothesis was proven that same year.
Most scientists originally believed the core was made up of seven layers.
The inner core is the center of the Earth, made up of mostly solid iron.
SECRET MESSAGE
Of Earth's total mass, the inner core makes
2 22 666 88 8
8 9 666
7 33 777 222 33 66
CLUE #3
SHOW WHAT YOU KNOW
The outer core is approximately 2,260 km (_____ mi) thick.
These powerful currents stretch thousands of miles into space creating a _____ field.
The outer core has extremely hot temperatures and is made up of liquid _____.
SECRET MESSAGE
Earth's magnetic field strength was measured by Carl Gauss in...
1-3 1-8 2-5 2-6 1-5 1-3 1-3 3-6
3-6 1-8 1-4 1-5 1-6

4 DECODERS


D E P
G H I
W Y
X Z
S U
T V
B=11 G=9
R=19 U=20
Eurasian Plate
North American Plate
Caribbean Plate
Arabian Plate
Juan de Fuca Plate
African Plate
Filipino Plate
Cocos Plate
EQUATOR
Nazca Plate
South American Plate
Pacific Plate
Scotia Plate
Australian Plate
Antarctic Plate
Only use buttons on the keyboard with a single alphabet letter. Do not count the other buttons.
(no symbols, no numbers)
3-5 = B
continental crust
oceanic crust
asthenosphere
lithosphere
mantle
2900 km
outer core (liquid)
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ

READ & THINK



READ THE PASSAGE

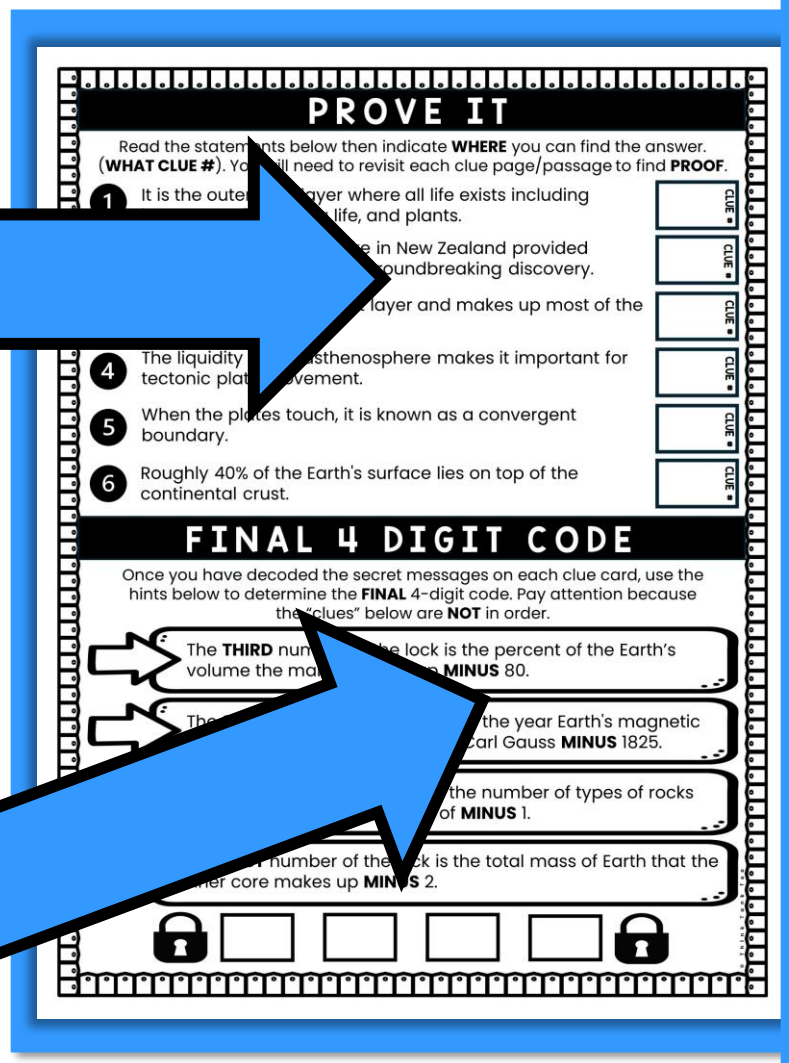
SHOW WHAT YOU KNOW

DECODE THE MESSAGE

FINAL CODE

CITING TEXT EVIDENCE

Students will read the final code statements then PROVE WHERE they found the answer (CLUE #). This will ensure that students read and revisit the reading passages multiple times seeking text evidence.



CRITICAL THINKING

Students will use critical thinking skills to decode the secret messages. They will then use the information revealed in the message to determine the final 4-digit code.



HOW IT WORKS







ENGAGING READING COMPREHENSION PRACTICE!

1. There are 4 clue cards and 4 puzzle decoders. Each clue card includes a short reading passage, questions to check for understanding, and a secret message to decode.

2. Students will work in pairs (or individually) and race to complete all 4 clue cards. A friendly competition always increases engagement. As students progress through the escape room, they will earn "clues" to determine the final 4-digit code. The final code is also a puzzle!



PRINT & GO



ABOUT THIS ACTIVITY

The reading passages are sequential but broken down throughout 4 pages to allow students to work on comprehension skills. Each clue card includes a short passage, comprehension questions and a secret message to decode. Although the passages build on one another, inferences, deductive reasoning and citing evidence will lead to understanding of the full text.

	OVERVIEW
READING PASSAGE	Students will use the reading passage from EACH clue card seeking answers to the "show what you know" portion. They will also need to revisit each of the 4 clue card passages to "prove" where they found the answer for the final code (text evidence)
CLUE 1	Students will read the passage, answer 3 fill in the blank questions, and reveal a secret message using a puzzle decoder.
CLUE 2	Students will read the passage, answer 3 True False questions, and reveal a secret message using a puzzle decoder.
CLUE 3	Students will read the passage, answer 3 fill in the blank questions, and reveal a secret message using a puzzle decoder.
CLUE 4	Students will read the passage, answer 3 True or False questions, and reveal a secret message using a puzzle decoder.
FINAL CODE	As students progress through the escape room, they will decode "clues" to determine the final 4-digit code. The final code is also a puzzle! In order to "escape" students must present correct answers for EVERY question as well as the decoded secret messages and final 4-digit code.

© Think Tank Too

BENEFITS

- ✅ PRINT & GO
- ✅ CLOSE READING
- ✅ COMPREHENSION SKILLS
- ✅ SECRET CODES
- ✅ CITING EVIDENCE
- ✅ CRITICAL THINKING
- ✅ MOVEMENT
- ✅ ACTIVE LEARNING
- ✅ CROSS-CURRICULAR
- ✅ HIGHLY ENGAGING
- ✅ NO LOCKS NEEDED
- ✅ NO ENVELOPES TO STUFF
- ✅ NO ODD SHAPES TO CUT

Everything a teacher dreams of wrapped up into one FUN and engaging activity!



USE FOR



ANTICIPATORY SETS

UNIT REVIEW

EARLY FINISHERS

STATIONS

REWARD ACTIVITY

SUB PLANS

COLLABORATION

ENRICHMENT

GALLERY WALK