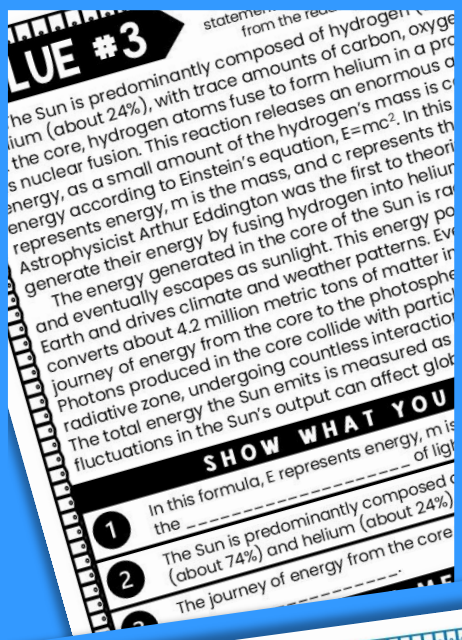
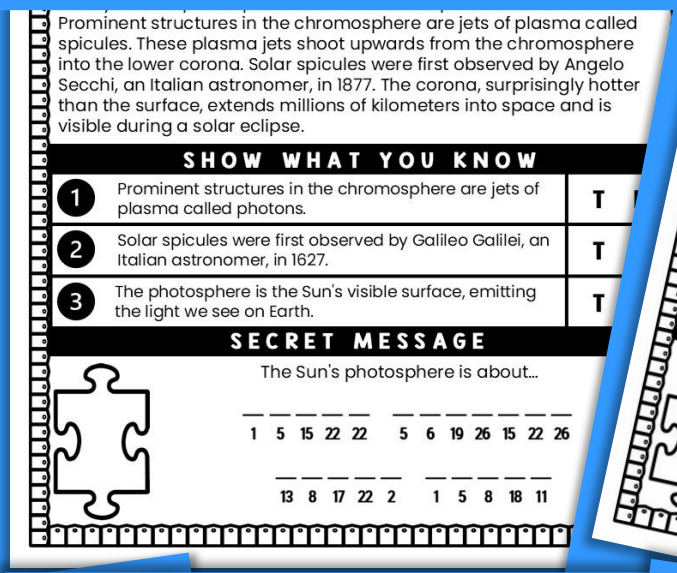
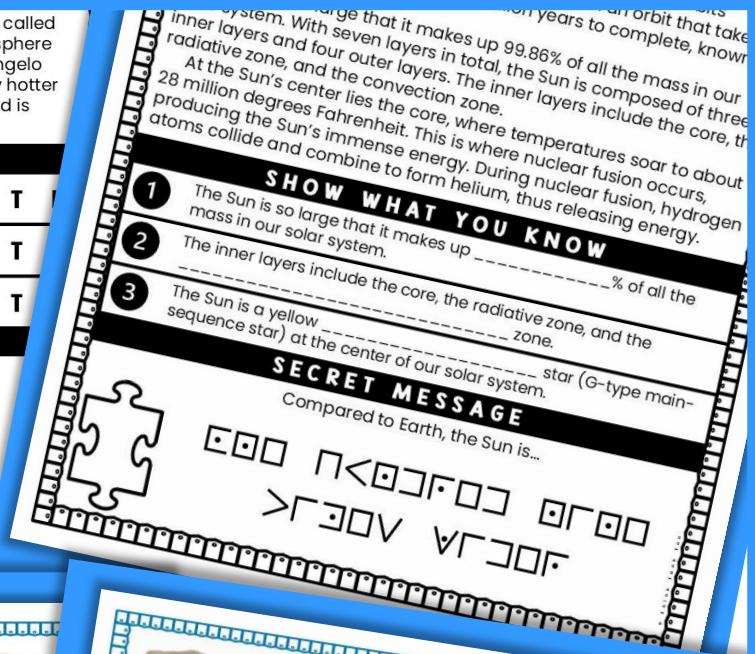
THE SUN

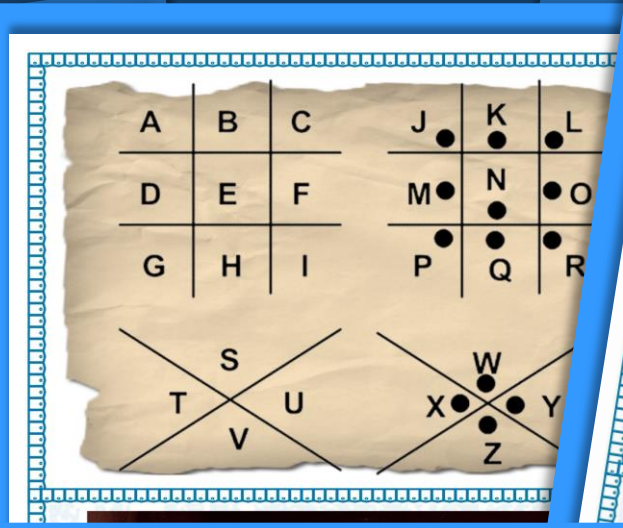
ESCAPE ROOM

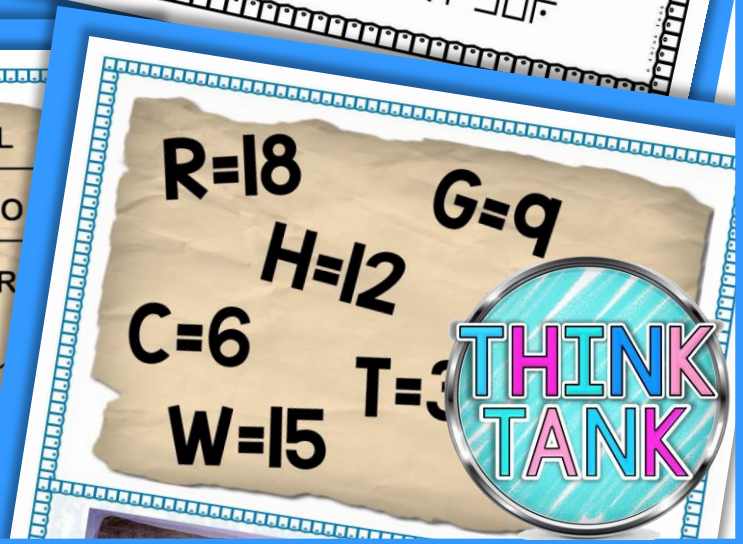








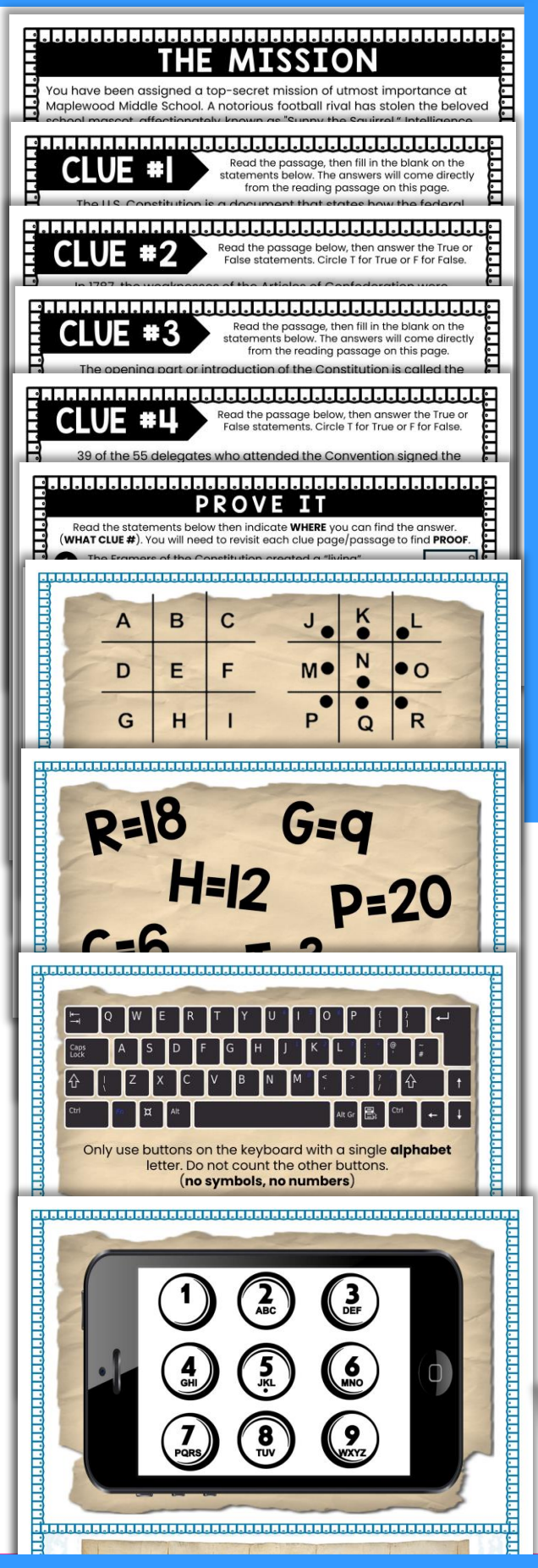


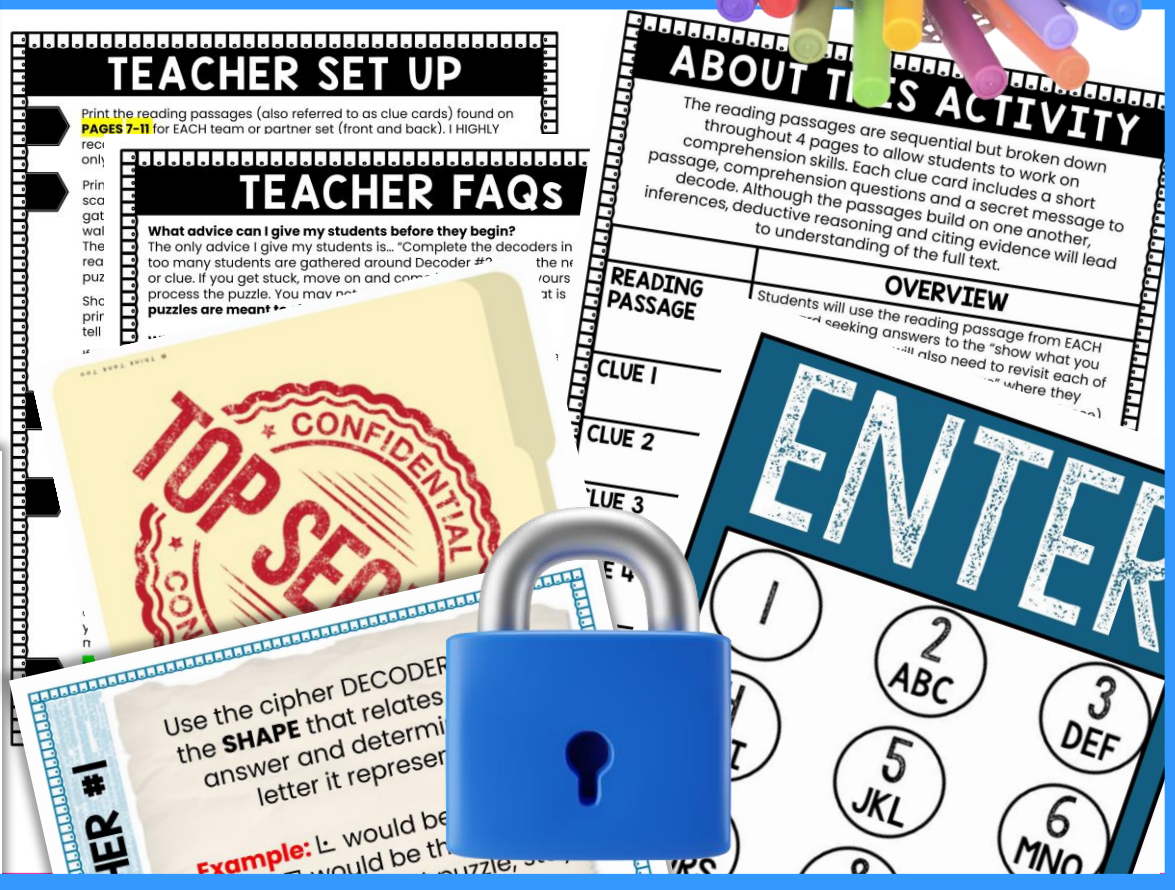


WHAT'S INCLUDED?

- 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 #2
Read the passage below, then answer the True or False statements. Circle T for True or F for False.
Surrounding the core is the radiative zone. Here, energy slowly moves outward in the form of radiation. It can take thousands of years for a photon of light to pass through this layer. Above the radiative zone lies the convective zone, where hot plasma rises and cooler plasma sinks, creating convection currents. These movements transport energy to the surface.
The outer layers include the chromosphere, transition region, and corona. The chromosphere is the Sun's surface, emitting the light we see on Earth. It is relatively cool compared to the corona, at about 5,500 degrees Celsius (9,932 degrees Fahrenheit).
Beyond the chromosphere and the corona are jets of plasma called prominences and spicules. The chromosphere is the Sun's visible surface, emitting light into the lower corona. Solar spicules were first observed by Italian astronomer, Galileo Galilei, in 1627, using a Secchi, an instrument that surprisingly, in 1627. Prominences are jets of plasma that can extend millions of miles into space and are more than the size of Earth.
KNOW
SECRET MESSAGE
The Sun's photosphere is about...
1 5 15 22 22 5 6 19 26 15 22 26
13 8 17 22 2 1 5 8 18 11
CLUE #1
Read the passage, then answer the True or False statements below. The answers will be found in the reading passage on this page.
The Sun is a giant ball of hot gas that generates energy through nuclear fusion in its core, providing the light and heat necessary to sustain life on Earth. The Sun is a yellow dwarf star (G-type main-sequence star) at the center of our solar system and is approximately 4.6 billion years old. All planets, dwarf planets, comets, and asteroids in the solar system orbit the Sun due to its immense gravitational pull. Additionally, the entire solar system, including the Sun, orbits around the center of our galaxy in an orbit that takes roughly two-hundred-twenty-million years to complete, known as the galactic year.
The Sun is so large that it makes up 99.86% of the mass in our solar system. With seven inner layers and four total, the Sun is composed of three radiative zone, and the core, the inner layers and the core, the Sun's center soar to about 28 million degrees Celsius (50 million degrees Fahrenheit). At the Sun's center, nuclear fusion occurs, producing the Sun's energy. During fusion, hydrogen atoms collide and fuse, releasing energy.
KNOW
% of all the
zone, and the
star (G-type main-sequence star) at the center of our solar system.
SECRET MESSAGE
Compared to Earth, the Sun is...
CLUE #3
Sun is predomina
n (about 24%), with
e core, hydrogen at
uclear fusion. This re
ergy, as a small amou
ergy according to Eins
epresents energy, m is t
strophysicist Arthur Edd
generate their energy by
The energy generated
and eventually escapes
Earth and drives climate
converts about 4.2 millio
journey of energy from th
Photons produced in the
radiative zone, undergoi
The total energy the Sun
fluctuations in the Sun's
SHOW WHAT YOU KNOW
In this formula, E represents energy, m is the mass, and c represents the _____ of light.
The Sun is predominantly composed of _____ (about 74%) and helium (about 24%).
The journey of energy from the core to the photosphere is incredibly _____.
SECRET MESSAGE
The average time it takes for sunlight to reach Earth is...
2-1 3-5 1-9 1-7 1-5
1-8 2-5 2-6 1-5
1-5 1-3 2-2
space dominated by the Sun's influence.
SHOW WHAT YOU KNOW
T
T
Sunspots are light, hotter areas on the Sun's surface caused by magnetic activity.
The Sun's gravity holds the planets, comets, asteroids, and other celestial objects in orbit.
The Sun experiences a seventeen-year cycle of activity, known as the solar cycle.
SECRET MESSAGE
The solar cycle was first suggested by Samuel Sc
33 444 4 44 8 33 33 66
8 44 444 777 8 999
33 444 4 44 8

4 DECODERS





C=18 N=19

L=17 D=26



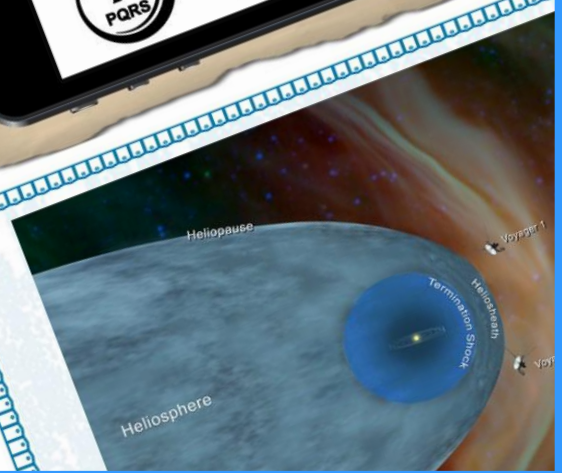


Only use buttons on the keyboard with a single **alphabet** letter. Do not count the other buttons.
(**no symbols, no numbers**)

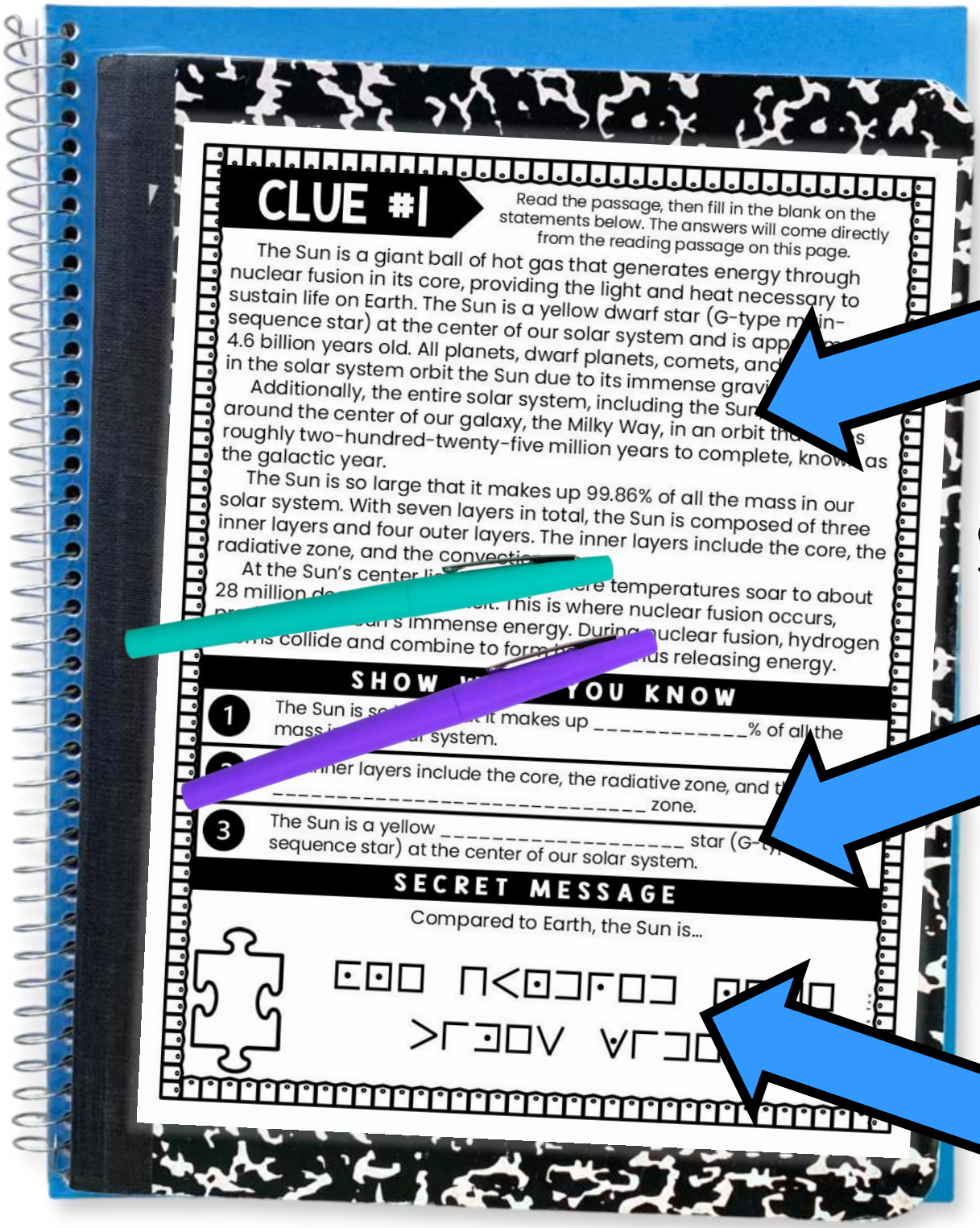
3-5 = B







READ & THINK



READ THE PASSAGE

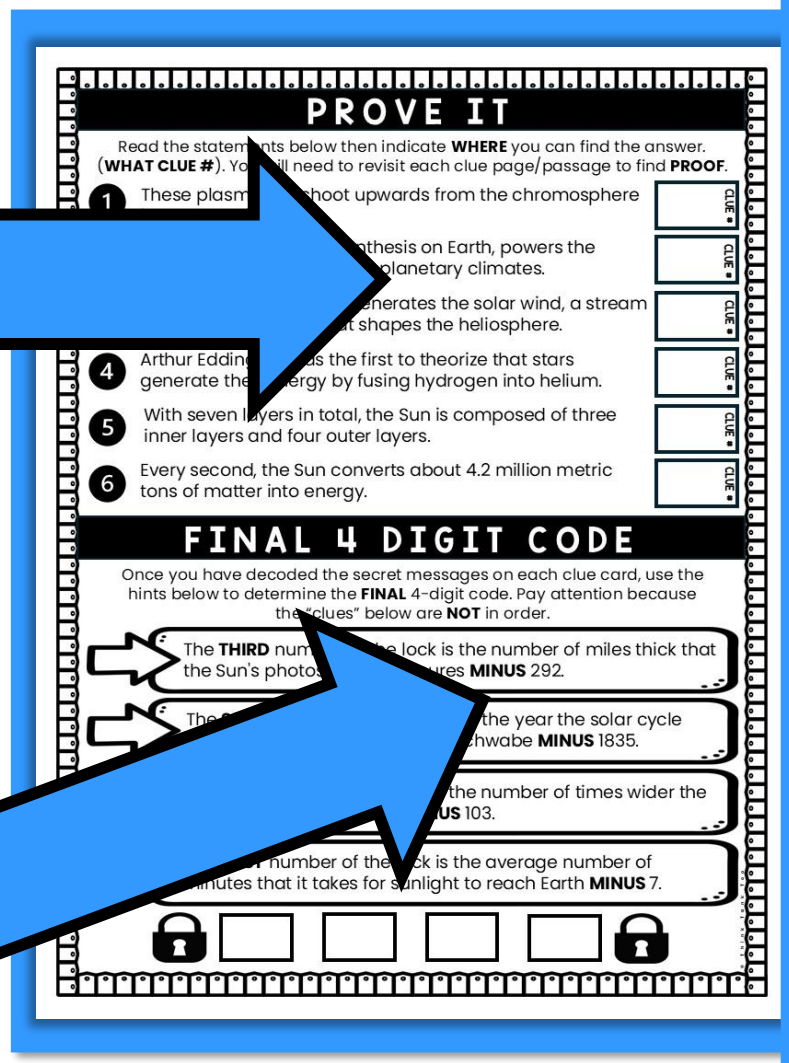
SHOW WHAT YOU KNOW

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