

# TSUNAMIS

## CUBE CODE

What are tsunamis most common?  
A. Volcanoes  
B. Earthquakes  
C. Tectonic plate shifts  
D. All of the above

On average, how often does Hawaii experience a severe tsunami?  
A. Every year  
B. Every seven years  
C. Every twenty years  
D. Every fifty years

In Japanese, what does the word tsunami mean?  
A. Coastal tide  
B. Harbor waves  
C. Tall trough  
D. None of the above

What can cause a tsunami?  
A. Meteorites  
B. Large landslides  
C. Underwater explosions  
D. All of the above

The amount in millions that Japan spends each year on its warning system MINUS 15.

The FIRST number of the lock is the number of feet the tallest recorded tsunami was MINUS 1715.

The THIRD number of the lock is the percent of tsunamis that happen in the "Ring of Fire" MINUS 71.

**STATION 2:**  
First, number ALL the paragraphs on your reading passage. Then, read each statement below and determine which paragraph NUMBER the statement can be found in. Lastly, eliminate ANY answer where the answer was found in an EVEN numbered paragraph, leaving only ODD numbers as your final code (in the order of questions). Paragraph numbers MAY be used more than one time or not at all.

- A There are sensors attached to buoys that transmit data about movement in the ocean.
  - B A tsunami is usually composed of a series of waves called a wave train.
  - C When a t... can multi...
  - D The wo... Japane...
  - E A trot... the ci...
  - F Som... heig...
- ELIMINAT

... first ... last ... trough  
... eight ... hours ... crest  
... fourteen ... minutes ... twelve

Tsunamis travel at speeds of 500 miles per hour. A tsunami travel from Portugal to North Carolina in just hours. Along the coast, waves move at speeds of 500 miles per hour. The tops of the distance waves travel from Portugal to North Carolina in just hours. The tops of the trough waves travel from Portugal to North Carolina in just hours.

**STATION 3:**  
Read each statement below and determine if it is true or false. If the statement is true, color or shade the coin that corresponds to the question. If the statement is false, cross out that coin value. When you are finished add the TOTAL of ALL TRUE coin values. The code has been provided for you. If the total is 625, a 6 in the first box, the 2 in the second box and so on.

A 75  
B 25  
C 50  
D 100  
E 100  
F 75  
G 50

- A. The retreating of ocean water is a very important warning sign of a tsunami.
- B. The "Ring of Fire" is located in the Atlantic Ocean.
- C. Hawaii is always at risk for a tsunami.
- D. Aside from Hawaii, a major tsunami happens about every 15 years.
- E. The Pacific Tsunami Warning System has headquarters in Malaysia.

... height of a tsunami wave will ... on the topography of the coast ... wave of a tsunami is always ... tically.

**4 DIGIT CODE**

A 75  
B 25  
C 50  
D 100

A. The Constitution is organized into seven different parts called Articles.  
B. The Constitutional Convention was held in Boston, Massachusetts.  
C. The 3 branches include the Legislative, Executive and Parliament Branch.  
D. The first ten amendments came in 1791 and are called the Bill of Rights.  
E. Before the Constitution, a strong federal government held the states together.  
F. The opening part of the Constitution is called the Preamble.  
G. George Washington was known as the "Father of the Constitution."  
H. The U.S. Constitution is the oldest government document still in use today.

4 DIGIT CODE →



### STATION 1:

Use your reading passage or deductive reasoning skills to determine the missing words in the paragraph below. Each missing word has a corresponding NUMBER. The 4-digit code will be the NUMBER of each missing word in the same order in which they appear in the paragraph.

### STATION 2:

First, number ALL the paragraphs on your reading passage. Then, read each statement below and determine which paragraph NUMBER the statement can be found in. Lastly, eliminate ANY answer where the answer was found in an ODD numbered paragraph, leaving only EVEN numbers as your final code (in the order of questions). Paragraph numbers MAY be used more than one time or not at all.

### STATION 3:

Read each statement below and determine if it is true or false. If the statement is true, color or shade the coin that corresponds with that question. If the statement is false, cross out that coin value. When you are finished add the TOTAL of ALL TRUE coin values. One digit of the code has been provided for you. If the total is 625, a 6 would go in the first box, the 2 in the second box and so on.

### STATION 4:

Use your reading passage to determine the combination to the 4-digit lock. You're going to have to use your critical thinking skills and do a tiny bit of math. Pay attention because the "clues" below are NOT in order.

### STATION 5:

Answer each multiple choice question below. Then, count the number of times you used each letter answer (ABCD) to reveal your 4 digit code. Answer options may be used more than once or not at all. If a letter option is not used, simply put a zero in the box.

### STATION 6:

Reread the passage and write the main idea in your own words. Then, add TWO supporting details that back up your main idea or topic sentence.

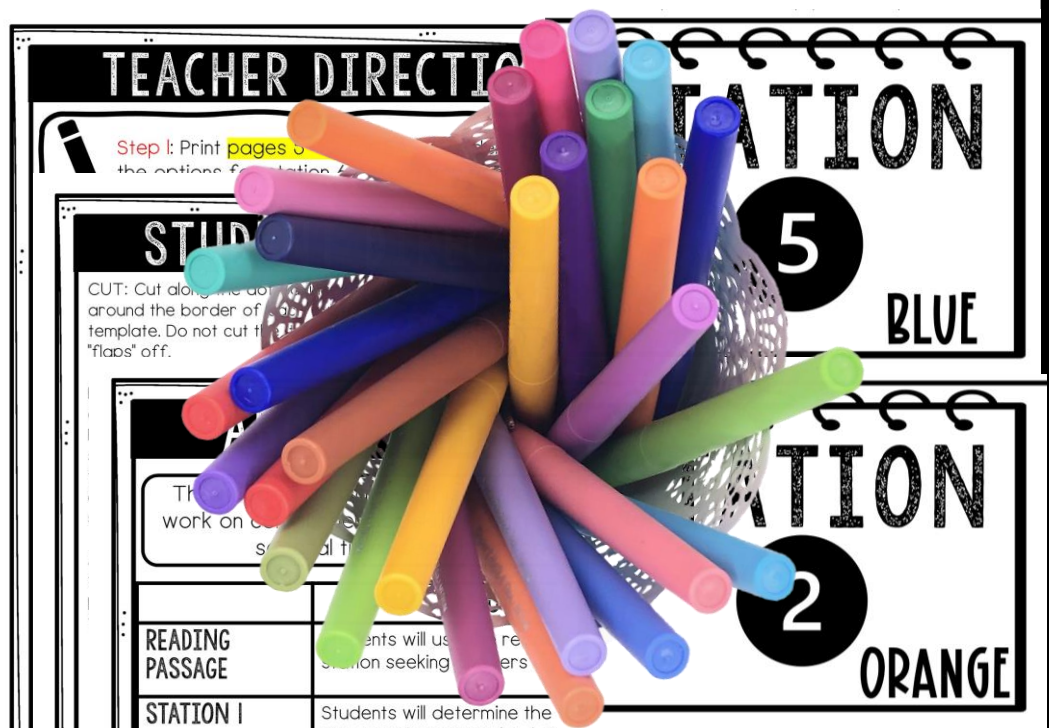
# STATION

# 1

# RED

## WHAT'S INCLUDED?

- READING PASSAGE
- 6 STATIONS
- TEACHER GUIDE
- STATION CARDS
- ANSWER KEY
- STUDENT DIRECTIONS
- TEXT MARKING OPTION
- ALTERNATE STATION
- ASSEMBLY TIPS





# 6 STATIONS

## STATION 1:

Use your reading passage or deductive reasoning to determine the missing words in the paragraph below. The missing word has a corresponding NUMBER. The 4-digit code will be the NUMBER of each missing word in the same order in which they appear in the paragraph.

1	first	4	last	7	trough
2	eight	5	hours	8	crest
3	fourteen	6	minutes	9	twelve

Tsunamis can travel at speeds of 500 miles per hour. A tsunami that traveled from Portugal to North Carolina traveled over 10,000 miles. The distance between the tops of the waves is called the wavelength. The distance between the troughs of waves is called the trough. The distance between the troughs of waves is called the trough. The distance between the troughs of waves is called the trough. The distance between the troughs of waves is called the trough.

STATION

1

RED

## STATION 6:

Reread the passage and write the main idea in your own words. Then, add TWO supporting details that back up your main idea or topic sentence.

MAIN IDEA

STATION

6



SUPPORTING DETAIL #2

## STATION 4:

Use your reading passage to determine the combination to the 4-digit lock. You're going to have to use your critical thinking skills and do a tiny bit of math. Pay attention because the "clues" below are NOT in order.

The LAST number of the lock is the number of international tsunami warning systems in the world's oceans MINUS 2.

The SECOND number of the lock is

STATION

4

GREEN

4 DIGIT CODE

## STATION 5:

Answer each multiple choice question below. Then, count the number of times you used each letter answer (ABCD) to reveal your 4 digit code. Answer options may be used more than once or not at all. If a letter option is not used, put a zero in the box.

In what ocean are tsunamis the most common?  
 A. Indian Ocean  
 B. Pacific Ocean  
 C. Atlantic Ocean  
 D. Arctic Ocean

What is common in the "Ring of Fire"?  
 A. Volcanoes  
 B. Earthquakes

How far do tsunamis travel?  
 A. One mile  
 B. Five miles  
 C. Twelve miles  
 D. Seventy miles

What can cause a tsunami?  
 A. Meteorites  
 B. Large landslides  
 C. Underwater explosions  
 D. All of the above

A. Coastal tide  
 B. Harbor wave  
 C. Tall trough  
 D. None of the above

STATION

5

BLUE

A  B  C  D

## STATION 3:

Read each statement below and determine if it is true or false. If the statement is true, color or shade the coin that corresponds to the statement. If the statement is false, do not color or shade the coin. One coin has been colored to show the first digit of the code.

STATION

3

YELLOW

A  
75

B  
25

C  
50

D  
100

- C. Hawaii is always a danger for a tsunami.
- D. Aside from Hawaii, the major tsunami happens about every 100 years.
- E. The Pacific Tsunami Warning System has its headquarters in Maldives.
- F. The height of a tsunami wave depends on the depth of the seafloor.
- G. The first wave of a tsunami is always the strongest.
- H. The size or height of a tsunami wave can range drastically.

4 DIGIT CODE

## STATION 2:

First, number ALL the paragraphs on your reading passage. Then, read each statement below and determine which paragraph NUMBER the statement can be found in. Lastly, eliminate ANY answer where the answer was found in an EVEN numbered paragraph, leaving only ODD numbers as your final answer. The final answer is the sum of the paragraph numbers.

STATION

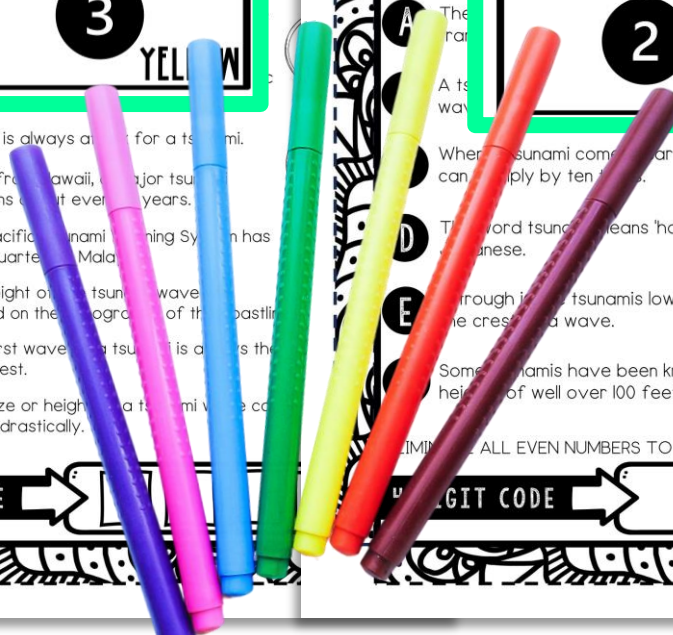
2

ORANGE

- A. The word tsunami means "harbor wave" in Japanese.
- B. When a tsunami comes on land the height can multiply by ten.
- C. The word tsunami means "harbor wave" in Japanese.
- D. Through the tsunami's lowest point beneath the seafloor is a wave.
- E. Some tsunamis have been known to reach heights of well over 100 feet.

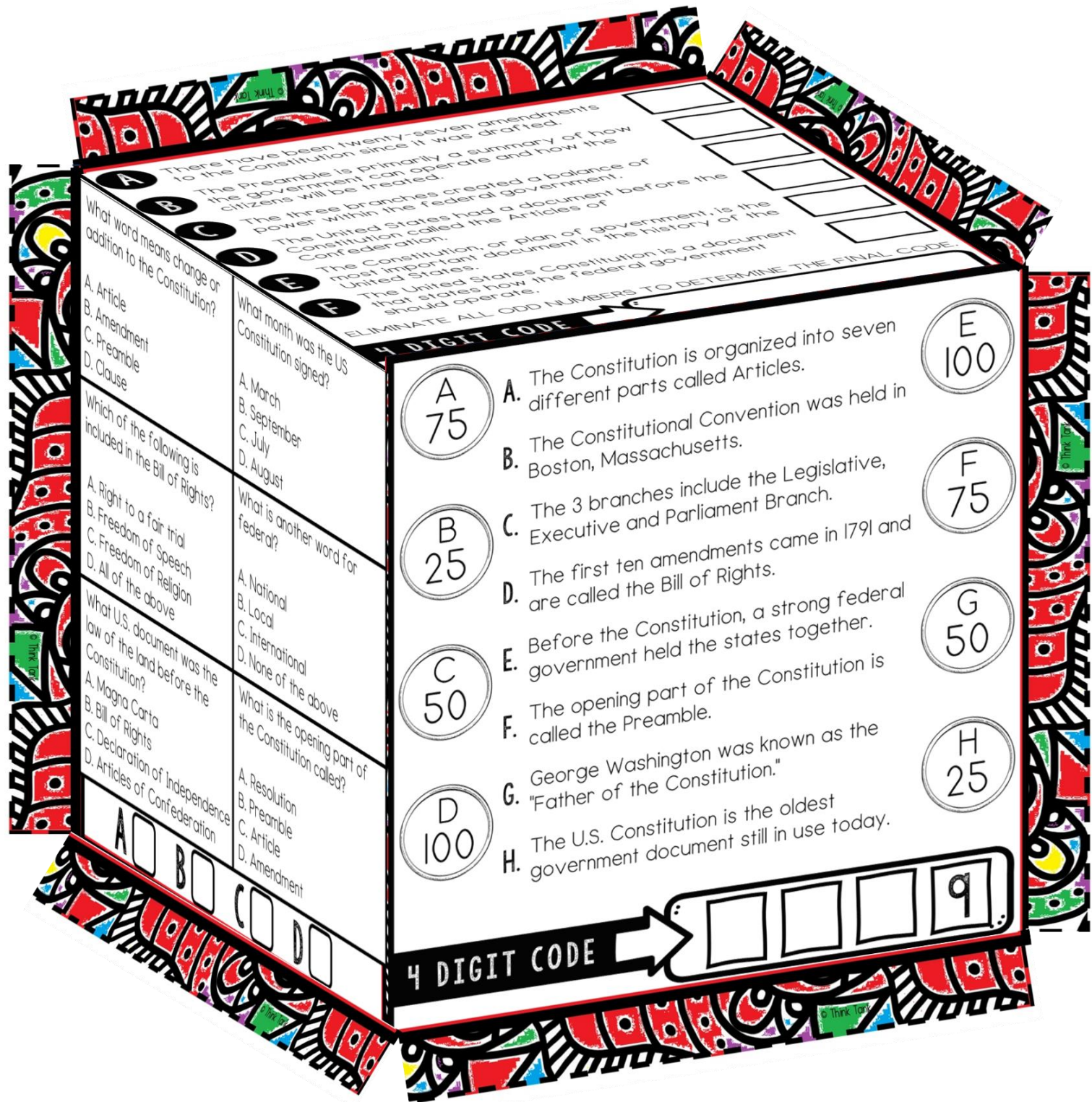
ELIMINATE ALL EVEN NUMBERS TO DETERMINE THE FINAL CODE.

4 DIGIT CODE





# SAMPLE CUBE






# STATIONS

STATION 1	Students will determine the missing words in the paragraph to reveal a 4 digit code.
STATION 2	Students will number the paragraphs and browse the passage to determine where the answers can be found (paragraph number). After eliminating EVEN numbers, a 4 digit code will be revealed.
STATION 3	Students will read each statement and determine if it is true or false. They will then ADD all TRUE values to find the 4 digit code.
STATION 4	Students will do some basic math here, read the passage to find the answers and then determine the 4 digit code.
STATION 5	Students will answer 6 multiple choice questions which lead them to a 4 digit code based on the number of times they used each "answer".
STATION 6	Option 1: Main idea writing activity Option 2: Color and add topic
TEXT MARKING	OPTIONAL: A color code chart is included in case you want students to mark the text citing evidence of where they found their answers.

**STUDENTS WILL  
USE THE SAME  
READING  
PASSAGE AT  
EACH STATION  
SEEKING  
ANSWERS AND  
TEXT EVIDENCE.**



# HOW IT WORKS



## ENGAGING READING COMPREHENSION PRACTICE!

1

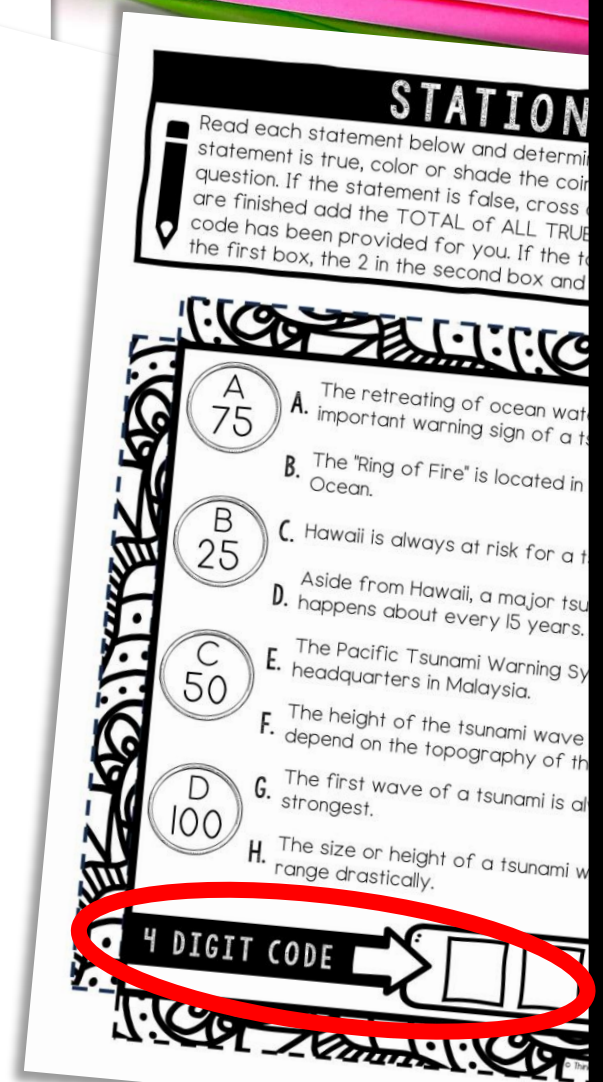
Students work individually (or in pairs) and visit 6 stations, grabbing one side of their cube at each station.

2

Students will answer the questions (found directly in the passage) on their cube sheet before assembly. Students will revisit their reading passage at EACH station!

3

Students will reveal 4-digit codes to move on to the next station. When they finish all stations, they can color and assemble their cube.



**STATION**

Read each statement below and determine if the statement is true, color or shade the corresponding box. If the statement is false, cross it out. When all questions are finished add the TOTAL of ALL TRUE statements. A 4-digit code has been provided for you. If the total is 75, write the 7 in the first box, the 5 in the second box and so on.

**A**  
75

**B**  
25

**C**  
50

**D**  
100

A. The retreating of ocean water is an important warning sign of a tsunami.  
B. The "Ring of Fire" is located in the Pacific Ocean.  
C. Hawaii is always at risk for a tsunami.  
D. Aside from Hawaii, a major tsunami warning center is located in Japan.  
E. The Pacific Tsunami Warning System has its headquarters in Malaysia.  
F. The height of the tsunami wave depends on the topography of the ocean floor.  
G. The first wave of a tsunami is always the strongest.  
H. The size or height of a tsunami wave can range drastically.

**4 DIGIT CODE** →



# COMBINATION



**Each Cube Code is a winning combination of:**

- stations and movement
- close reading
- comprehension skills
- coloring and stress relief
- secret codes
- cut and paste
- citing evidence
- critical thinking

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



# BENEFITS



THINK OUTSIDE THE BOX!

-  ANTICIPATORY SETS
-  UNIT REVIEW
-  EARLY FINISHERS
-  STATIONS
-  SUB PLANS
-  PARTNER WORK
-  ENRICHMENT

-  HANDS-ON
-  CROSS-CURRICULAR
-  HIGHLY ENGAGING

