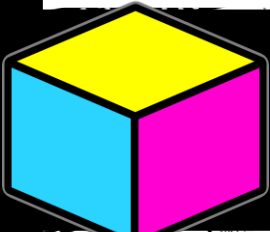


# PLANET NEPTUNE

## CUBE CODE



et is NOT known as moon of Ne

A. Ganymede  
B. Naiad  
C. Triton  
D. Proteus

How many Earth years does one year on Neptune take?

A. 165  
B. 184  
C. 206  
D. Over 300

Who discovered Neptune planet in 1846?

A. Johann Galle  
B. John Couch  
C. Urbain Le Verrier  
D. All of the above

Due to methane in the atmosphere, what color does Neptune appear?

A. Red  
B. Blue  
C. Green  
D. Yellow

At least 72

How many official moons does Neptune have?

56  
1980s  
water

Neptune has likely existing orbits Neptune large moon Triton is the discoverer of active surface moon

official moons, with many more largest of the moons and direction. It is the only retrograde orbit. planets, gods

**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.

the number of times wider Neptune is than Earth MINUS 3.

The FIRST number of the lock is the percent of hydrogen in the upper atmosphere of Neptune MINUS 71.

The THIRD number of the lock is the number of rings that Neptune has MINUS 2.

**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. Once you are finished add the TOTAL of ALL TRUE coin values. A 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. The mantle is made up of water, ammonia, and methane ices.  
B. Neptune was the first planet to be found using math.  
C. The moon closest to the planet of Neptune is called Triton.  
D. Neptune is impossible to see without the use of a telescope.  
E. The "Great Dark Spot" was the size of Earth and lasted five years.

**PLANET NEPTUNE**  
Neptune is the eighth and most distant planet in the Solar System. It is the fourth largest planet and the furthest from the sun. In fact, Neptune is 30 times further from the sun than Earth is. Neptune was named after the Roman god of the sea due to its blue appearance. Neptune is so far from Earth that it is impossible to see without the use of a telescope, even on the darkest nights.  
There is some controversy over who discovered Neptune. Galileo is thought to be the first person to view Neptune through a telescope in 1613, but he thought it was a star. It was not discovered as a planet until 1846 by Urbain Le Verrier, John Couch Adams, and Johann Galle. Astronomers at

**THINK TANK**

### 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.

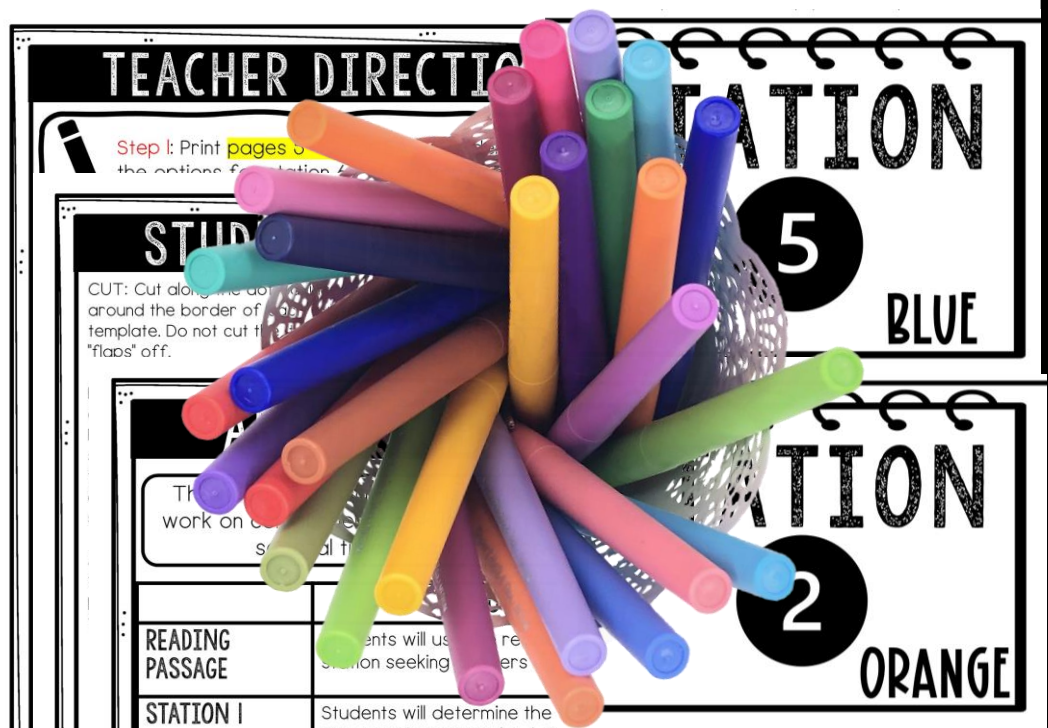
# STATION

# 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	56	4	Naiad	7	Ganymede
2	1980s	5	1940s	8	fire
3	water	6	14	9	27

Neptune has \_\_\_\_\_ official moons, with many more likely existing. \_\_\_\_\_ moons and \_\_\_\_\_ orbits Neptune. \_\_\_\_\_ is the only large moon that orbits in the retrograde direction. Triton is the largest of the planets, discovered in 1989. It is named after the god of the sea. Triton has an active geology and a thin atmosphere of nitrogen. It has a surface of water ice and frozen methane. Triton was discovered in 1989. The fourteenth moon of Neptune was discovered in 2013 after analyzing images collected by the Hubble Space Telescope.

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 year Triton was discovered MINUS 1840.

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.

Which planet is NOT known as a gas giant?

- A. Jupiter
- B. Neptune
- C. Mercury
- D. Saturn

What is the second largest moon of Neptune?

- A. Ganymede
- B. Naiad

How many moons does Neptune have?

- A. 3
- B. 14
- C. 49
- D. At least 27

Due to methane in its atmosphere, Neptune appears to be a

- A. Red
- B. Blue
- C. Green
- D. Yellow

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 it. One coin has been colored to show you. The 4-digit code has been revealed. The first box is empty.

STATION

3

YELLOW

A  
75

B  
25

C  
50

D  
100

- C. The moon closest to the planet Neptune is called Triton.
- D. Neptune is possibly the only planet in the Solar System that has a ring system.
- E. The "Great Dark Spot" is the size of Earth and last seen in 1994.
- F. Neptune spins on its axis and one day takes 16 Earth hours.
- G. Neptune is the second largest planet in the Solar System.
- H. Similar to all the gas giants, Neptune does not have a solid surface.

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 possible answers. The 4-digit code is the sum of the remaining numbers. Eliminate ALL EVEN NUMBERS TO DETERMINE THE FINAL CODE.

STATION

2

ORANGE

A. Neptune is the only planet in the Solar System that has a ring system.

B. Neptune is the only planet in the Solar System that has a ring system.

C. The longest and most powerful winds in the Solar System are on the planet Neptune.

D. Neptune was named after the Roman god of the sea due to its blue appearance.

E. Neptune has a powerful magnetic field which is stronger than Earth's.

F. The upper atmosphere of clouds contain about 90% hydrogen and 10% helium.

G. Neptune is the only planet in the Solar System that has a ring system.

H. Neptune is the only planet in the Solar System that has a ring system.

I. Neptune is the only planet in the Solar System that has a ring system.

J. Neptune is the only planet in the Solar System that has a ring system.

K. Neptune is the only planet in the Solar System that has a ring system.

L. Neptune is the only planet in the Solar System that has a ring system.

M. Neptune is the only planet in the Solar System that has a ring system.

N. Neptune is the only planet in the Solar System that has a ring system.

O. Neptune is the only planet in the Solar System that has a ring system.

P. Neptune is the only planet in the Solar System that has a ring system.

Q. Neptune is the only planet in the Solar System that has a ring system.

R. Neptune is the only planet in the Solar System that has a ring system.

S. Neptune is the only planet in the Solar System that has a ring system.

T. Neptune is the only planet in the Solar System that has a ring system.

U. Neptune is the only planet in the Solar System that has a ring system.

V. Neptune is the only planet in the Solar System that has a ring system.

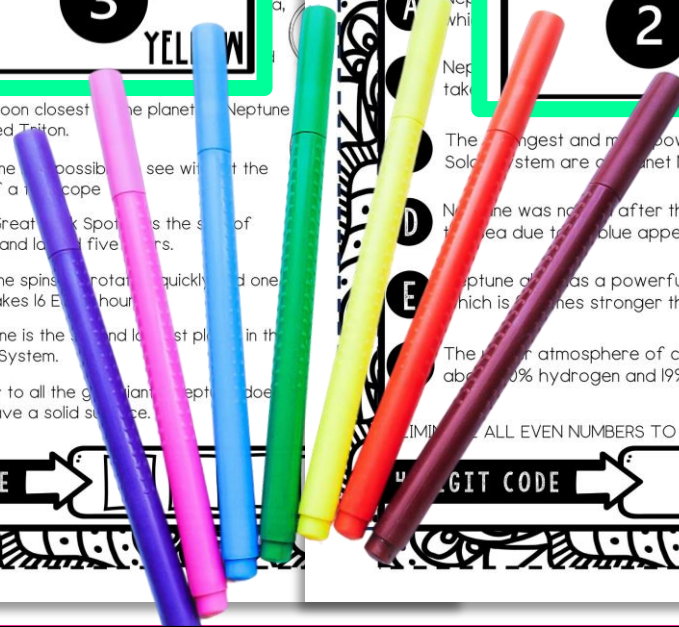
W. Neptune is the only planet in the Solar System that has a ring system.

X. Neptune is the only planet in the Solar System that has a ring system.

Y. Neptune is the only planet in the Solar System that has a ring system.

Z. Neptune is the only planet in the Solar System that has a ring system.

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

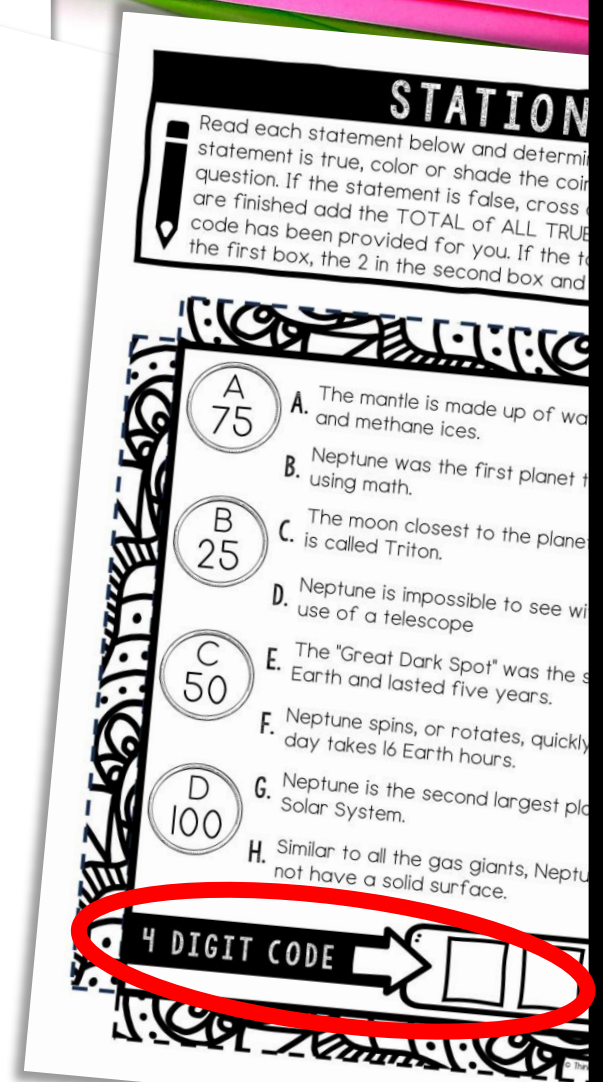
Students work individually (or in pairs) and visit 6 stations, grabbing one side of their cube at each station.

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 question. 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, the code is 75. If the total is 100, the code is 100.

**A**  
75

A. The mantle is made up of wad and methane ices.

**B**  
25

B. Neptune was the first planet to use math.

**C**  
50

C. The moon closest to the planet is called Triton.

**D**  
100

D. Neptune is impossible to see without the use of a telescope.

**E**

E. The "Great Dark Spot" was the largest storm on Earth and lasted five years.

**F**

F. Neptune spins, or rotates, quickly. One day takes 16 Earth hours.

**G**

G. Neptune is the second largest planet in our Solar System.

**H**

H. Similar to all the gas giants, Neptune does not have a solid surface.

**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

