

# IMMUNE SYSTEM

## CUBE CODE

Peyer's patches be also known as  
A. Cellulites  
B. Leukocytes  
C. Cytokines  
D. Lymphatic vessels

What is not part of the immune system?  
A. Skin  
B. Diaphragm  
C. White blood cells  
D. Lymph system

How many lobes does the thymus gland have?  
A. 2  
B. 3  
C. 4  
D. 5

What can you do to help your body's immune system?  
A. Wash your hands  
B. Eat healthy food  
C. Exercise  
D. All of the above

The FIRST number of the lock is the number of inches long the average spleen is MINUS 3.

The THIRD number of the lock is the number of main types of immunity the human body has MINUS 3.

4	innate	7	antibodies
5	passive	8	memory
6	three	9	autonomic

To build immunity, which is the body's ability to fight off disease, you must have already been exposed to the cells. Because the immune system is able to remember antigens that enter again, they are called \_\_\_\_\_. They are called \_\_\_\_\_. The immune system remembers antigens that enter again if they \_\_\_\_\_. They are called \_\_\_\_\_. The immune system remembers antigens that enter again if they \_\_\_\_\_. They are called \_\_\_\_\_.

### 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.

### 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, cross out that coin value. After 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** Lymph nodes are glands that collect and destroy bacteria and viruses before they spread to the rest of the body.

**B** B cells release antibodies which attack antigens.

**C** When the signals a action.

**D** Everyone genera

**E** The in blood

**F** An in antik to

ELIMINAT

**A 75** Vaccines are given to people to help develop immunities against certain known diseases.

**B 25** The adenoids can be found at the back of the small intestine.

**C 50** White blood cells, also called leukocytes, are made in the bone marrow.

**D 100** Antibodies, also called immunoglobulins, are a Y-shaped protein.

**E 75** Active immunity is also called adaptive.

**F 50** The flu vaccine has the flu microbes in it, but they are not alive.

**G 25** The immune system releases chemicals called cytokines to release chemicals called cytokines.

**H 100** The immune system builds cells that fight pathogens that enter the body.

### IMMUNE SYSTEM

The immune system (from the Latin word "immunis" meaning "free" or "untouched") is the body's defense system, responsible for keeping the body healthy and strong. It protects the body from anything harmful such as viruses, bacteria, and invading germs that can make a person sick. These harmful invaders are called pathogens or antigens. The immune system includes the skin, white blood cells, and the lymph system.

The immune system army that combats germs includes these body parts: adenoid (back of the nose and throat), appendix (lower right abdomen), bone marrow (inside the bones lymphatic vessels), lymph nodes (throughout the body, but also clustered at the armpits and groin), Peyer's patches (in the small intestine), spleen (under the ribs and roughly the size of a fist).

**A 75** The Constitution is organized into seven different parts called Articles.

**B 25** The Constitutional Convention was held in Boston, Massachusetts.

**C 50** The 3 branches include the Legislative, Executive and Parliament Branch.

**D 100** The first ten amendments came in 1791 and are called the Bill of Rights.

**E 75** Before the Constitution, a strong federal government held the states together.

**F 50** The opening part of the Constitution is called the Preamble.

**G 25** George Washington was known as the "Father of the Constitution."

**H 100** 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.

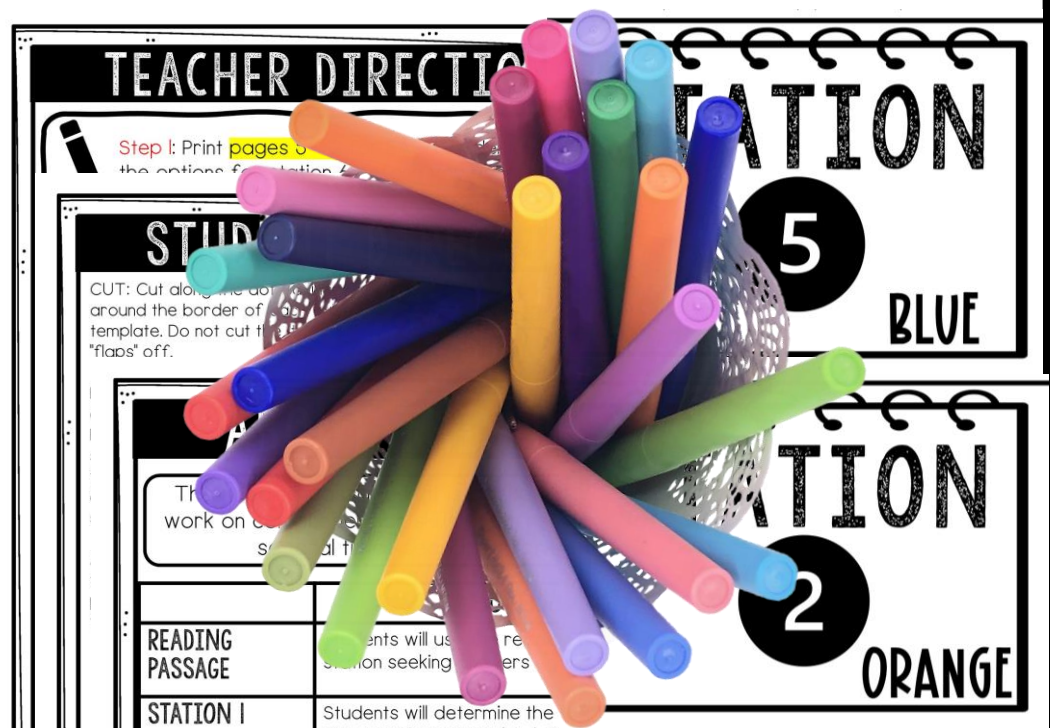
# STATION

# 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.

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.

STATION  
6

SUPPORTING DETAIL #1



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 lymph nodes in an adult

STATION  
4

GREEN

## 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.

STATION  
5

BLUE

Where can Peyer's patches be found?

- A. Spleen
- B. Small intestine
- C. Adenoids
- D. Bone marrow

What are white blood cells also known as?

- A. Cellulites

What are the most common known causes of the flu?

- A. Immunity
- B. Hemorrhage
- C. Leukemia
- D. Adenoids

What is the most common cause of the flu?

- A. Wash your hands
- B. Eat healthy food
- C. Exercise
- D. All of the above

A  B  C  D

## STATION 3:

Read each statement below and determine if it is true or false. Write the number of the statement in the box. The first question is finished as an example.

STATION  
3

YELLOW

A  
75

B  
25

C  
50

D  
100

C. White blood cells, also called leukocytes, are made in the bone marrow.

D. Antibodies are also called immunoglobulins, and are a Y-shaped protein.

E. Active immunity is also called active.

F. The flu vaccine has the same microorganisms in it, but they are not alive.

G. T cells also release chemicals called cytokines.

H. The immune system builds cells that are ready to fight pathogens that enter the body.

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 not found in the passage. Only ONE answer will be correct. Write the numbers as a 4 digit code.

STATION  
2

ORANGE

A

B

C

D

E

F

G

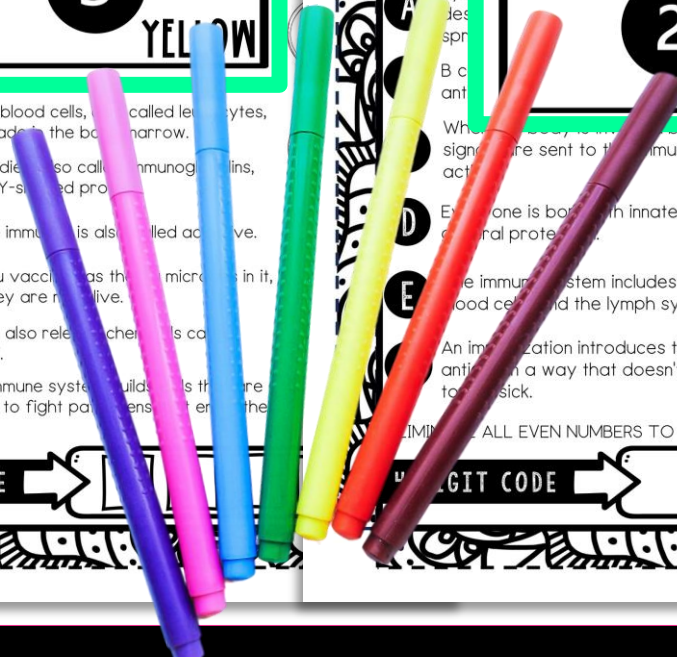
H

I

J

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 question. If the statement is false, cross it out. When you are finished add the TOTAL of ALL TRUE statements. A code has been provided for you. If the total is 75, the 1 in the first box, the 2 in the second box and so on.

**A 75** A. Vaccines are given to people to help them develop immunities against certain diseases.

**B 25** B. The adenoids can be found at the end of the small intestine.

**C 50** C. White blood cells, also called leukocytes, are made in the bone marrow.

**D 100** D. Antibodies, also called immunoglobulins, are a Y-shaped protein.

E. Active immunity is also called acquired immunity.

F. The flu vaccine has the flu microorganisms but they are not alive.

G. T cells also release chemicals called cytokines.

H. The immune system builds cells that are ready to fight pathogens that enter the body.

**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

