



Water Conservation

Data Jam

DESCRIPTION

Students practice reading tables and graphs while using the Common Online Data Analysis Platform (CODAP), the same tool they will use to look for data trends for the Water Conservation Data Jam. In the game, students will take on the role of a scientist in the future using COVID-19 data to make predictions about a new outbreak and find a vaccine. Students will learn how to manipulate data in CODAP while answering questions using COVID-19 data and solving puzzles.

GRADE LEVEL
6-12

OBJECTIVES

Students will:

- Practice reading tables and graphs
- Learn how to use CODAP

TIME
30 - 45 MINUTES

MATERIALS

- Internet connected device [1 per student]
- CODAP Escape Room link (<http://asombro.org/flattenthecurve/>)

PREPARATION

1. If needed, set up an assignment in your virtual learning platform (Canvas, Google Classroom, etc.).
 - a. Provide student access to the CODAP Escape Room game.
 - b. Suggested text for online assignment:
CODAP Escape Room: We will be using an online data program called CODAP to look at water data in the Water Conservation Data Jam. You will use CODAP in this game to look at data from the COVID-19 pandemic and solve puzzles to create a vaccine.
<http://asombro.org/flattenthecurve/>

PROCEDURES

1. Give students the link to the CODAP Escape Room game.
2. Students should follow the instructions in the game to answer the questions using data, hints, and help videos. If they have trouble moving past a question, advise students to make sure they are following instructions and using the correct capitalization and spaces in their answer.
3. Students will need 30-45 minutes to answer the questions and solve the puzzles in the game.

ANSWER KEY**Task 1: Determine how fast viruses can spread around the world.**

- How many new cases were reported in China in January of 2020? *9,724 cases*
- Besides China and the United States, what other country reported cases in January 2020? *Italy*
- How many months did it take for the United States to reach more than 100,000 cases of COVID-19? *2 months*
- Which country in the data table never reported more than 600 cases in a single month and was most successful at preventing the spread of COVID-19? *NEW ZEALAND (in all capital letters)*
- mRNA Code #1 from maze: *ACGCCAUG*

Task 2: Identify places where outbreaks happened in the COVID-19 pandemic.

- What date shows the highest number of cases in New Mexico? *November 24, 2020*
- Which of the three states had the most cases on November 24th, 2020? *Texas*
- Which state's cases increased the most during December of 2020? *CALIFORNIA (in all capital letters)*
- Approximately two weeks after which holiday did Texas, Florida, New York, and Arizona see the most cases? *NEW YEARS EVE (in all capital letters)*
- mRNA Code #2 from cipher: *AGACGUCU*

Task 3: Determine which age group is the most at risk.

- Which age group had the most cases of COVID-19? *18-29*
- Did the 18-29-year-old age group also have the most deaths? *NO (in all capital letters)*
- mRNA Code #3: *CUCAGGAAU*

Create the vaccine.

- How many digits are in the number 20 (the age group had the most cases of COVID-19)? *2*
- How many strands of mRNA did you collect to make this vaccine? *3*
- What number do you multiply 8 by to get 8 as the answer? *1*
- Final mRNA Code: *AGACGUCUCUCAGGAAUACGCCAUG (Code 2, Code 3, Code 1)*
- What brand of vaccine did Dr. Kizzmekia Corbett help with? *MODERNA (in all capital letters)*