Brandon Valley School District District Learning Plans April 13-17, 2020

Grade 3 Social Studies/Science



LESSON/UNIT: Weather/Gove	ernment SUBJECT/GRADE: Science-Social Studies/3rd DATES: April 13-17
What do students need to do?	Students may print out articles/quizzes listed below OR write on lined or unlined paper with the student's name, date, and title of the worksheet at the top. Monday (4/13): No School
Link to BV instructional video for week of April 13-17, 2020	Tuesday (4/14): Science - Read article "Despite technology, meteorologists still at the mercy of subtle changes"
	Wednesday (4/15): Science - Complete quiz (questions 1-4) for article "Despite technology,
	meteorologists still at the mercy of subtle changes" Reminder: Students can go back into the
	article to find the text evidence to answer these questions.
	Thursday (4/16): Social Studies - Read article "The job of the president"
	Friday (4/17): Social Studies - Complete quiz (questions 1-4) for article "The job of the
	president" Reminder: Students can go back into the article to find the text evidence to answer
	these questions.
What do students need to bring back to school?	 Science Article Quiz (questions 1-4) - "Despite technology, meteorologists still at the mercy of subtle changes" Social Studies Article Quiz (questions 1-4) - "The job of the president" When the work is completed, you may send it electronically to your child's teacher or drop it off at their school in the 3rd grade tub.
What standards do the lessons cover?	 Science 3-ESS.A - Typical weather occurs during a particular season. 3-ESS.B - Climate describes patterns of typical weather conditions over different scales and variations. 3-ESS.C - Historical weather patterns can be analyzed. Social Studies 3.C.2.2 - Explain the basic political roles of leaders in the state and nation
What materials do students need? What extra resources can students use?	Materials: • Paper/pencil • Articles with quizzes (posted below) Print off articles with quizzes OR complete on lined or unlined paper.
What can students do if they finish early?	 Observe the weather outside and make predictions about what you think the weather will be like later in the day, the next day, or a few days from now With a family member, explain what you think is the most important role of the president NGSS aligned experiments: https://www.hookedonscience.org/nextgenerationsciencestandards.html NASA at Home https://www.nasa.gov/specials/nasaathome/index.html

	• NASA STEM https://www.pasa.gov/stem.at.homo.for.students.E.8.html
	NASA STEM https://www.nasa.gov/stem-at-home-for-students-5-8.html
	• Brain Pop Jr <u>https://jr.brainpop.com/</u> request free family access for your child to
	watch educational videos, complete activities, take quizzes, etc.
	 PBS Design Squad-<u>https://pbskids.org/designsquad/</u> cool site to watch videos,
	design, and build things from home! You will have to create a username and
	password but it is free!
	 Practice washing your hands properly, help disinfect/clean the house
	 Watch Mystery Science videos <u>https://mysteryscience.com/school-closure-planning</u>
Who can we contact if	Brandon Elementary
we have questions?	Building Principal:
	Mr. Horst- <u>merle.horst@k12.sd.us</u>
	Teachers:
	Ms. Buum- <u>Blossom.Buum@k12.sd.us</u>
	Ms. Flint- <u>Jill.Flint@k12.sd.us</u>
	Mr. Kramer- Brent.Kramer@k12.sd.us
	Mr. Johnson- <u>Andy.Johnson@k12.sd.us</u>
	Robert Bennis Elementary
	Building Principal:
	Ms. Hofkamp- Kristin.Hofkamp@k12.sd.us
	Teachers:
	Mr. Bobzien <u>- Adam.Bobzien@k12.sd.us</u>
	Mr. Ganschow- Jeff.Ganschow@k12.sd.us
	Ms. Pederson- <u>Jill.Pederson@k12.sd.us</u>
	Ms. Rozier- <u>danylle.rozier@k12.sd.us</u>
	Fred Assam Elementary
	Building Principal:
	Ms. Foster- <u>susan.foster@k12.sd.us</u>
	Teachers:
	Ms. Hunsaid- <u>Jessica.Hunsaid@k12.sd.us</u>
	Ms. Jones- <u>Deb.Jones@k12.sd.us</u>
	Ms. Kieffer- Michelle.Kieffer@k12.sd.us
	Ms. Van Leur- <u>Chelsea.Vanleur@k12.sd.us</u>
	Valley Springs Elementary
	Building Principal:
	Ms. Palmer- <u>tanya.palmer@k12.sd.us</u>
	Teacher:
	Ms. Kocer- <u>Cassie.Kocer@k12.sd.us</u>
<u>Notes:</u>	

Instructional materials are posted below (if applicable)

Brandon Valley School District



Despite technology, meteorologists still at the mercy of subtle changes

By How Stuff Works, adapted by Newsela staff on 08.08.19 Word Count **536** Level **590L**



Hunter Anderson (center), a meteorology student at St. Cloud State University in Minnesota, monitors a developing supercell thunderstorm outside Limon, Colorado, May 8, 2017. Scientists and meteorologists from the Center for Severe Weather Research try to get close to supercell storms and tornadoes to better understand tornado structure and strength and learn more about tornado formation. Photo by: Drew Angerer/Getty Images

Weather scientists are called meteorologists. Their job is to give the weather forecast and tell you the weather in the coming days. They are not always right, though. Why is it so hard for them to know the weather in the future?

Meteorologists today can make better forecasts than they could in the past. They can give early warnings about tornadoes. They can also give people an extra 40 minutes to escape flash floods. These are big improvements.

To predict future weather, meteorologists use math equations. These equations need lots of recorded data to be correct. The data comes from many different weather stations. There are stations on land, sea, and air. All of these stations are linked together.

Many Different Weather Tools

Stations use different kinds of special tools to watch the weather. They might contain wind gauges. These measure wind speed and direction. They could also have rain collectors. Others have temperature sensors. Some weather stations float at sea. Others even travel on planes and ships. Weather satellites and balloons provide information from high in the sky. Satellites are constantly orbiting Earth. They take pictures of the weather as they move. Balloons track air data from above one spot.

Meteorologists use special computers to study this data. These machines are very fast. They are known as supercomputers. The weather data streams into a supercomputer's brain. The computer plugs the data into mathematical equations. The answers help the computer predict how weather conditions might change.

Even supercomputers aren't always correct, though. There are so many possibilities in weather. Many different events could happen. Supercomputers have



to guess at how the sun will heat the Earth's surface. They have to guess which winds will form. Small changes in one event can have big effects on weather. Edward Lorenz was a meteorologist. He gave this problem a name. He called it the butterfly effect. The name came from the idea of a butterfly flapping its wings in Asia. Lorenz said the wings flapping in Asia could change the weather in New York City.

Even Small Changes Can Throw Off Forecasts

Today, Lorenz is known as the father of chaos theory. This theory is applied to complicated systems. Weather systems are one example. In these kinds of systems, small changes at the start affect the final results. Chaos limits how correct weather forecasts can be. Lorenz set this limit at two weeks.

Meteorologists also use Doppler radar to get better forecasts. Doppler radar sends radio waves into the sky from a transmitter. The waves strike things in the sky. Then they bounce back. Clouds moving away from the transmitter return one kind of wave. Clouds moving closer return another kind. There is a computer in the radar. It changes the returned signals into pictures. These pictures may show clouds and rain. They can also show wind speed and direction.

Thanks to technology, meteorologists can predict the weather better than ever. Still, they will never be right all the time. Blame this on chaos. Surprise storms may still come with little warning. That is why you should always carry an umbrella.

Quiz

1

3

4

Read the introduction [paragraphs 1-3].

Select the sentence that explains HOW meteorologists forecast weather.

- (A) Their job is to give the weather forecast and tell you the weather in the coming days.
- (B) Meteorologists today can make better forecasts than they could in the past.
- (C) To predict future weather, meteorologists use math equations.
- (D) All of these stations are linked together.
- 2 Which sentence from the section "Even Small Changes Can Throw Off Forecasts" gives a reason WHY predicting the weather is hard?
 - (A) Today, Lorenz is known as the father of chaos theory.
 - (B) Chaos limits how correct weather forecasts can be.
 - (C) Doppler radar sends radio waves into the sky from a transmitter.
 - (D) Thanks to technology, meteorologists can predict the weather better than ever.
 - Read the following sentence from the introduction [paragraphs 1-3].

Their job is to give the weather forecast and tell you the weather in the coming days.

A "forecast" is a _____.

- (A) best guess about the weather
- (B) report about flash floods
- (C) type of weather
- (D) signal from a radar

Read the selection below from the section "Even Small Changes Can Throw Off Forecasts."

Still, they will never be right all the time. Blame this on chaos. Surprise storms may still come with *little warning.*

Which word could replace "chaos" WITHOUT changing the meaning of the sentence?

- (A) disorder
- (B) data
- (C) technology
- (D) radar



The job of the president

By Whitehouse.gov and USA.gov, adapted by Newsela staff on 01.19.17 Word Count **417**

Level 490L



President Barack Obama signs H.R. 3630 - Middle Class Tax Relief and Job Creation Act of 2012 (Payroll Tax Cut Extension) in the White House Oval Office in Washington, D.C., February 22, 2012. Courtesy of the Executive Office of the President of the United States.

The United States Constitution was written in 1789. This was when America was a new country. The Constitution is a plan for the U.S. government. It created three branches of government. The Constitution also created the role of the president. The president is part of the executive branch of government.

Creation Of A Presidency

The Constitution was unique. Most countries in Europe still had kings and queens. They were rulers with total power. The founders of America were afraid of one person having too much power. They created a system that limited a leader's power. This was a very new idea.

The President

Congress proposes laws. Then the president reviews them. The president can either approve or reject them. Rejecting is called vetoing.

The president makes sure laws are carried out. Fifteen departments help do this. The leaders of each department are part of the president's Cabinet.

The president can issue executive orders. These direct people who work under the president. They can also update laws.

The executive branch maintains relationships with other countries. The president can also forgive people for federal crimes. This is called a pardon.

With these powers come responsibilities. One is a requirement to give Congress updates. Presidents do this in a speech. It is called the State of the Union address. It happens each January.

Presidential Requirements

There are three requirements to be president. First, the president must be 35 years old. Second, the president must have been born in the United States. Finally, he or she must have lived in the United States for at least 14 years.

Choosing A President

The president is elected through the Electoral College. Citizens vote in elections. Each state decides who has the most votes. The person with the most votes is awarded electors. Each state has a certain number of electors to give away. States with more people get more electors. There are a total of 538 electors if electors from every state are added together. The parties choose who will be electors. These people then vote for president. A candidate needs 270 electoral votes to become president.

Today, the president is limited to two terms. Each is four years long. This was established in 1951. Before then, a president could serve an unlimited number of terms.

The White House

The president lives in Washington, D.C. His home and office is in the White House. The president earns \$400,000 a year. Some presidents choose not to take this money.

Quiz

1

4

- Which sentence from the section "Choosing A President" tells how many electors are in the Electoral College?
 - (A) The person with the most votes is awarded electors.
 - (B) Each state has a certain number of electors to give away.
 - (C) There are a total of 538 electors if electors from every state are added together.
 - (D) A candidate needs 270 electoral votes to become president.
- 2 Based on the article, which of the following is TRUE?
 - (A) Presidents are allowed to block laws created by Congress.
 - (B) To be president, a person must be at least 30 years old.
 - (C) A president is not allowed to make executive orders.
 - (D) The president gives a speech to Congress once every four years.
- 3 Read the paragraph from the section "Creation Of A Presidency."

The Constitution was unique. Most countries in Europe still had kings and queens. They were rulers with total power. The founders of America were afraid of one person having too much power. They created a system that limited a leader's power. This was a very new idea.

What information do you get by reading this paragraph?

- (A) why European countries had kings and queens
- (B) what the American founders were afraid of
- (C) what year the United States Constitution was written
- (D) whether the new American presidency was a good idea or not

Read the caption under the photo. According to this caption, what is happening in the photo?

- (A) The president is writing a book about the duties of the presidency.
- (B) The president is reading the Constitution of the United States.
- (C) The president is writing a speech about the importance of education.
- (D) The president is signing a law meant to lower taxes and create jobs.