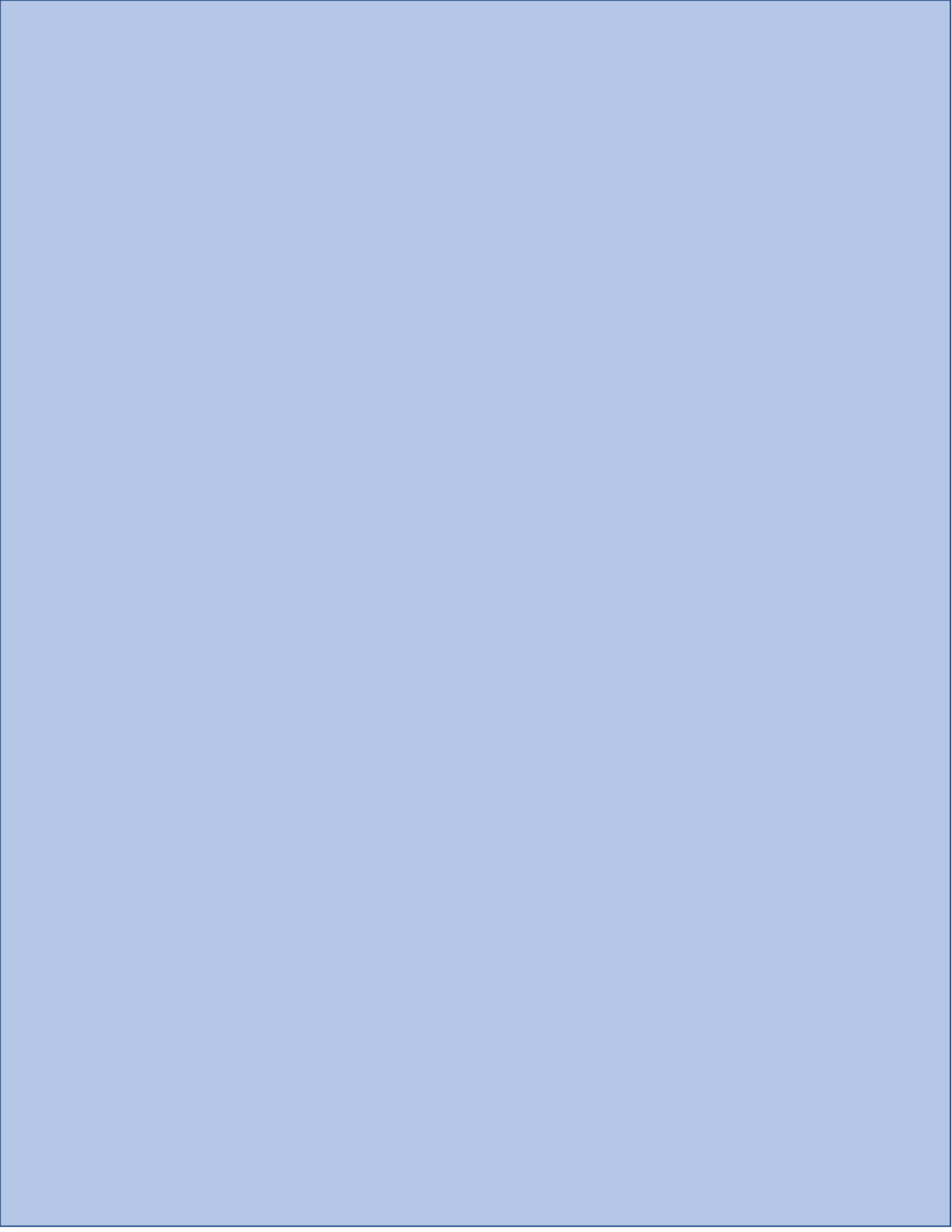


Galaxy

Days 13-14



Daily Launch Day 13



Do Now: Teachers in Space!

Teachers in space? What a weird idea! Actually, several U.S. astronauts have been teachers. Barbara Morgan, an elementary school teacher from Idaho, was an astronaut from 1998 to 2008 and helped to build the International Space Station. She now teaches math, science, and engineering at Boise State University. Other teacher astronauts who helped with the International Space Station were middle and high school science teachers. These include Joseph Acaba, the first astronaut of Puerto Rican heritage; Ricky Arnold; and Dorothy Metcalf-Lindenburger.

Question: *Imagine one of your teachers going to space! What kind of online lesson do you think he or she would teach from a space station?*

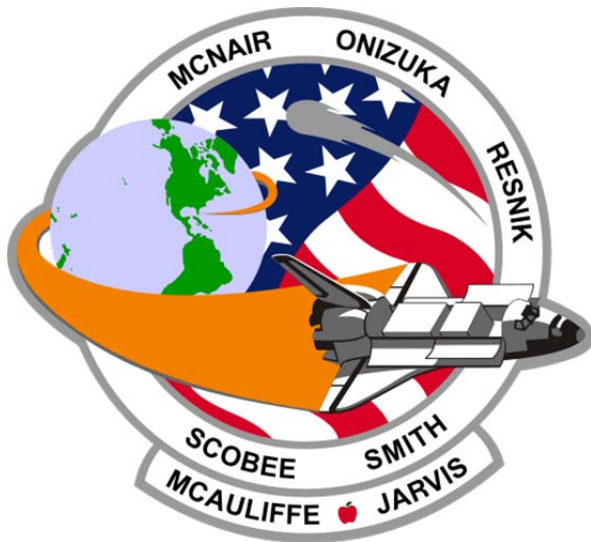
How might teaching from a spaceship be different from teaching a lesson on Earth?



Daily Launch Day 14

Do Now: Create a Space Patch

Each time NASA puts together a team for a space mission, the team's first job is to create a space patch that represents the team and the mission! Look at the space patch for the Challenger mission below. Do you see the tiny red apple



The official NASA space patch for the 1986 *Challenger* mission (NASA, Photo ID: S85-46260, Wikimedia Commons)



beside Christa McAuliffe's name?

The apple is a **symbol** of her work as a teacher.

What about you? Where would you like to go on a space journey? A different planet? Or maybe a different galaxy? Who would you want to have on your mission team?

Use the space below (or the back of the page) to design a space patch for your mission. Use words and pictures to represent the mission goal and the people you would like on the team.



National Aeronautics and Space Administration: NASA History Office

The Explosion of the Space Shuttle *Challenger*

Address to the Nation, January 28, 1986

by President Ronald W. Reagan



[Note: The President spoke at 5 p.m. from the Oval Office at the White House. His address was broadcast live on nationwide radio and television.]

Ladies and gentlemen, I'd planned to speak to you tonight to report on the state of the Union, but the events of earlier today have led me to change those plans. Today is a day for mourning and remembering.

Nancy* and I are pained to the core by the tragedy of the shuttle *Challenger*. We know we share this pain with all of the people of our country. This is truly a national loss.



The crew of the Challenger space shuttle. (Photo: NASA, Johnson Space Center)

Nineteen years ago, almost to the day, we lost three astronauts in a terrible accident on the ground.† But we've never lost an astronaut in flight; we've never had a tragedy like this. And perhaps we've forgotten the courage it took for the crew of the shuttle; but they, the *Challenger* Seven, were aware of the dangers, but overcame them and did their jobs brilliantly. We mourn



Launch of the Challenger space shuttle, Jan. 28, 1986 (Wikimedia Commons)

seven heroes: Michael Smith, Dick Scobee, Judith Resnik, Ronald McNair, Ellison Onizuka, Gregory Jarvis, and Christa McAuliffe. We mourn their loss as a nation together.

For the families of the seven, we cannot bear, as you do, the full impact of this tragedy. But we feel the loss, and we're thinking about you so very much. Your loved ones were daring and brave, and they had that special grace, that special spirit that says, "Give me a challenge and I'll meet it with joy." They had a hunger to explore the universe and discover its truths. They wished to serve, and they did. They served all of us.

* Nancy was President Reagan's wife.

† President Reagan was referring to the death of three Apollo 1 astronauts in a fire during a training exercise on January 27, 1967.

We've grown used to wonders in this century. It's hard to dazzle us. But for 25 years the United States space program has been doing just that. We've grown used to the idea of space, and perhaps we forget that we've only just begun. We're still pioneers. They, the members of the *Challenger* crew, were pioneers.

And I want to say something to the schoolchildren of America who were watching the live coverage of the shuttle's takeoff. I know it is hard to understand, but sometimes painful things like this happen. It's all part of the process of exploration and discovery. It's all part of taking a chance and expanding man's horizons. The future doesn't belong to the fainthearted; it belongs to the brave. The *Challenger* crew was pulling us into the future, and we'll continue to follow them.

I've always had great faith in and respect for our space program, and what happened today does nothing to diminish it. We don't hide our space program. We don't keep secrets and cover things up. We do it all up front and in public. That's the way freedom is, and we wouldn't change it for a minute.

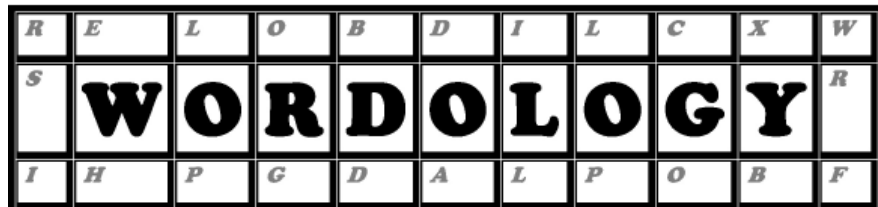
We'll continue our quest in space. There will be more shuttle flights and more shuttle crews and, yes, more volunteers, more civilians, more teachers in space. Nothing ends here; our hopes and our journeys continue.

I want to add that I wish I could talk to every man and woman who works for NASA or who worked on this mission and tell them: "Your dedication and professionalism have moved and impressed us for decades. And we know of your anguish. We share it."

There's a coincidence today. On this day 390 years ago, the great explorer Sir Francis Drake died aboard ship off the coast of Panama. In his lifetime, the great frontiers were the oceans, and an historian later said, "He lived by the sea, died on it, and was buried in it." Well, today we can say of the *Challenger* crew: Their dedication was, like Drake's, complete.

The crew of the space shuttle *Challenger* honored us by the manner in which they lived their lives. We will never forget them, nor the last time we saw them, this morning, as they prepared for their journey and waved goodbye and "slipped the surly bonds of earth" to "touch the face of God."





Wordology Activity #1: Speech-Writing

Instructions: Think of a recent public disaster or tragedy that you know something about. Using at least four words from the Word Bank, write a brief speech as if you were the president, mayor, or another public official. Explain what happened and tell your audience how people should remember the victims and heroes.

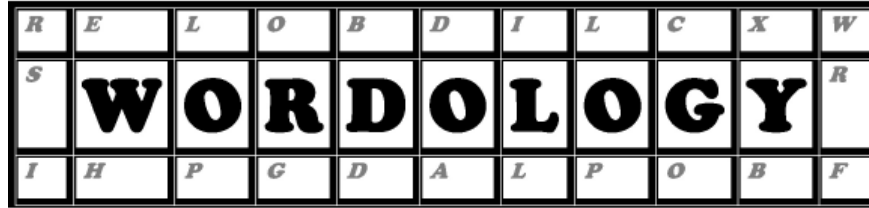
Word Bank

mourn	tragedy	dazzle	expand	diminish
quest	anguish	fainthearted	coincidence	shuttle



Name _____ Date _____

Galaxy Days 13 and 14



Wordology Activity #2: Vocabulary Scramble

Instructions: Unscramble the letters to find words that fit in the boxes. All the words come from the Word Bank at the bottom of the page.

1. Be brave; stop being so _____!

hfedanirate

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

2. People at a funeral come to _____ and pay their respects.

noumr

--	--	--	--	--	--

3. Instead of shrinking our business, we should be trying to _____ it.

xaepdn

--	--	--	--	--	--	--

4. I am on a _____ to make this community better.

tuseq

--	--	--	--	--	--

5. Whenever Ramón gets the ball, he tries to _____ us with his fancy footwork.

lezadz

--	--	--	--	--	--	--

6. It's such a _____ that we're wearing the same shirt.

dincecenioc

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

7. His screwed-up face told a story of much pain and _____.

hgsiuna

--	--	--	--	--	--	--	--

8. Mom usually takes the _____ to get to her job at the hospital.

lesthut

--	--	--	--	--	--	--	--

Word Bank

mourn

tragedy

dazzle

expand

diminish

quest

anguish

fainthearted

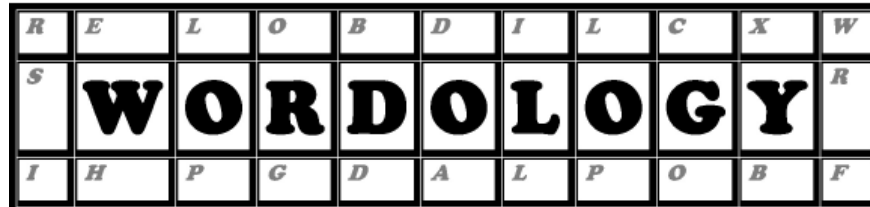
coincidence

shuttle



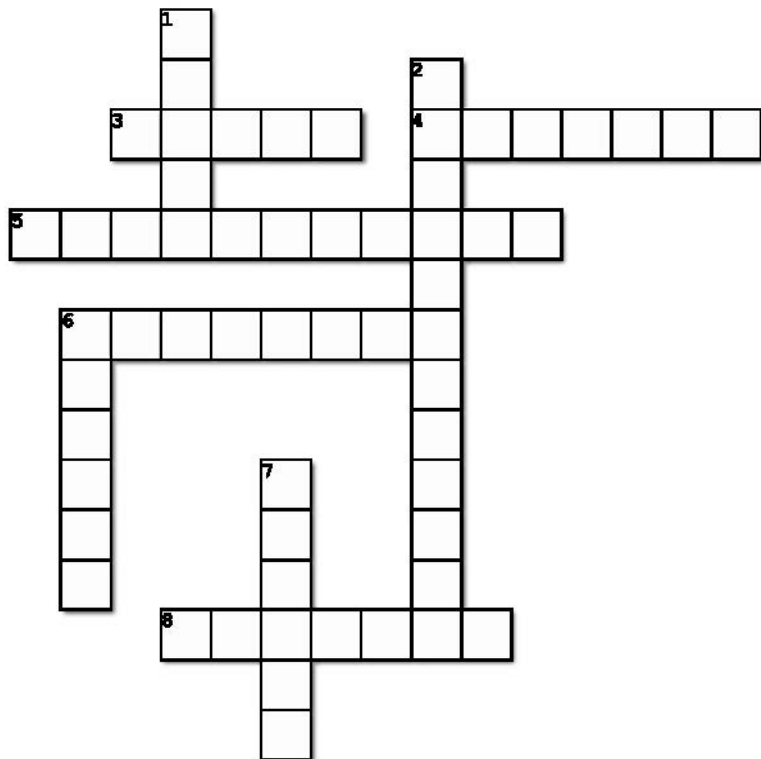
Name _____ Date _____

Galaxy Days 13 and 14



Wordology Activity #3: Crossword Puzzle

Instructions: Choose words from the Word Bank to complete this puzzle. The Clues box will help you decide which words fit in which spaces.



Word Bank

mourn
tragedy
dazzle
expand
diminish
quest
anguish
fainthearted
coincidence
shuttle

Created using the Crossword Maker on TheTeachersCorner.net

Clues

Across

3. an adventurous search
4. extreme mental or physical pain
5. a chance event
6. to make smaller; to decrease
8. an event that causes great suffering

Down

1. to show sorrow; to grieve
2. nervous; scared
6. to amaze or astonish
7. to make larger; to increase



Name _____ Date _____

Galaxy Days 13 and 14

R	E	L	O	B	D	I	L	C	X	W
S	W	O	R	D	O	L	O	G	Y	R
I	H	P	G	D	A	L	P	O	B	F

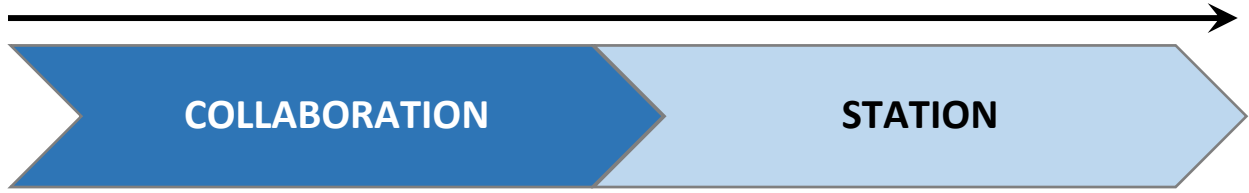
Composing Meaningful Sentences

If you complete your chosen Wordology activity, take the remaining time at this station to write Meaningful Sentences using the vocabulary words listed below. (Remember, a Meaningful Sentence is a sentence that shows that you know what the word means!) Read and discuss your sentences with your teammates.

Word Bank				
mourn	tragedy	dazzle	expand	diminish
quest	anguish	fainthearted	coincidence	shuttle







Collaboration Station: Persuasive Speech Organizer

With your team, take turns reading aloud the four paragraphs on the first page of “The Explosion of the Space Shuttle *Challenger*: Address to the Nation.” Discuss together the graphic organizer below. Then fill in the organizer on your own.

Speaker:

Occasion:

Audience:

Purpose:

Main Points:

Conclusion:



Name _____ Date _____

Galaxy Days 13 and 14



Media Madness

Media Madness: A Speech to the Nation

Instructions: Go to the link <https://www.youtube.com/watch?v=66mGwws7EEw>. This is the actual footage of the speech that Reagan gave in 1986. Follow along with the text as you listen to him speak.

After watching it once or twice, find a partner and practice giving the speech (softly!) as if you were the President giving an address to the entire country. You can take turns reading by paragraph if you like.



Ronald Reagan, President of the United States 1981-1989 (Wikimedia Commons)



