

unit tour: day one

Reason 3 (for using the bomb): To impress the Soviets

With the end of the war nearing, the Soviets were an important strategic consideration, especially with their military control over most of Eastern Europe. As Yale Professor Gaddis Smith has noted, "It has been demonstrated that the decision to bomb Japan was centrally connected to Truman's confrontational approach to the Soviet Union." However, this idea is thought to be more appropriately understood as side benefit of dropping the bomb and not so much its sole purpose.

What is interesting is that the events in Japan, although they brought a close to World War II, marked the beginning of the Cold War between the United States and the Soviet Union.

Between 1945 and the late 1980s, both sides invested huge amounts of money in nuclear weapons and increased their stockpiles significantly, mostly as a means to deter conflict. The threat of catastrophic destruction from The Bomb loomed over everyone and everything. Schools conducted nuclear air raid drills. Governments built fallout

Image Reference: Bert the Turtle from the 1951 film Duck and Cover by the Office of Civil Defense and the National Education Association

Optional Non-fiction Extension: Duck And Cover (1951) Bert the Turtle Civil Defense Film Show a clip from the following to give students a sense of what going to school and living at this time period was like for kids. 'A bomb could explode any time of year, day or night...Paul and Patty know what to do. Even on a beautiful Spring day...no matter where they go or what they do, they always try to remember what to do if the atom bomb explodes right then!' https://www.youtube.com/watch?v=IKqXu-5jw60 According to the United States Library of Congress (which declared the film "historically significant" and inducted it for preservation into the National Film Registry in 2004), it was seen by millions of schoolchildren from the early 1950's until 1991. Made with the help of schoolchildren from New York City and Astoria, New York, it was shown in schools as the cornerstone of the government's "duck and cover" public awareness campaign. Do they think this duck and cover technique could be effective? [While this (or any) tactic would be useless for someone at ground zero during a surface burst nuclear explosion, it would be beneficial to the vast majority of people who are positioned away from the blast] What does this film show us about how people felt at the time and day to day life? Were people afraid or constantly worried about atom bombs? How can you tell? Do we still feel that way today? How would students feel if films like this were shown as part of their school day?



shelters. Homeowners dug bunkers in their backyards

Part of the intense cold war nuclear arms race, the 15-megatonne Bravo test on 1 March 1954 by the US was a thousand times more powerful than the atomic bomb dropped on Hiroshima. It vaporised one island and exposed thousands in the surrounding area to radioactive fallout.

Bikini islanders and their descendants have lived in exile since they were moved for the first weapons tests in 1946. US nuclear experiments in the Marshall Islands ended in 1958 after 67 tests. But a United Nations report in 2012 said the effects were long-lasting. When US government scientists declared Bikini safe for resettlement some residents were allowed to return in the early 1970s. But they were removed again in 1978 after ingesting high levels of radiation from eating foods grown on the former nuclear test site. The US embassy in Majuro said on its website: "While international scientists did study the effects of that accident on the human population unintentionally affected, the United States never intended for Marshallese to be hurt by the tests."

During the 1960s, the United States Atomic Energy Commission (AEC) conducted nuclear tests on Amchitka Island near Alaska. Despite being designated as a national wildlife refuge by President William Taft in 1913, Amchitka was chosen as a nuclear testing site by the AEC. There were several reasons for this decision. Firstly, Amchitka was close to the former Soviet Union, making it an ideal location for a nuclear test to intimidate the latter. However, the public reason given by the AEC was the island's remoteness. Forceful objections were raised against the testing by a number of organizations and groups, most notably the Aleut people, who, although they vacated the island in the 19th century after Russian fur traders reduced sea otter numbers in the area, are resident on nearby islands, and were concerned about radiation leaks as well as potential physical damage resulting from the nuclear tests.

In 1965,

the Long Shot nuclear test was executed by the Department of Defense. Almost immediately, fallout from the nuclear test began to leak into adjacent freshwater lakes, although details of this contamination



were not made public until 1969. On October 2, 1969, the AEC executed a calibration shot underground to determine whether the island would be a safe place for future tests. However, this test set off a

number of reactions in the surrounding area – the test triggered earthquakes and landslides, and sent water from lakes flying 50 feet (15 m) up into the air.

In 1970, the AEC announced plans for another test, named Cannikin. The environmental movement, then in its infancy, vehemently opposed the testing, and filed a suit in the United States Supreme Court to stop the testing. This motion was denied by a 4 to 3 vote. On November 6, 1971, the Cannikin bomb was detonated, cresating a 60 feet (18 m) deep crater in the island, killing 1,000 sea otters and thousands of birds. The blast was 385 times that created by the Hiroshima bombing, and was the largest underground test of a nuclear weapon in history.

During the 1970s and '80s, tensions began to ease somewhat. Then the Berlin Wall fell in 1989, followed by the collapse of the Soviet government itself two years later. The Cold War officially ended. As relations between the two countries improved, a commitment to limit nuclear arsenals emerged. A series of treaties followed, with the latest going into effect in February 2011. Like its predecessors, the new Strategic Arms Reduction Treaty (START) aims to further reduce and limit strategic arms. Among other measures, it calls for an aggregate limit of 1,550 warheads [source: the White House].

Unfortunately, even as Russia and the U.S. step tentatively away from the brink, the threat of nuclear warfare remains. Nine countries can now deliver nuclear warheads on ballistic missiles [source: Fischetti]. At least three of those countries -- the U.S., Russia and China -- could strike any target anywhere in the world. Today's weapons could easily rival the destructive power of the bombs dropped on Japan. In 2009, North Korea successfully tested a nuclear weapon as powerful as the atomic bomb that destroyed Hiroshima. The underground explosion was so significant that it created an earthquake with a magnitude of 4.5 [source: McCurry].

While the political landscape of nuclear warfare has changed considerably over the years, the science of the weapon itself -- the atomic processes that unleash all of that fury -- have been known since Einstein.

Peeling Back Layers

A parable or allegory is a story intended to teach a basic truth or moral about life. A parable differs from a fable in that fables employ animals, plants, inanimate objects, or forces of nature as characters, whereas parables have human characters. A parable is a type of analogy or allegory. There are political, social, and historical allegories as well as allegories that express ideas or human qualities such as greed or goodness.

Challenge students to peel back the layers of meaning found in the symbolism in the following parables and allegories which may be as brief as a paragraph, a few or many minutes of video, or short stories that are many pages in length. Obviously stories may be read and videos may be watched and enjoyed at face value, but try to challenge students to practice the skill of peeling back the top layer of literary symbols to see what lies beneath. And as with an onion, some of the symbols may be multi-layered. Literary symbols gain their meaning from the context of the work. Practicing the skill of peeling back the layers becomes a way of making connections and exercising our imaginations. After exploring this diversity of stories and clips that incorporate symbols, have students engage their

creativity to craft their own fables, parables, allegories, or symbolic stories. They may use some of the skills for crafting their stories that they will have practiced in deciphering the symbols in following.

The Butter Battle Book, by Dr. Seuss, and perhaps the most controversial of all Dr. Seuss' books, was a parable written in response to the arms buildup and nuclear war threat during the Reagan administration. Published in 1984, Butter Battle sheds light on the growing threat of war between the Yooks and the Zooks. Yooks and Zooks are societies who do everything differently. The Yooks eat their bread butter-side up and the Zooks eat their bread butter-side down. Obviously, one of them must be wrong, so they start building weapons to outdo each other: the "Tough-Tufted Prickly Snick-Berry Switch,"• the "Triple-Sling Jigger,"• the "Jigger-Rock Snatchem,"• the "Kick-A-Poo Kid"•, the "Eight-Nozzled Elephant-Toted Boom Blitz,"• the "Utterly Sputter"• and more.



At the end of the book, the Yooks develop a "Bitsy Big-Boy Boomeroo" bomb (a pretty clear representation of the nuclear bomb) to destroy the entire town of the Zooks. When the man gets to the wall to drop the bomb, he sees that the Zooks also have the bomb. The last page of the book reads: "'Grandpa! Be careful! Oh gee! Who's going to drop it? Will *you*...? Or will *he*...?'

'Be patient,' said Grandpa. 'We'll see, We will see...'", but the reader doesn't know how it actually turns out because the story ends with a blank page, leaving a

cliffhanger ending that is open to interpretation. * When you read it have students discuss what they think happened and why they think that. When Dr. Seuss presented this particular project, Random House (his publisher) saw red flags!



Image Via: 1http://blogs.houstonpress.com/artattack/Butter-Battle-Book.jpg All Rights Reserved.

For the first time in decades, editors and art directors questioned Dr. Seuss—the cover, the ending, the verb tenses, even the title itself went through several changes. Never one to initiate (start) confrontation, Ted suddenly found himself defending every element in question. Ted remained as true

to the original as possible because the book itself represented what he saw as the truth about the arms buildup. Ultimately, few changes were made.

The Butter Battle Book illustrates many peoples' fears during the Cold War including the fear of all life on earth ending due to a nuclear weapon and nuclear war. The highly political and critical nature of the book caused it to be banned in the United States after publishing in 1983. The book was banned due to its critical stance on mutually assured destruction (MAD) and going to war over what was characterized as trivial. For six months, Butter Battle remained on The New York Times' Bestseller List . . . for **adults**.

In 1990, when the televised version of *The* Butter Battle Book was shown on Russian television, Dr. Seuss bragged that the country began "falling apart." Indeed, the Soviet Union was

Image Via: http://buddhabuttah.com/the-butter-battle-book/ All Rights Reserved. crumbling at that time, but Dr. Seuss' message reached a much broader

spectrum—and challenged readers to answer the question, how does it all end? What do students think?

See a one minute "live-action preview" for the book here: https://www.youtube.com/watch?v=jQWCtzdEC5g

The full movie is available at YouTube <u>https://www.youtube.com/watch?v=C5FR_cuQsrc</u>, SchoolTube <u>http://www.schooltube.com/video/bf8b526c80c54176bc32/</u> or search for it online.

Have students compare and contrast while exploring matching texts—stories and the movies adapted from them—to develop their analytical strategies. Have them draw comparisons between the two texts and hypothesize about the effect of adaptation. They analyze the differences between the two versions by citing specific adaptations in the film version, indicating the effect of each adaptation on the story, and deciding if they felt the change had a positive effect on the overall story.

Instructions

1. Hand out copies of the book and, if possible and depending on the abilities of your students, have the students read it in a read aloud so many students get a chance to read, or can at least follow along.

2. Start a class discussion with open ended questions such as:

a. Why do you think the Zooks and Yooks did not get along?

- b. What do you think caused this conflict to get worse?
- c. How do you think this happens with your friends or siblings?
- d. What do you think the Zooks and Yooks could have done differently to prevent this conflict?

e. In the story, each side uses propaganda to make their side seem like the right side. Does anybody know how to explain what propaganda is?

3. Direct the conversation by explaining:

<u>Propaganda</u> is the spread of information aimed at promoting a cause or influencing public opinion, often slanting the truth to mislead.

4. Next give a few examples of methods used in propaganda such as:

- a. Testimonials- using famous celebrities or leaders in advertisements
- b. Name calling-insulting or putting people down
- c. Fear- using fear to change somebody's opinions

5. Transition into class activity by putting the students in groups of 3-4. Hand out a bank sheet of paper to each group. Write on the board the 3 different methods of propaganda and explain each. Then assign each group to be either the Zooks, or the Yooks to create a banner against the other side using the methods on the board.

6. After about half an hour pair up opposing groups and have the groups present the banners to one another.

Evaluation

1. To evaluate student comprehension, have the groups present the banners to the whole class and explain the different methods and purposes they had in mind.

2. Have students explain what methods they chose to use, and the purpose of their banner.

3. Next lead a discussion about propaganda in today's world. Ask the students if they think it is still used often, if they believe it is influential, where they see it the most in society, whether it be television commercials, billboards, newspapers etc.

Day One K-8 Standards Alignment

К

R.L.K.6 Assess how point of view or purpose shapes the content and style of a print or digital text.

RI.K.2. With prompting and support, identify the main topic and retell key details of a text.

These standards will be met and reinforced as we go through the texts and videos and discuss the reasons why the authors/creators might have written/made them—what was the point they were trying to make. Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it.

1

RL. 1.6 Assess how point of view or purpose shapes the content and style of a text.

RL.1.2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.

These standards will be met and reinforced as we go through the texts and videos and discuss the reasons why the authors/creators might have written/made them—what was the point they were trying to make. Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it.

2

RL.2.2. Recount stories, including fables and parables, and determine their central message, lesson, or moral.

RI.2.3. Describe the connection between a series of historical events or scientific ideas and concepts in a text.

These standards will be met and reinforced as we go through the texts and videos and discuss the reasons why the authors/creators might have written/made them—what was the point they were trying to make and also what inspired them (ex. the arms race, fear of nuclear war, trying to get kids to read books, etc) Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it. RL.3.2. Recount stories, including fables, folktales, and parables; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.

RI.3.2. Determine the main idea of a text; recount the key details and explain how they support the main idea.

These standards will be met and reinforced as we go through the texts and videos and discuss the reasons why the authors/creators might have written/made them—what was the point they were trying to make. Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it.

4

RI.4.2. Determine the main idea of a text and explain how it is supported by key details.

RI.4.5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

These standards will be met and reinforced as we go through the texts and videos and discuss what was the point they were trying to make. Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it.

We'll discuss the different causes (ex. butter & bread, dislike, fear) and effects (ex. new weapons, war, possible total annihilation) in the stories as well as the problems and solutions that were demonstrated, as well as possible alternate solutions that students come up with.

5

RI.5.2. Determine two or more main ideas of a text and explain how they are supported by key details.

RI.5.5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.

These standards will be met and reinforced as we go through the texts and videos and discuss what was the point they were trying to make. Students will have to identify what they see as the moral of the parable (in the different versions—they may not all express the same moral, even if based on the same story) and what they are trying to teach us. They'll have to support their conclusion by pointing out details in the text that led them to it. RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context.

RL.6.7. Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.

These standards will be met and reinforced as we go through the texts and videos and discuss what was the point they were trying to make. They'll have to find and define symbols, ex. what does the bread and butter represent? The Bitsy Big-Boy Boomeroo? The Yooks and Zooks? We'll determine if each version (video and book formats) have different symbols or if they all share the same ones, or both.

Students will give their opinions on each version, video and book forms, and which one they liked best, how they were the same, and how they were different. How their understanding of the story did or didn't change with each different variation and why or why not.

7

RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context.

SL.7.2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

These standards will be met and reinforced as we go through the texts and videos and discuss what was the point they were trying to make. They'll have to find and define symbols, ex. what does the bread and butter represent? The Bitsy Big-Boy Boomeroo? The Yooks and Zooks? We'll determine if each version (video and book formats) have different symbols or if they all share the same ones, or both.

Students will give their opinions on whether or not reading a 'children's story' or watching it helped them understand the feelings people had/have about nuclear war and the effects of WW2 on the world. Did it affect their opinions on nuclear weapons? Why or why not?

8

RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context

6.10.b Examine the shaping of public and personal opinion by the government and the media.

6

These standards will be met and reinforced as we go through the texts and videos and discuss what was the point they were trying to make. They'll have to find and define symbols, ex. what does the bread and butter represent? The Bitsy Big-Boy Boomeroo? The Yooks and Zooks? We'll determine if each version (video and book formats) have different symbols or if they all share the same ones, or both.

We will also discuss the reasons why the authors/creators might have written/made them for example, in answer to public panic and fear, or to change public opinion, etc. Students will give their opinions on what the government, authors, and video producers were trying to do and whether or not it worked.

Students will give their opinions on whether watching the government produced safety video with the turtle and/or reading a 'children's story' or watching it helped them understand the feelings people had/have about nuclear war and the effects of WW2 on the world. Which one had a greater impact? Did either affect their opinions on nuclear weapons? Why or why not?

unit tour: day two

That Grey Area



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One of television's most revered series, *The Twilight Zone* (CBS, 1959-64) stands as the role model for TV anthologies. Its trenchant scifi/fantasy parables explore humanity's hopes, despairs, prides, and prejudices in metaphoric ways conventional drama cannot and it shows every sign of lasting the ages as the literature that it is. Atomic war, space exploration, government control, anxiety, and mortality are all common *Twilight Zone* themes. A tv show designed to discuss current political or social issues and bring current social issues literally in front of the eyes of millions of Americans. It was an effective way to spread a message and Serling intentionally chose to address contemporary issues, albeit under the veil of fiction.

The simple act of showing a TV show from the Golden Age of television can be a lesson in American culture after World War II. Most students have never heard of an anthology series (this means that each episode is an independent story from other episodes, and generally there are no recurring characters) and possibly have never even watched a show in black and white.

Have students watch one or more of the following (fear of nuclear attack storyline based) videos and episodes of "The Twilight Zone" and write a critique. As always, please preview any and all video clips to make sure they are appropriate for your students prior to class! Do not show them if you feel they or any of their content or language are inappropriate for your student's grade levels or ages.

"There is a fifth dimension, beyond that which is known to Man. It is a dimension as vast as space, and as timeless as infinity. It is the middle ground between light and shadow, between science and superstition; and it lies between the pit of Man's fears, and the summit of his knowledge. This is the dimension of imagination. It is an area which we call...the Twilight Zone."

- Rod Serling, the first Opening Narration

Time Enough At Last

This Twilight Zone episode (The Twilight Zone S01 E08) is an excellent tool for showing students the fear that the American public felt about a possible nuclear war with the Soviet Union during the Cold War. It's a perfect fit when discussing the Cold War, the Cuban Missile Crisis, or the effects of nuclear weapons. Students often love this episode because of the classic ending—Burgess Meredith's glasses break and he is doomed to a life without his beloved books. This episode often stirs a lot of discussion afterward—leave it to Rod Serling to gain the full attention of the class! http://www.imdb.com/video/hulu/vi2883299097/ The Shelter (The Twilight Zone S03 E03) is another excellent example of the fear of nuclear attack in America. This episode, zeroed in on the greatest postwar fear, the threat of nuclear war, depicting suburban neighbors at a dinner party who, after hearing a radio warning that bombing was imminent, degenerate, Lord of The Flies - like, into a raging mob clawing each other over access to the lone fallout shelter—the host's. <u>http://www.imdb.com/video/hulu/vi2749081369/?ref_=tt_ov_vi</u>

What themes and moral lessons do the students notice in the film(s)? How do people cope with fear of the unknown? Does the pace of the show seem slow compared to modern shows? What would the plots of Twilight Zone episodes today be like?

All-a-what?

Allegories are a very funny genre. They have a lot to say, but they want to say it in a mysterious or slightly cryptic way. One big requirement of allegory, however: you must have something to say. You must feel something strongly about an issue and want to represent it in fiction. So: how do we go about it?

To write an allegory students need to identify a problem that they want to bring attention to and then plan and write an allegory for it in the form of a story (like *The Butter Battle Book*).

To help them understand this task, think about the following examples. Your school has a bullying problem, and your school administration isn't trying to fix it. Your principal, in fact, laughs when he sees students being bullied. You could write an allegory (in fable form) of this by creating a cast of animal characters. On a farm, the haughty stallions prance and tease the other animals. They dislike how the other animals are all smaller, weaker, and uglier than they are. So, they tease and torment them. The farmer enjoys this as the horses are his favorite.

Allegories are full of symbols, for example in the movie The Wizard of Oz - The lion represents cowardice. The scarecrow stands for the agrarian past and the tin man the technological future.

A Puzzling Genre

One tip to remember about writing an allegory is that it's a puzzle, a riddle of sorts that you are offering to your reader. The key is that all is not what it seems; everything, instead, stands for something else, often something very dark. You are dropping visual and plot-related clues as to what this stands for. You must have a clear idea yourself of what you're pointing at, or else the reader won't have a chance. As if it's a mystery story, leave clues, but don't sacrifice the surface story to make the deeper one perfect, either. The surface story must be engaging enough to stand on its own, which is a challenge when it's only a coverup. Write and rewrite. Fail and try again. It's a tricky genre of story, but immensely satisfying when you've got one done right, because it is a story that says something.

Well, you can see where this is going. Think of your issue and plan an allegory for it. (Create a sample one with students) It is ok to write about a resolution to the issue in your allegory even if one hasn't been found in real life.

For older students, think of what moral lesson, deeper meaning you aim to convey to your reader. For example, will you write about current times of the War in Iraq? Perhaps, warfare could be allegorized as the playground scuffles of young children. You can create a character in turmoil who is an allegory for the war. Or perhaps your main character and his wife are involved in a bitter divorce. It pits the husband on one side and the wife on the other, thus creating enemy lines. Once the lines are drawn, what happens?

Third, there should be a moral lesson. How will the characters learn and what lesson will the reader take away? In keeping the with the divorce example, perhaps the couple might finally divorce and go their separate ways, unable to move on with their lives. This is an allegory for how war always stays with us and the soldier is forever emotionally damaged after battle.

Once you have a fairly good idea of these things, it's time to start writing your allegory, pretty much the same way you'd be writing any normal story.

Now that students know the framework of an allegory, have them think of their own example.

Day Two K-8 Standards Alignment

К

R.L.K.6 Assess how point of view or purpose shapes the content and style of a print or digital story.

RL.K.10. Actively engage in group reading and writing activities with purpose and understanding.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We'll discuss how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together. How is each episode similar and how are they different from each other, even though they address the same basic idea, fear of nuclear war.

We'll work together to create our own allegory as a class and the students will dictate and help craft it.

1

RL. 1.6 Assess how point of view or purpose shapes the content and style of a story.

RL.1.2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Then we'll have a class discussion about the Twilight Zone, and how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together. How is each episode similar and how are they different from each other? Students will give their opinions on whether or not each episode was an effective allegory on the same basic idea, fear of nuclear war.

2

RL.2.2. Recount stories, including fables, allegories, and parables, and determine their central message, lesson, or moral.

RI.2.3. Describe the connection between a series of historical events or scientific ideas and concepts in a text/story.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Then we'll have a class discussion about the Twilight Zone, and how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together. How is each episode similar and how are they different from each other? Students will give their opinions on whether or not each episode was an effective allegory on the same basic idea, fear of nuclear war.

3

RL.3.2. Recount stories, including fables, folktales, and parables; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.

RI.3.2. Determine the main idea of a text; recount the key details and explain how they support the main idea.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Then we'll have a class discussion about the Twilight Zone, and how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together. How is each episode similar and how are they different from each other? Students will give their opinions on whether or not each episode was an effective allegory on the same basic idea, fear of nuclear war.

4

RI.4.2. Determine the main idea of a text and explain how it is supported by key details.

RI.4.5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Then we'll have a class discussion about the Twilight Zone, and how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together. How is each episode similar and how are they different from each other? Students will give their opinions on whether or not each episode was an effective allegory on the same basic idea, fear of nuclear war.

We'll discuss how Twilight Zone episodes are set up, that everything isn't clear at the beginning, and they usually have a surprising conclusion. We'll discuss if students think the structure is effective at getting the message across and what aspects of the episode led them to their conclusions.

5

RI.5.2. Determine two or more main ideas of a text and explain how they are supported by key details.

RI.5.5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Then we'll have a class discussion about the Twilight Zone, and how the purpose for the show, addressing/showing the social and political issues of the time, vs. creating a show purely for entertainment might have affected how the show was put together.

We'll discuss how Twilight Zone episodes are set up, that everything isn't clear at the beginning, and they usually have a surprising conclusion. We'll discuss if students think the structure is effective at getting the message across and what aspects of the episode led them to their conclusions.

How is each episode similar and how are they different from each other? Students will give their opinions on whether or not each episode was an effective allegory on the same basic idea, fear of nuclear war.

RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context.

RL.6.9. Compare and contrast different stories/texts in terms of their approaches to similar themes and topics.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Prior to watching the episodes students will be asked to look for symbols and will write them down as they watch and we'll see if everyone saw the same symbols and what students. Then we'll discuss how is each episode similar and how are they different from each other? Do they have the same theme? Why or why not?

7

6

RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context

SL.7.2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Prior to watching the episodes students will be asked to look for symbols and will write them down as they watch and we'll see if everyone saw the same symbols and what students. Then we'll discuss how is each episode similar and how are they different from each other? Do they have the same theme? Why or why not?

Students will give their opinions on whether or not reading watching television episodes helped them understand the feelings people at the time had/have about nuclear war and the effects of WW2 on the world. Did it give them a clearer picture of the affects that Hiroshima and Nagasaki had long afterwards and the affects of the nuclear arms race. Did the episodes affect their opinions on nuclear weapons? Why or why not?

8

RST.6-8.4. Determine the meaning of symbols as they are used in a specific literary context

6.10. b Examine the shaping of public opinion by the government and the media.

These standards will be met when students watch and help analyze the message or theme behind the episodes. We will watch the videos/clips and students will determine what they think the central idea of the episodes are, without being told first. Prior to watching the episodes students will be asked to look for symbols and will write them down as they watch and we'll see if everyone saw the same symbols and what students. Then we'll discuss how is each episode similar and how are they different from each other? Do they have the same theme? Why or why not?

We will compare the message from the government produced video from the previous day (or this day if we didn't have time to watch it before), to the message presented by the Twilight Zone episodes. We'll discuss which one might have shaped public opinion more and which one showed public opinion more, or if they believe both were equally affective.

unit tour: day three

Reason 4 to drop the bomb: A lack of incentives **not** to use

the bomb - Weapons are created to be used. By 1945, the bombing of civilians was already an established practice. In fact, the earlier U.S. firebombing campaign of Japan, which began in 1944, killed an estimated 315,922 Japanese, a greater number than the estimated deaths attributed to the atomic bombing of Hiroshima and Nagasaki. The firebombing of Tokyo alone resulted in roughly 100,000 Japanese killed.

pearl harbor?

The best way to really bring a tragic event to life is through the stories of those who lived through it-- whether they be fictional stories or real eyewitness accounts. Introduce or support the following topic with an appropriate book such as, *Attack on Pearl Harbor: The True Story of the Day America Entered World War II*

Reason 5 to drop the bomb: Responding to

Pearl Harbor - When a general raised objections to the use of the bombs, Truman responded by noting the atrocities of Pearl Harbor and said that "When you have to deal with a beast you have to treat him as a beast."



Where is Pearl Harbor?

Pearl Harbor is located in Hawaii on the island of O'ahu. Hawaii is located in the Pacific Ocean between California and Japan. During the time of World War II, Hawaii was not a state, but a US territory. (Have students map and mark the locations as they are discussed.)

Before the Attack -At dawn on December 7, 1941, America was at peace, although it was clear a war was coming. World War II had been raging in Europe and Asia for two years, but the United States had not entered the war. Nazi Germany had overrun most of Europe and was literally at the gates of Moscow. Britain was slowly starving as Nazi submarines sank the ships carrying food and medicine the British needed. Although officially neutral, there was no doubt where American sympathies lay. Although the United States sent huge amounts of war supplies to Britain and Russia and had greatly expanded its own Army and Navy, Americans were unwilling to officially go to war against enemies who had never attacked us.

Submarine Race: Build Your Own (Unsinkable?) Submarine!

Just as the Germans and British were in a race to see who could survive at sea, we're going to see who survives the race! Divide students into teams (Germans vs. British) and must build a submarine that will sink and come back to the surface. Each team will try one variation (ex. British can start with Soda Cup Lander and the Germans with the Lift Bag Lander) and then switch, just as nations at war try to spy, steal, and improve upon technology and engineering discovered by other groups. Can they combine elements from each into an even better TOP SECRET Submarine design?

Soda Cup Lander: Assembly and Operation

THIS IS HOW TO MAKE IT:

Collect everything you need from the drawing on the following pages. Students will also need access to a tank, clear bucket, or sink to watch their submarine dive. Then, assemble as follows:

- 1. Hot glue (or Velcro[®]) the film canister lid to the inside top of cup.
- 2. Make two ballast weights as follows:
 - a. Loop rubber band through end of a paper clip.
 - b. Loop the other end of the rubber band through the hole of the washer.
 - c. Attach the paper clip to the soda cup, one on each side, using the duct tape.
- 3. Make sure the inside of the film canister is dry.
- 4. Inside the film canister, place ten pennies.
- 5. On top of the pennies, place one Alka Seltzer tablet.
- 6. Snap the bottom of the film canister tightly to the lid.
- 7. Place the assembly underwater and tip it to flood.
- 8. Release.
- 9. The Lander will sink to the bottom, then rise to the surface.

PRINCIPLES OF OPERATION:

Pennies and ballast weights cause the Soda Cup Lander to sink to the bottom.

Water will enter the film canister under pressure, slowly rising to contact Alka Seltzer. How fast it comes in (rate) is controlled by the size and number of holes in the canister.

Tablet fizzes on contact with water to form a gas. Gas exits upper hole of canister and gets caught in top of cup, displacing the water from the cup. Captured gas displaces water until cup becomes buoyant and returns to the surface.



SODA CUP LANDER

LANDER BODY -

Plastic drink cup

-35mm film canister and lid

Alka Seltzer™ tablet

Pennies

-Duct tape

Paper clips

Rubber bands

ASCENT ENGINE-

Holes (1/16" - 1/8") drilled in film canister

Washers for ballast (2 on each side)

Created by Kevin Hardy, Scripps Institution of Oceanography, UC San Diego Illustration and design by Tanya Young

Lift bag lander: Assembly and Operation

THIS IS HOW TO MAKE IT:

Collect everything you need from the drawing on the following page. Students will also need access to a tank or swimming pool to watch their submarine dive. Then, assemble as follows:

- 1. Poke a 1/4" hole in the center of one side of the Ziploc bag.
- 2. Drill two 1/8" holes in the film canister: one in the center of the lid and the other in the side of the body.
- 3. Make sure the inside of the film canister is dry.
- 4. Fill the canister two-thirds full of pennies.
- 5. On top of the pennies, place one Alka Seltzer tablet.
- 6. Place the canister lid inside the Ziploc bag and line it up over the hole you poked in the side of the bag.
- 7. Snap the lid tightly over the canister body.
- 8. Zip the bag securely, then slowly squeeze all the air out of the bag. (Very important! If it is not completely closed, the air will escape and the Lander will malfunction!)
- 9. Place underwater and release.

PRINCIPLES OF OPERATION:

Weight of pennies will cause Lander to sink to the bottom.

Water will enter the film canister under pressure, slowly rising to contact the Alka Seltzer tablet. (The flooding rate can be changed by the size and number or holes.)

Tablet fizzes when water touches it, making a gas.

Gas rises to top of canister, passing through the hole in the lid into the Ziploc bag.

The captured gas expands the bag; it begins to float and returns to the surface.

LIFT BAG LANDER



Created by Kevin Hardy, Scripps Institution of Oceanography, UC San Diego

Illustration and design by Tanya Young

SUBMARINE A Voyage into Science Discovery with James Cameron and Kevin Hardy

Other fun things to try:

FOR YOUR SODA CUP LANDER:

- Hot glue a propeller to the top and cause the Lander to rotate like a gyroscope. Does it rotate in different directions or at different speeds, going up and down?
- Ballast weights could be lead tire or fishing weights, or metal nuts or bolts.
- A straw attached to the Ascent Engine pointing straight down will return a soft bottom sample to the surface, (such as lifting artifacts or lost supplies from a sunken ship). (Thanks to Harry Helling from the Ocean Institute, Dana Point, CA for this idea.)
- A clear plastic straw capped on the top and fastened to one side is a manometer to measure depth.

FOR YOUR LIFT BAG LANDER:

• For ballast, try rocks instead of pennies. Does it still sink? Why? Hint: The specific gravity of rocks is 2.7; iron is about 8.

Day Three K-8 Standards Alignment

К

7.11.1a Explore different ways that objects move.

7.11.1b Use a variety of objects to demonstrate different types of movement. (e.g., straight line/zigzag, backwards/forward, side to side, in circles, fast/slow).

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines.

1

7.11.1a Investigate how forces (push, pull) can move an object or change its direction.

7.11.1b Use familiar objects to explore how the movement can be changed.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. We will discuss, test, and observe how gravity is pulling them down, friction is slowing them down, and buoyancy is trying to lift them back up, etc.

2

7.12.2 Describe what happens when an object is dropped and record the observations in a science notebook.

7.9.3 Recognize that air takes up space

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. Students will keep track of the results of their tests and compare them to see which lander they think works the best. We will discuss how the gas displaces (takes the place of/moves out of the way) the water and takes up the space the water once took and fills up the bag.

3

7.T/E.2 Apply engineering design and creative thinking to solve practical problems.

7.T/E.5 Apply a creative design strategy to solve a particular problem.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. Students will have to design, test, figure out problems, redesign, and retest their landers. As problems arise students will have to figure out how to solve it and or change their lander to overcome it.

4

7.11.1 Identify the position of objects relative to fixed reference points.

7.11.2 Design an investigation to identify factors that affect the speed and distance traveled by an object in motion.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. We will mark on the sides of the tub different depths and compare and contrast how deep their lander goes, and how high it rises as they test out variables, such as extra ballast, etc. They will have to identify whether or not their changes to their landers made any changes in its movement.

5

7.11.1 Predict how the amount of mass affects the distance traveled given the same amount of applied force.

7.12.2 Identify the force that causes objects to fall to the earth.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. We will identify what force is pulling the landers down into the water (gravity). As they test different ballasts and configurations students will have to make predictions whether they think it will increase/decrease the depth their submarine reaches or increases/decreases the amount of lift they are able to achieve.

7.T/E.5 Develop an adaptive design and test its effectiveness.

7.T/E.2 Know that the engineering design process involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. Students will have to design, test, figure out problems, redesign, and retest their landers. They will be given materials and suggestions and also be allowed and encouraged to come up with their own modifications to see which combination of elements makes the most effective design.

7

7.11.4 Recognize how a net force impacts an object's motion.

7.T/E.2 Know that the engineering design process involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. We will discuss, test, and observe as the sum of all the forces (or interactions with the environment or constraints around it) change a lander's movements, ex. how gravity is pulling them down, friction is slowing them down, and buoyancy is trying to lift them back up, etc. all combine to affect the lander's movement. Students will have to design, test, figure out problems, redesign, and retest their landers. They will be given materials and suggestions and also be allowed and encouraged to come up with their own modifications to see which combination of elements makes the most effective design.

8

7.12.7 Explain how the motion of objects is affected by gravity.

7.T/E.2 Know that the engineering design process involves an ongoing series of events that incorporate design constraints, model building, testing, evaluating, modifying, and retesting.

These standards will be met and reinforced when students construct, test, and re-engineer (as necessary), and compare their submarines. We will discuss, test, and observe as gravity affects the lander's movements, ex. how gravity is pulling them down even as buoyancy is trying to lift them back up, and how that might affect the lander's movement. Students will have to design, test, figure out problems, redesign, and retest their landers. They will be given

materials and suggestions and also be allowed and encouraged to come up with their own modifications to see which combination of elements makes the most effective design.

unit tour: day tour

Pyramid Battle

This is a great game to get kids active and use math skills! Students battle one on one as they roll the dice to get the higher number. If they get the higher number they advance to the next level. If they win the championship level, their team gets a point.

Watch the very clear explanation video with rules, tips, instructions, diagrams, and variations on how to play at the following link: <u>http://www.peuniverse.com/Videos/detail.cfm?post_id=819</u>

Materials:

- 15 Hula Hoops (or sheets of paper in five different colors (ex. red, yellow, blue, green, and black) to mark levels)
- 30 dice
- 6 cones
- Hurdles (optional)
- a pool noodle
- way to keep score

Option: If available use Dice in Dice (pictured), especially if you are incorporating addition/subtraction/multiplication/division in this game. The dice are colorful, transparent, and have a small white die inside the bigger transparent die making it easy to roll one die, but really be rolling 2 to easily incorporate the math.



Variations:

- With Kinders and 1st grade, etc. use the greater than or less than element.
- Use 10 hula hoops total (4 on the base -3-2-1). Instead of running a full lap have students run to the opposite end of the gym, touch the wall, then return to the beginning.
- Use 8 hoops in the first row, 4 in the second row, 2 in the third row and one hoop in the last row. figured 16 students play in first round, then those 8 winners play in row 2, then the 4 winners in row 3 and finally the 2 winners in the last row.
- Have an obstacle course the kids have to run through when they lose at one of the hoops.
- With 10 minutes left in the activity, say 3,2,1 Freeze! Then switch the rules so that the lower number gets to move up the pyramid and the higher number gets to run the lap. ALSO...the person who rolled the lower number has to do that many jumping jacks before heading up to the next level.
- NO teams. If you were the champ you grab a rubberband bracelet and put it on your wrist.

Day Four K-8 Standards Alignment

- К
- K.CC.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.
- K.CC.5. Count to answer "how many?" questions.
- K.OA.2. Solve addition and subtraction word problems, and add and subtract within 10
- K.OA.5. Fluently add and subtract within 5.

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

1st

- 1.0A.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
- 1.0A.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

 2^{nd}

- 2.0A.1. Use addition and subtraction within 100 to solve one- and two-step problems
- 2.0A.2. Fluently add and subtract within 20 using mental strategies.

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

3rd

- 3.0A.7.Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8)
- 3.0A.7.b) Fluently multiply and divide within 100, using strategies such as properties of operations.

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

 4^{th}

- 4.NBT.4. Fluently add and subtract multi-digit whole numbers
- 4.NBT.5.a Multiply a whole number of up to four digits by a one-digit whole number

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

5th

- 5.NBT.5. b Fluently multiply multi-digit whole numbers
- 5.NBT.5. a Perform operations (addition, subtraction, multiplication, division) with multi-digit whole numbers

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

 6^{th}

- 6.NS.2. Fluently divide multi-digit numbers
- 6.NS.3. Fluently add, subtract, multiply, and divide multi-digit numbers using the standard algorithm for each operation

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

7th

- 7.NS1.1 Apply and extend previous understandings of operations, ex. with fractions, to add, subtract, multiply, and divide rational numbers.
- 7.NS.3. Solve real-world and mathematical problems involving the four operations with rational numbers.

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

 8^{th}

• A-APR.1. Add, subtract, and multiply polynomials.

30

• A-APR.7. b Solve real-world and mathematical problems involving the four operations with rational numbers and/or rational expressions.

Students will practice these math skills, among others, through the selected math problem review game as we practice core math problem solving and mental math skills.

Unit Four Academic Vocabulary Guide

К

- Human
- Community
- Shelter

Story •

Author

Classify

- 1
- Past
- Present •
- Future
- History
- 2
- History ٠
- Events •
- Authority
- Government •
- 3
- Population
- Tools •
- Weapons
- Division
- 4
- Population
- Political •
- Genre •
- 5
- Metaphor
- Gravity •
- Boundary •

- Fables •
- Main idea
- Message •
- Author's purpose ٠
- Opinion
- Effect •
- Cause •
- Character •
- Fable •
- Metaphor ٠
- Compare •
- Border
- Theme •
- Visual image •

- Compare
- Greater than/less than
- Reality
- Media
- Outcome •
- Similarities
- Differences •
- Supporting details
- Setting •
- Borders •
- Contrast
- Chance •
- Main ideas
- Implied ٠
- Divisibility •

- Investigate

- Shelter
- •
- Property ٠
- Push/Pull

- Relevant
- Imagery
- Point of view •
- •

7

- Impact
- Property
- Relationships
- Mood

8

- Buoyancy
- Buoyant force
- Doctrine

- Employ
- Power •
- Control

- Tone
- •
- Climax
- Nuance

- Persuasive
 - Tension •
 - Social norms •

• Cause and effect

• Interaction with

- Similarity •
- pyramid

texts

• Stress

- •
- •
- Order
- Debate •
- Dramatization •

- Inferences

Wings of the Crane Unit Four Sample Supply List

Day One

- Access to the internet/videos
- The Butter Battle Book
- PowerPoint over the history

Day Two

- Access to the internet/videos
- Paper
- Pencils
- White Board/markers/erasers for sample allegory creation

Day Three

- Plastic drink cups (clear)
- 35mm film canisters with lids
- Alka-seltzer tablets
- Duct Tape
- Paper Clips
- Rubber Bands
- Drill
- Washers (4 per lander)
- Pennies
- Ziploc sandwich bags
- Hot glue gun/glue sticks or Velcro circles
- Clear bucket

Day Four

- 15 Hula Hoops (or sheets of paper in five different colors (ex. red, yellow, blue, green, and black) to mark levels)
- 30 dice
- 6 cones
- Hurdles (optional)
- a pool noodle
- way to keep score

Option: If available use Dice in Dice (pictured), especially if you are incorporating addition/subtraction/multiplication/division in this game. The dice are colorful, transparent, and have a small white die



inside the bigger transparent die making it easy to roll one die, but really be rolling 2 to easily incorporate the math.