

MR. BURNS

A POST-ELECTRIC PLAY

at Illinois State University, Spring 2018

<https://mrburns-isu.wixsite.com/dramaturgy>

Hey team!!

I'm Nicole and I'm your dramaturg (not your costume designer - that's Amanda's job)! Woo! am so overjoyed to be a part of this show in a different capacity than I have done before...although, being a dramaturg isn't too far out of my comfort zone. Let me explain...

I didn't graduate undergrad with a theatre degree, I graduated with a psychology research degree (I can even give you my thesis paper on gender in the classroom that is currently being reviewed for publication in a academic journal). I love the process of research - looking at both small details and the larger implications and how everything fits together. (Which, if you think about it, sets me up well to be a costume designer.)

It is my hope that you use this packet as a tool and reference as you go through this process. Whenever you flip through it (especially the first time), keep a pen in hand to write thoughts and questions down. And then send them my way! The more we talk and are in communication with each other, the more fantastic this process can be.

Also! I have built a website for you all to use. I reference it a lot within this packet, since the website has cool videos and links to more information. There is also a page called "Questions". Not only can you shoot me a direct message, it also has thought-provoking questions and ideas to ponder (and

maybe get frustrated with). I also written a few of those questions on here as well - just look for my handwriting!

Think of me as your reference librarian - I can provide some answers and give you research tools, but I will also be asking you just as many questions you ask me.

Feel free to email or message me any time with any questions or thoughts!

Nicole R Kippen
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PS. Did you know that the area code 701 is for all of North Dakota? I'm originally from Fargo and no, I do not like the movie. They filmed it in northern Minnesota and their accents are nothing like mine. But we do have the wood chipper in the middle of our welcome center, which is hilarious.

THE PRODUCTION TEAM

DirectorKristin L Schoenback

Assistant Director.....Asa Wallace

Stage ManagerKiara Irizarry

Assistant Stage ManagerJojo Wallenberg

DramaturgNicole R Kippen

Music DirectorPete Guither

Vocal CoachConnie De Veer

ComposerJordan Coughtry

Choreographer.....Mattilyn Nation

Fight ChoreographerPaul Denhardt

Costume DesignerAmanda Bedker

Assistant Costume DesignerMegan Wungleuck

Wardrobe SupervisorIan Liberman

Scenic DesignerAllison McCarthy

Prop MasterNick Chamernik

Assistant Prop MasterLucy Yahr

Charge Artist.....Amanda Vander Byl

Lighting Designer.....Laura Gisondi

Assistant Lighting Designer & Assistant ME.....Clare Maylone

Master Electrician.....Trey Brazeal

Assistant Master ElectricianGreg Kontos

Sound DesignerMorgan Hunter

Assistant Sound DesignerMaKenna Lockhart

THE CAST

Matt/HomerThomas Russell
Jenny/FBI Agent 1/Marge/LisaJohanna Kerber
Sam/Mr. BurnsEverson Pierce
Maria/FBI Agent 2/BartSarah Ford
Gibson/Sideshow Bob/Stratchy.....Owen McGee
Collen/MargePaige Brantley
Quincy/Lisa/ItchyMegan Compton

Edna KrabappelErika Clarke
Chorus.....Emily Franke
Lauren Hickel
Emma Lizzio
Daija Nealy
Pat Regan
Cody Rogers
Deanna Stewart
Caitlin Wolfe

Chorus/Percussionist.....Josh Harris

GENERAL GLOSSARY

Cape Fear is a 1962 psychological thriller film directed by J. Lee Thompson. Based on the novel *The Executioners*, by John D. MacDonald, the film is about attorney Sam Bowden (played by Gregory Peck), whose family is stalked by a rapist named Max Cady (Robert Mitchum), whom Bowden helped send to jail. Bowden and his family escape to their houseboat in Cape Fear, off the coast of North Carolina, but Cady follows them. After a long struggle, Bowden ultimately allows Cady to live out the rest of his life in jail. The film regularly makes it onto lists of the most frightening movies ever made. In 1991, the film was remade, directed by Martin Scorsese. It starred Nick Nolte as Bowden, Robert De Niro as Cady, Ileana Douglas as Bowden's colleague and Cady's victim, and Juliette Lewis as Bowden's teenage daughter. De Niro and Lewis both received Academy Award nominations for their roles.

Chablis (*sha-'blē* or *sha-'blēz*) is a white wine made in and around the town of the same name in Burgundy, France. Chablis wines are almost all dry chardonnays and are famous for their distinctive notes of flint, chalk, and/or seashells.

Do the Right Thing— see *The Night of the Hunter*

"Feets, don't fail me now" is a catchphrase most famously heard in films of the 1930s and '40s, said by such black actors as Willie Best, Stepin Fetchit, and Mantan Moreland.

Gilbert and Sullivan collectively refers to librettist W. S. Gilbert (1836–1911) and composer Arthur Sullivan (1842–1900), who wrote 14 comic operas together between 1871 and 1896. Their work is marked by intricate rhyming structures, syncopated rhythms, witty lyrics, and dynamic harmonies. *H.M.S. Pinafore*, the pair's first international success, was first performed in 1878. *The Mikado* opened in 1885 and became their most popular opera. It takes place in a fictional Japanese city where flirting is punishable by execution; Ko-Ko has been convicted of this crime, but as he himself is the Lord High Executioner, he cannot be killed, and therefore, no one else can be. His assistant, Pooh-Bah, takes the offices of all those who are too proud to serve Ko-Ko. The opera features the song "Three Little Maids from School Are We," which is sung by Yum-Yum (the ingénue) and her friends.

H.M.S. Pinafore— see *Gilbert and Sullivan*

"Hundreds of plants"—in the United States, there are currently 62 nuclear power plants in operation, with a total of 100 reactors. The state with the most is Illinois, with 6 plants and 11 reactors. The West Coast has only two plants, with a total of three reactors.

Crazy, right?

Kelsey Grammer (born 1955) is an American actor, famous for his role as Dr. Frasier Crane in the television series Cheers and Frasier, and for providing the voice of Sideshow Bob in The Simpsons.

Lithium batteries use the element lithium as a source of power. These batteries can be one-use or rechargeable. Due to their longevity (some can last for as long as 15 years), they are often used in electronics and such medical devices as pacemakers.

"LOVE" and "HATE"— see The Night of the Hunter

The Mikado— see Gilbert and Sullivan.

The Night of the Hunter, directed by Charles Laughton, is a 1955 film about reverend/serial killer Harry Powell (Robert Mitchum), who attempts to seduce a widow (Shelley Winters) in order to acquire the money her husband stole from a bank. In the film, Powell has tattoos of the words "LOVE" and "HATE" on his knuckles. He explains them to the widow's young son, while acting out the story with his hands:

H-A-T-E! It was with this left hand that old brother Cain struck the blow that laid his brother low. L-O-V-E! You see these fingers, dear hearts? These fingers has veins that run straight to the soul of man. [. . .] Those fingers, dear hearts, is always a-warring and a-tugging, one agin t'other. Now watch 'em! Old brother left hand, left hand hate's a-fighting, and it looks like love's a goner. But wait a minute, wait a minute! Hot dog, love's a-winning! Yessirree! It's love that's won, and old left hand hate is down for the count!

In 1989, director/writer/producer Spike Lee paid homage to The Night of the Hunter in his film Do the Right Thing, about mounting racial tension in a Brooklyn neighborhood. In this film, the character Radio Raheem (Bill Nunn) wears brass knuckles spelling out "LOVE" and "HATE." He explains them while acting out the story with his hands:

Hate: it was with this hand that Cain iced his brother. Love: these five fingers, they go straight to the soul of man. The right hand: the hand of love. One hand is always fighting the other hand, and the left hand is kicking much ass. I mean, it looks like the right hand, love, is finished. But hold on, stop the presses, the right hand is coming back. [. . .] Ooh, it's a-devastating, right, and hate is hurt, he's down. Left-hand hate K-O'ed by love.

Pooh-Bah— see Gilbert and Sullivan.

Pret-a-Manger is a fast-food chain, especially popular in London (where it first opened in 1986) and New York City. It is famous for its sandwiches and dedication to using all-natural/ preservative-free ingredients.

Robert Mitchum was a film noir actor in the 1950s and 1960s. Appeared in both The Night of the Hunter and Cape Fear (1962). See The Night of the Hunter.

Rods provide the fuel for nuclear reactors. They are usually made of uranium-235, an isotope that fissions readily, and are encased in metal cladding.

Shale is a sedimentary rock that often contains higher-than-average levels of radioactivity.

Shiraz is a red wine made from grapes grown primarily in Australia, with undertones of violet, tar, pepper, spice, and dense, dark red berries.

Smash cut refers to an abrupt cut in a film that occurs without warning, usually in the middle of a scene, with the intent of startling the viewer.

"This is the vida loca, we are living the vida loca" is a line from the 1999 Latin-pop song "Livin' la Vida Loca," by Ricky Martin. It was one of the best-selling singles of all time and stayed at number one on the Billboard "Hot 100" for five weeks.

Three fingers—many early cartoon characters were drawn with three fingers and one thumb, as this was easier for animators to draw than a complete human hand. Groening used this convention for *The Simpsons*.

"Three Little Maids from School Are We"— see Gilbert and Sullivan.

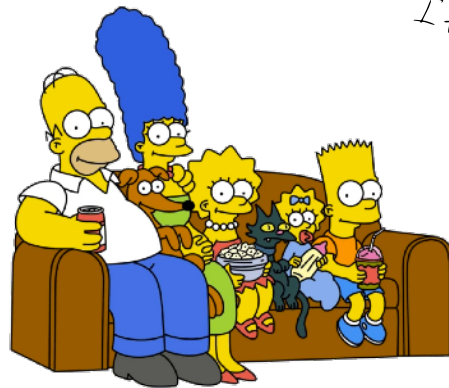
"Toxic" is a 2003 song by American pop singer Britney Spears; it reached number nine on the Billboard "Hot 100" chart. The song compares the singer's lover to a toxic substance, presumably a drug.

The West Wing is a political drama series, created by Aaron Sorkin, that ran from 1999 to 2006. The show, which follows the story of the fictional President Bartlet and his staff through his term in office, has been praised for its political accuracy, treatment of current events, and witty, fast-paced dialogue.

SIMPSONS GLOSSARY

Adapted from American Conservatory Theatre's "Words on Plays"

Springfield is the town in which The Simpsons takes place. It is located in an unspecified American state. Its mottos are "Meanest Town in America!" and "Springfield: Good."



If you want more info, check out simpsons.wikia.com

Bart Simpson, voiced by Nancy Cartwright, is a ten-year-old fourth-grade student and the only son of Homer and Marge Simpson. Unlike the other members of the Simpsons family, who are named after creator Matt Groening's family members, Bart's name is an anagram of the word "brat." He is mischievous and disrespectful of authority; he makes prank phone calls, does poorly in school, and can be found riding his skateboard. He is famous for his catchphrases, including "Eat my shorts!" and "Ay, caramba!" "Cowabunga" also became one of his catchphrases, but only after fans attributed it to him.

Homer Simpson, voiced by Dan Castellaneta, is the patriarch of the Simpsons family. He works at the Springfield Nuclear Power Plant, but has held many other jobs. He has an affinity for beer and donuts. His stupidity is often a source of humor in the show.

Lisa Simpson, voiced by Yeardley Smith, is the eight-year-old daughter of Homer and Marge Simpson. Extremely intelligent with an IQ of 159, she often feels like an outcast in her family. She has idealistic morals; she is an environmentalist and a feminist, and she becomes a vegetarian and a Buddhist over the course of the show.

Maggie Simpson is the infant daughter of Marge and Homer Simpson. She generally does not speak, but has been voiced by Nancy Cartwright, Elizabeth Taylor, Jodie Foster, and James Earl Jones. She is usually seen sucking on a red pacifier. Throughout the series, she has exhibited traits that imply she is a genius.

Marge Simpson, voiced by Julie Kavner, is the matriarch of the Simpsons family. She is recognizable by her blue beehive hairstyle and high-pitched, gravelly voice. She is a calm foil to the rest of the family's chaos.



Mr. Montgomery Burns, voiced by Harry Shearer, is Homer's boss and the wealthy, evil owner of the Springfield Nuclear Power Plant.

Sideshow Bob is a recurring character on The Simpsons. Voiced by Kelsey Grammer, he is an evil clown whose real name is Underdunk Terwillinger, PhD. Sideshow Bob begins his clowning career as the trod-upon, silent sidekick on Krusty the Clown's television show. Eventually, Bob begins to resent Krusty's abuse and frames his boss for armed robbery of Kwik-E-Mart, a neighborhood convenience store. Krusty is arrested, and Bob assumes control of the show, but Bart exposes the plan. Krusty is freed while Bob goes to prison, holding a long-lasting grudge against Bart.



Blinky is a species of fish with three eyes that lives in Springfield; the mutation is caused by radiation from the Springfield Nuclear Power Plant. In the episode "Two Cars in Every Garage and Three Eyes on Every Fish" (S2E4), Bart catches a Blinky fish.

Kent Brockman is a newscaster in Springfield.

Ned Flanders is the Simpsons' neighbor. His devout Christianity and perfect family are a source of annoyance for the Simpsons, particularly Homer.

Itchy and Scratchy are characters in a fictional cartoon (The Itchy & Scratchy Show, part of The Krusty the Clown Show) frequently watched by Lisa and Bart. In this spoof of Tom and Jerry, a mouse (Itchy) and a cat (Scratchy) antagonize each other; but unlike Tom and Jerry, they succeed in killing each other several times, often with gratuitous violence and gore.



Edna Krabappel teaches Bart's fourth-grade class. Her grumpy demeanor is a satire of the American public-school system.

Troy McClure is a washed-up actor, acting in infomercials and educational videos.

Nelson Muntz is a bully who attends Springfield Elementary School with Bart and Lisa. He is famous for his obnoxious laugh.

Apu Nahasapeemapetilon, an Indian immigrant, is the manager of Kwik-E-Mart, Springfield's convenience store.

Mayor Quimby is the mayor of Springfield and a parody of Kennedy politicians.

"Smarmy Prosecutor," also known as the "Blue-Haired Lawyer," often appears in episodes featuring the Simpsons in court. He is also one of Mr. Burns's lawyers.

Moe Szyslak is the owner of Moe's Tavern, a bar frequented by Homer and his friends. He has a short temper and propensity for violence and suicide attempts, and often receives prank phone calls from Bart.

Thelma is likely a corruption of the name of Marge's sister Selma Bouvier. (There is no Simpsons character named Thelma.)

Chief Wiggum is the incompetent chief of police in Springfield. In one episode, he claims that Sideshow Bob calls him Chief Piggum; in fact, the character was designed to resemble a pig.

"THE SIMPSONS" GLOSSARY

"Calm thyself, Bartron, and tell us now where the magic space crystals which can save the galaxy are hidden" is a line said by Lisa in "Space Patrol," the 14th short on The Tracey Ullman Show, which aired on November 8, 1987. In the short, Lisa, Bart, and Maggie play "Space Patrol"; Maggie and Lisa put pots on their heads as helmets, but Bart gets his head stuck in a vase. Lisa dubs him "Bartron, the evil robot from Mars gone berserk" and proceeds to antagonize him.

"A Streetcar Named Marge" (S4E2), originally aired October 1, 1992

Marge wins the role of Blanche DuBois in a musical adaptation of Tennessee Williams's classic play *A Streetcar Named Desire*. Homer is unsupportive of Marge's new hobby, and she begins to realize that he shares certain undesirable traits with Stanley Kowalski, the brutish character in *Streetcar*. Homer eventually comes around and is sincerely moved by the production and Marge's role in it. The episode pokes fun at community theatre and makes allusions to other plays.

"Homer the Heretic" (S4E3), originally aired date October 8, 1992

To Marge's dismay, Homer decides not to attend church one cold winter morning, instead staying home and having an extraordinarily good time. Despite visits from God in his dreams, Homer continues skipping church, but one Sunday morning he falls asleep with a lit cigar and the house catches on fire. Homer survives but concludes that God was exacting vengeance on him, and he decides to return to church. It is one of the more philosophical episodes, including such lines as "I'm not a bad guy, I work hard, I love my kids . . . so why should I spend half my Sunday hearing about how I'm going to hell?" and "What if we've picked the wrong religion? Every week we're just making God madder and madder."

"Bart of Darkness" (S6E1), originally aired September 4, 1994

Called "Heart of Bartness" in *Mr. Burns*. In this parody of the Hitchcock film *Rear Window* (1954), Bart breaks his leg and is confined to his room for the entirety of summer vacation. Realizing that her brother is becoming increasingly agitated and bored, Lisa gives him a telescope, which Bart uses to spy on their neighbors, the Flanders. Bart becomes convinced that Ned Flanders murdered his wife, but eventually discovers that she was just at vacation Bible camp.

"Lisa the Vegetarian" (S7E5), originally aired October 15, 1995

After visiting a petting zoo, Lisa decides to stop eating meat. She is teased for her decision but receives encouragement from Apu, who is a vegan, as well as Paul and Linda McCartney. The McCartneys, who were vegetarians in real life, agreed to appear on the show as long as Lisa remained a vegetarian for the rest of the series. The episode received an Environmental Media Award and a Humane Society of the United States Genesis Award for its treatment of animal rights and environmental issues.

"Much Apu About Nothing" (S7E23), originally aired May 5, 1996

When Springfield forms a patrol to protect the townspeople from bears, taxes are raised astronomically; Mayor Quimby shifts the blame to illegal immigrants and puts forth a proposition to deport them. When Homer learns that Apu (manager of the Kwik-E-Mart) is at risk of deportation, he helps his friend study for the U.S. citizenship test so he can remain in Springfield. The episode received generally positive reviews for its satirical yet sympathetic take on a controversial topic.

"Springfield Files" (S8E10), originally aired January 12, 1997

This parody of The X-Files (a series that aired on FOX from 1993 to 2002) features guest stars David Duchovny and Gillian Anderson as their characters from The X-Files, as well as Star Trek actor Leonard Nimoy as himself. In the episode, Homer sees an alien, but Lisa reveals that the alien is actually Mr. Burns, who glows green at night due to radiation from his nuclear plant.

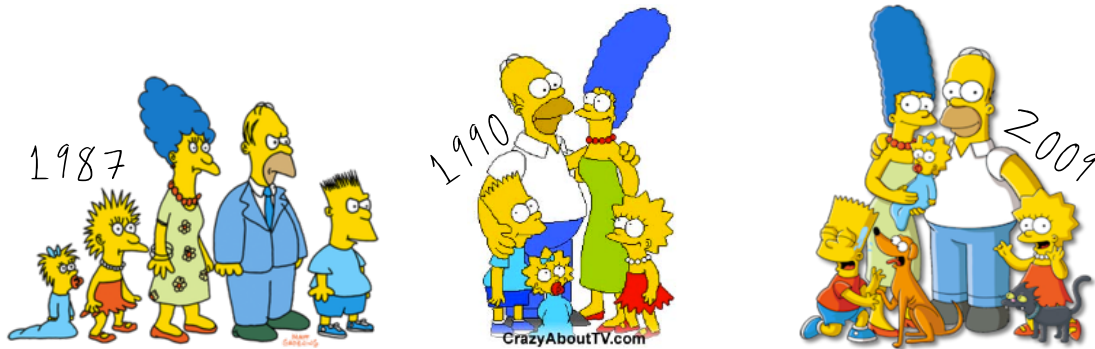
Here are some more episodes to watch if you want:

"Treehouse of Horror X" (S11E4), originally aired October 31, 1999 - Homer accidentally initiates the nuclear core's meltdown.

"Two Cars in Every Garage and Three Eyes on Every Fish" (S2E4), originally aired November 1, 1990 - Bart catches a three-eyed fish (Blinky) in the river and causes the plant to nearly be shut down.

"THE SIMPSONS" HISTORY

The Simpsons was created by Matt Groening, who conceived of the idea for the Simpsons in the lobby of James L. Brooks's office. He named the characters after his own family members, substituting "Bart" for his own name (which is an anagram for brat). The family debuted as shorts on *The Tracey Ullman Show* on April 19, 1987 to help boost ratings for the newly-founded Fox Network. In 1989, the shorts were spun off into the series *The Simpsons* which debuted on December 17, 1989. Since then, the series has aired over 500 episodes, 27 seasons and a film, released in 2007. The show has won more than 120 awards, including 32 Emmys, 11 Writers Guild Awards, and 8 People's Choice Awards.



The creators negotiated with Fox network that prevented the network from interfering with the show's content. Groening said his goal in creating the show was to offer the audience an alternative to what he called "the mainstream trash" they were watching. *The Simpsons* was Fox's first TV series to rank in the 30 highest-rated shows. However, the network got over-confident and moved the show another time slot that competed with *The Cosby Show*, which hurt the ratings. In season 14 (2002), the show switched from cel animation to digital ink and paint.

When the show was created, it had one of the longest opening sequences on the air, roughly 1:30. However, it worked for the show because every opening sequence has episode-specific gags - the chalkboard gag and the couch gag. The couch gag's length helped make shorter episodes fill time.

Search for the Vox.com article, "How an episode of *The Simpsons* is Made"

The show has seen its fair share of controversy. In the fourth season, "A Streetcar Named Marge" was deemed offensive to the people of New Orleans because of its parody song of the opening number of *Sweeney Todd*. However, a week after it was aired, the chalkboard gag for the episode "Homer the Heretic" read "I will not defame New Orleans", which seemed to end the controversy. The same type of controversy happened with season 13's episode "Blame it on Lisa" where Rio de Janeiro threatened to sue the producers; the only thing that happened is that the episode is banned in Brazil.

FUN FACTS!

- Homer's catchphrase "d'oh!" is one of only 23 sounds that have been copyrighted, along with Darth Vader's breathing, *Law and Order's* "chung chung", and "You've Got Mail"
- Homer has had 187 other jobs besides the nuclear plant. *There's a cool video on the website about all of Homer's jobs!*
- Conan O'Brien was a writer on the show in the 90s.
- The sound of a crow cawing is played in almost every establishing shot of the power plant.
- Since the show began, 244 Fox shows have come and gone.
- Bart's middle name is JoJo.
- Homer and Mr. Burns are distantly related (according to Groening)

NUCLEAR POWER

THE BASICS!

Taken from "Explaining Nuclear Energy to Kids" from The Washington Post

What is nuclear energy?

It's the energy in the center (or nucleus) of an atom. **Atoms** make up everything in the universe and are held together with great force. In a process called **fission**, atoms are broken apart, and the energy released can be used to generate electricity at power plants. Atoms of **uranium**, a common element that can be mined from the Earth, are used in nuclear reactions. In fission, a tiny particle called a neutron hits a uranium atom; the atom splits, releasing more neutrons and generating a chain reaction. That reaction releases huge amounts of energy. That energy can boil water to create steam, which in turn causes turbines to spin, generating electricity in a power plant.

What is a nuclear reactor?

A nuclear reactor is the device in a power plant where fission takes place. Pieces of uranium about the size of your fingertip get stacked up in 12-foot-long metal tubes, called **rods**. Bunches of rods form the **core** of the reactor.

So what happens when power goes down?

Rods are normally kept under water, which keeps the reactor core cool. When the electrical grid goes down, the nuclear plant switches to a backup system of generators and the backup batteries only last eight hours. Without power, the water can't circulate and begins to boil away, allowing for the rods to get hot. The inability to keep cooling water on the fuel rods leads to explosions and fires. Those events send **radioactive elements** into the air. High levels of radiation can be dangerous, even deadly. Close to the reactors, the radiation levels fluctuate. If there isn't water available to keep the fuel rods cool, the fingertip-size pellets can melt, like candles. This melting damages the core, which could lead to the release of more radioactive gases.

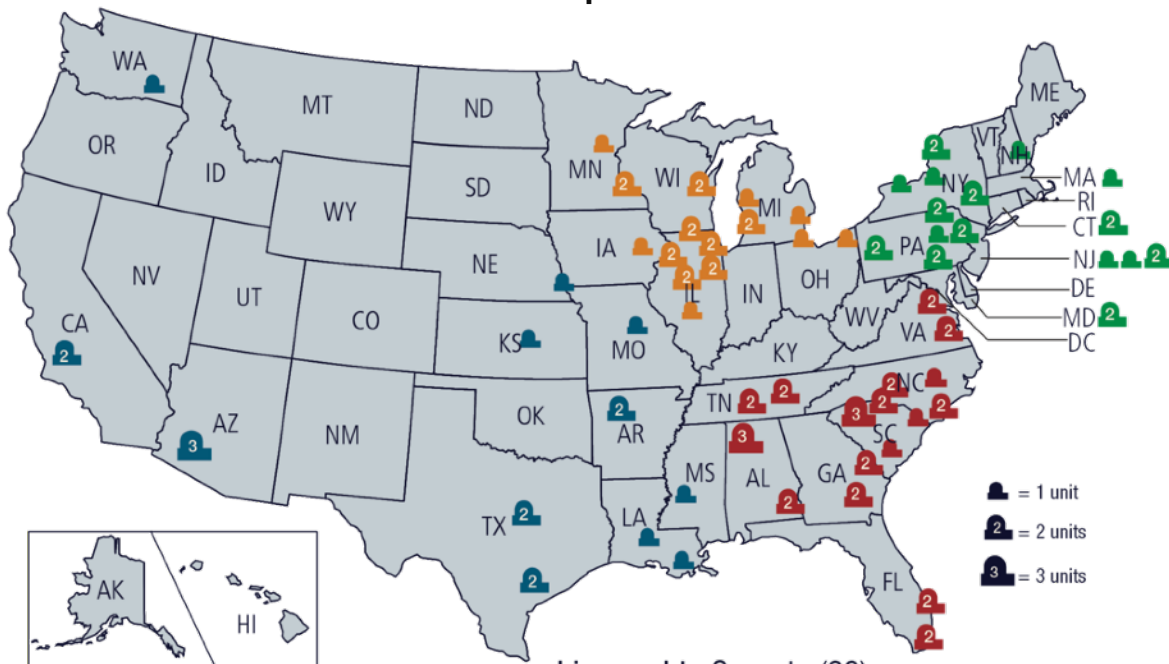
Is nuclear power safe?

That question has been asked for many years. Nuclear power is very efficient. For example, one of those small uranium pellets can produce as much electricity as 150 gallons of oil. Many people see nuclear power as an alternative energy source.

check out the website for videos!

So WHERE ARE THE REACTORS?

Good question!



Licensed to Operate (99)

REGION I

CONNECTICUT

Millstone 2 and 3

MARYLAND

Calvert Cliffs 1 and 2

MASSACHUSETTS

Pilgrim

NEW HAMPSHIRE

Seabrook

NEW JERSEY

Hope Creek
Oyster Creek
Salem 1 and 2

NEW YORK

FitzPatrick
Ginna
Indian Point 2 and 3
Nine Mile Point 1 and 2

PENNSYLVANIA

Beaver Valley 1 and 2
Limerick 1 and 2
Peach Bottom 2 and 3
Susquehanna 1 and 2
Three Mile Island 1

REGION II

ALABAMA

Browns Ferry 1, 2, and 3
Farley 1 and 2

FLORIDA

St. Lucie 1 and 2
Turkey Point 3 and 4

GEORGIA

Edwin I. Hatch 1 and 2
Vogtle 1 and 2

NORTH CAROLINA

Brunswick 1 and 2
McGuire 1 and 2
Harris 1

SOUTH CAROLINA

Catawba 1 and 2
Oconee 1, 2, and 3
Robinson 2
Summer

TENNESSEE

Sequoyah 1 and 2
Watts Bar 1 and 2*

VIRGINIA

North Anna 1 and 2
Surry 1 and 2

REGION III

ILLINOIS

Braidwood 1 and 2
Byron 1 and 2
Clinton
Dresden 2 and 3
LaSalle 1 and 2
Quad Cities 1 and 2

IOWA

Duane Arnold

MICHIGAN

Cook 1 and 2
Fermi 2
Palisades

MINNESOTA

Monticello
Prairie Island 1 and 2

OHIO

Davis-Besse
Perry

WISCONSIN

Point Beach 1 and 2

REGION IV

ARKANSAS

Arkansas Nuclear 1 and 2

ARIZONA

Palo Verde 1, 2, and 3

CALIFORNIA

Diablo Canyon 1 and 2

KANSAS

Wolf Creek 1

LOUISIANA

River Bend 1
Waterford 3

MISSISSIPPI

Grand Gulf

MISSOURI

Callaway

NEBRASKA

Cooper

TEXAS

Comanche Peak 1 and 2
South Texas Project 1 and 2

WASHINGTON

Columbia

Note: NRC-abbreviated reactor names listed. Data is as of May 2017. For the most recent information, go to the Dataset Index Web page at <https://www.nrc.gov/reading-rm/doc-collections/datasets/>

NUCLEAR RADIATION ACCIDENTS AND INCIDENTS

Kyshtym, 1957

Mayak, Russia. One of the cooling systems for one of the tanks, which contained upwards of 80 tons of radioactive waste, failed. The temperature rose and then exploded, releasing toxins into the air. Most of the surrounding population was not informed until much later about the danger. It is the third-most serious nuclear accident.

SL-1, 1961

Idaho Falls, ID. The control rod (absorbs neutrons) was not withdrawn properly, which caused a steam explosion and a meltdown of the nuclear reactor. It killed three operators immediately. It was an experimental nuclear reactor controlled by the US Army.

Three Mile Island, 1979

Dauphin County, PA. This one was an accident on multiple levels - one of the secondary systems failed and a relief valve was left open by an operator. This was all compounded by the fact that the operators didn't take immediate action. They weren't properly trained and the computer system wasn't designed to handle such situations. The total cost of cleanup is estimated to be around \$1 billion. This situation resulted in new regulations for nuclear energy in the US, which slowed down the construction of new plants.

Chernobyl, 1986

Pripyat, Ukrainian Soviet Socialist Republic. Occurred during a late-night safety test when safety systems were deliberately turned off. The reactor had design flaws and the safety checklist was not followed by the operators. Water flooded the steam generator, which created a steam explosion and then a graphite fire. The fire produced updrafts for nine days. 2 operators died the day of, but around 45 people died in the days and months afterwards. (See the next section for long-term effects.)

Fukushima Daiichi, 2011

Fukushima, Japan. The reactor had been working since 1971, with six reactors; it was one of the largest plants in the world. After a massive earthquake and tsunami, the emergency generators failed to start. Over the next three weeks, partial nuclear meltdowns occurred in three of the reactors and explosions in two other reactors. The plant is permanently shut down.

WHAT HAPPENS WHEN YOU ARE EXPOSED TO RADIATION?

Taken from "Radiation Health Effects" from US Environmental Protection Agency

Chronic exposure

Continuous or intermittent exposure over a long period of time. There tends to be a delay between exposure and observed health effect.

Most common effects:

- Benign tumors
- Cataracts
- Genetic changes - pregnant women and children are the most sensitive because the cells are rapidly dividing, so genetic abnormalities are more common.

Short-term effects

Radiation Sickness: Occurs within 24 hours (sometimes even minutes) of being exposed to high levels of radiation. Symptoms:

- Nausea & vomiting
- Headache
- Diarrhea
- Seizures & tremors
- Skin damage (swelling, redness, blisters, ulcers)
- DNA damage

Radiation above 75,000 millirem (base unit) causes radiation sickness. For comparison, the average dose of radiation from an x-ray is 4 millirem.

Long-term effects

Cancer, really. The most common is thyroid cancer. Three decades after Chernobyl, children who drank contaminated milk had a higher risk of be diagnosed with it. In 2006, it was anticipated that more and more would be diagnosed as time went along.

Did you know that the Simpsons was created in 1989 and the Cold War ended in 1991?

CULTURE IN CRISES

Taken from "Culture in Emergencies" & "UNESCO's Response to Protect Culture in Crises" from UNESCO

THE IMPORTANCE OF CULTURE

Culture and heritage, as expressions of peoples' identity, repositories of memory and traditional knowledge, are essential components of a community's identity and social capital. Promoting respect for cultural diversity is fundamental to **preventing violent extremism**, generating **positive dialogue and inclusion**, and fostering lasting **peace**.

The significance of culture in the lives of communities and individuals makes its continuity a powerful tool for building **resilience**, serving as a basis for sustainable **recovery**. Likewise, the rehabilitation of heritage can contribute towards healing the scars of war and natural disasters by allowing communities to recover a sense of **hope, dignity** and **empowerment**. As a visible expression of common ground between communities, culture can be a powerful tool for **reconciliation** and a building block for **social cohesion**.

Artists and cultural institutions play an essential role in ensuring freedom of expression, promoting cultural diversity and fostering inclusive dialogue. Such cultural expressions also offer appropriate ways to deal with psycho-social distress and so reconcile communities.

Whoa!

CULTURE IN CRISES

In an armed conflict or disaster situation, culture is particularly at risk, owing to its inherent vulnerability and tremendous symbolic value. At the same time, culture is as a driver of recovery, strengthening the resilience of a community.

During conflicts, cultural heritage not only suffers from collateral damage, large-scale looting, and illicit trafficking, but also becomes the target of systematic and deliberate attacks, due to its high significance to the communities to which it belongs. They are an intention to destroy the very identity of individuals and groups, severing their links to the land, and breaking the bonds that bind them together as a community.

Disasters caused by natural and human-made hazards including earthquakes, fires, floods, landslides and typhoons, also cause extensive damage to, if not the complete loss of, innumerable cultural and natural heritage sites, museums, cultural institutions, as well as intangible practices, over years.

Culture, however, is not only a victim of emergency situations. Immediately after a disaster or an armed conflict, communities often find in heritage an essential element of material and psychological support. The ability to access one's heritage – be it a religious building, a historic city, an archaeological site or a landscape – or to engage in a specific cultural practice, may provide a much-needed sense of identity, dignity and empowerment. Moreover post emergency, culture can be a vehicle both to rebuild economies and societies and to foster tolerance and reconciliation, mitigating tensions and preventing renewed escalation into conflict. Music, dance, theatre and cinema, for example, have been used to build mutual understanding among diverse refugee communities.

STORYTELLING

*Taken from "The Psychological Power of Storytelling" by Pamela B Rutledge, PhD
from PsychologyToday.com*

Stories are **authentic human experiences**. Stories leap frog the technology and bring us to the core of experience, as any good storyteller knows. There are several psychological reasons why stories are so powerful.

- **Stories have always been a primal form of communication.** They are timeless links to ancient traditions, legends, archetypes, myths, and symbols. They connect us to a larger self and universal truths.
- **Stories are about collaboration and connection.** They transcend generations, they engage us through emotions, and they connect us to others. Through stories we share passions, sadness, hardships and joys. We share meaning and purpose. Stories are the common ground that allows people to communicate, overcoming our defenses and our differences. Stories allow us to understand ourselves better and to find our commonality with others.
- **Stories are how we think.** They are how we make meaning of life. Call them schemas, scripts, cognitive maps, mental models, metaphors, or narratives. Stories are how we explain how things work, how we make decisions, how we justify our decisions, how we persuade others, how we understand our place in the world, create our identities, and define and teach social values.
- **Stories provide order.** Humans seek certainty and narrative structure is familiar, predictable, and comforting. Within the context of the story arc we can withstand intense emotions because we know that resolution follows the conflict. We can experience with a safety net.
- **Stories are how we are wired.** Stories take place in the imagination. To the human brain, imagined experiences are processed the same as real experiences. Stories create genuine emotions, presence (the sense of being somewhere), and behavioral responses.
- **Stories are the pathway to engaging our right brain and triggering our imagination.** By engaging our imagination, we become participants in the narrative. We can step out of our own shoes, see differently, and increase our empathy for others. Through imagination, we tap into creativity that is the foundation of innovation, self-discovery and change.

STOCK CHARACTERS

Antihero is a protagonist lacking conventional heroic qualities, such as morality, courage, or idealism.

Bad Boy is a roguish macho

Boy/Girl Next Door is average, nice, and wholesome

Criminal is often a thief. Has a strange gait, slouched posture, and devious facial expression. Usually wears black and white stripes.

Damsel in Distress is a noble lady in need of rescue

Everyman is an ordinary individual

Gentleman Thief is a sophisticated and well-mannered thief

Ingenue is a young woman who is endearingly innocent and wholesome

Lovers are main characters who deeply and truly fall romantically in love, despite the blocking effect of other characters; often moonstruck, star-crossed lovers that are strongly fraternizing with the enemy

Nerd is a socially-impaired, obsessive, or overly-intellectual person, often interested in doing well in school as well as reading books

Outlaw is a romanticized, often charismatic or social bandit

Superhero is an unrealistically powerful hero dedicated to protecting the public

Supervillain is the antithesis to the Superhero

Swashbuckler is a joyful, noisy, and boastful renaissance era swordsman or pirate

Tomboy is a girl with boyish behavior

Tortured Artist is a character who is in constant torment due to frustrations with art and other people

Tragic Hero is a hero with a major flaw that leads to their eventual death and downfall

Villain is an evil character

Wise fool is a fool with an attribute of wisdom

MASKS IN THEATRE

Taken from "Masks on Stage" from Michigan State University

Ancient Greece— Greek theatrical masks were particularly linked to festivals of Dionysus, the god of fertility, the harvest, theater, and wine. A masked performer would depict Dionysus and over time other characters became represented by masks. One actor could take on the persona of several characters by changing the mask. As well as transforming the appearance of the character, it is possible that the mask designs, with their large mouths, may have assisted in amplifying the voice of the actor as he projected around the amphitheater.



Middle Ages— Mystery plays told Biblical stories and masks were used to portray the devil, demons, or the seven deadly sins. Often made from papier maché, the masks emphasized the ugliness of evil and sin. The commedia dell'arte theater began in Italy and was popular from the 15th century to about the 19th century. Masks depicted various standard characters. So closely linked were characters and masks that the characters themselves were often called "masks".



William Shakespeare— Much Ado About Nothing features Venetian-styled carnival masks in its masked-ball, where romantic liaisons are pursued with some confusion. A Midsummer Night's Dream tells of the comedic outcomes of romance in the realms of humans and fairies. The mask is used as a theatrical link between the planes of existence.



Sanskrit, Mahabharata, and Ramayana— The stories are traditional subjects for performance through much of South East Asia, with characters commonly depicted through masks. Both explore the battle of good versus evil, through superhuman heroes and supernatural villains in the form of demons and witches. Masks lend themselves very well to projecting exaggerated features - be they features of good or evil.



Noh— Dramatic performances in Japan are another fine example of masked characterization. The lead character, and some of the other roles, will be masked. In Noh, carved facial expressions are often very subtle, and can convey emotions, especially in the masks depicting female characters.



Chinese Opera— Exists in various forms, including the well known Beijing (Peking) Opera. Characters depict gods, emperors, warriors, lay people, and clowns, and in older versions, female parts were played by men. Heavy facial makeup, and sometimes real ceramic or cloth masks, are used to denote the nature of the characters. Each line and each color of the painted facial masks can have symbolic significance.

