#### **Education Mini-Pack**

#### THE CHILDREN

by Lucy Kirkwood

#### THE CHILDREN SYNOPSIS

In a small cottage on the British coast, Hazel makes a modest life for herself and her husband Robin in the aftermath of a natural disaster that's led to the meltdown of a nuclear reactor at a power plant. Hazel and Robin are retired nuclear physicists, having helped to open the plant in the 1970s. Now, ensconced in their vacation cabin while waiting for the government to clear their return to their farmhouse in the current "exclusion zone", Hazel follows the rules, stays occupied, and is waiting it out.

So she is not expecting a visit from Rose, a former colleague she hasn't seen in 38 years and one whom she thought dead. Not from the nuclear meltdown, mind you: the rumor was that she fell ill over in America, got better, and then committed suicide. The two 60-something women talk children (Rose has none; Hazel has four children and three grandchildren), career (Rose went to the US; Hazel stuck around), and the actual events of the disaster (Hazel got a first-hand view). But as they're catching up, Hazel notices that Rose is unnaturally at ease in this vacation cottage, pulling out a hidden footstool, snagging a glass from the cabinets without breaking stride. Only Hazel and Robin have used this cottage for years, and Robin hasn't seen Rose for years either, has he?

Robin spends his days back on their property within the exclusion zone, tending to the cows and packing a Geiger counter. He returns for dinner, and Hazel confronts her husband and old friend about their perhaps not-so-distant past. But Rose has come with a more urgent and unusual request, one that will change each of their lives.

#### **CHARACTERS**

Hazel Robin

Rose

#### **SETTING**

Where: A small cottage on the East coast of England

When: A summer's evening

#### THE WORK OF LUCY KIRKWOOD



Lucy Kirkwood is an acclaimed playwright and screenwriter. In 2009, Lucy's play It felt empty when the heart went at first but it is alright now was produced by Clean Break Theatre Co. at the Arcola Theatre. The play was nominated for an Evening Standard Award for Best Newcomer and made Lucy joint winner of the John Whiting Award 2010. NSFW premiered at the Royal Court Theatre, starring Janie Dee and Julian Barrett, in 2012.

**Chimerica**, premiered at the Almeida Theatre in 2013 and subsequently transferred to the West End, earning the Best New Play at the 2014 Olivier and Evening Standard Awards, as well as the Critics Circle Award and the Susan Smith Blackburn Award. Recent work includes **Mosquitoes**, presented by special arrangement with Manhattan Theatre Club, which opened at the National Theatre in summer 2017, and **The Children**, which premiered at the Royal Court, London, in 2016, and opened on Broadway in December 2017.

Lucy also writes for screen: she has written for **Skins** (Company Pictures), created and wrote **The Smoke** (Kudos / Sky 1), wrote and directed the short film **The Briny**, and is developing projects with Raw TV, Cowboy Films, Clio Barnard and Lenny Abrahamson. Her new 6 part season **Adult Material** with Tiger Aspect Productions has recently been greenlit and her mini-series of her play **Chimerica** for Playground Productions aired on Channel 4 in April.

#### APPETITES AND DESTRUCTION: LUCY KIRKWOOD'S THE CHILDREN

Hazel wasn't expecting a visitor—there's no one for miles, not since the disaster. And especially not Rose. Rose whom she hasn't seen in 38 years. Rose whom she'd heard had died. So when Rose shows up very much alive, Hazel accidentally bloodies her long-gone colleague's nose. And when Rose seems unnaturally familiar with the vacation cottage that Hazel and her husband Robin are staying at until the government clears them to return to their proper house, well—that's not the oddest thing that's happened in the last few weeks.

Kirkwood had wanted to write a play about climate change for a few years, but wasn't sure how to approach the subject. The facts about the impact human activities have had and continue to have on the planet are well-known. "What is interesting to me is this: if we know the facts, why are we failing so catastrophically to change our behaviors?" Kirkwood asks. "I think it's because those changes are enormous and frightening and demand that we give up things we have all come to feel we are entitled to."

Kirkwood took inspiration from the events that led to the 2011 disaster at the Fukushima Dai-ichi plant—a tsunami flooded the plant, breached the sea wall, and triggered the meltdown of three of its six core reactors—as well as the story of the retired work-force that went in to clean up the plant. From there she fashioned a profoundly predicable disaster ("We built a nuclear reactor next to the sea then put the emergency generators in the basement!" says one character), as a way to investigate the all-too-human impulse to downplay the potential larger impact of their choices.

To set up this conflict between what you want ("life or sex or children or food or electricity," as Kirkwood characterizes it) and what you actually need, Kirkwood turns to a sturdy and time-honored structure: the romantic triangle. The nature of Rose's relationship with Robin 40 years ago and over the intervening decades is eventually teased out, with the play's romantic triangle operating as both plot engine and metaphor for other unconsidered consequences of desire—particularly in an economic system that depends on creating appetites instead of satisfying them. "Capitalism has instilled a set of desires in us that are very difficult to de-program," Kirkwood says. "Capitalism depends on growth. Our entire economic system depends on us wanting more and more, on boundless desire—and if we continue to pursue those desires they will destroy us." In a world of Geiger counters and exclusion zones, this destruction is literal.

The Children has one location, three characters, and plays out in real time over the 90-minute duration of the play. It was a theatrical impulse born of a political one, the desire to slow people's thinking down, bring them into real reckoning with the true implications of their decisions. "That's what drama is," says Kirkwood, "looking at human beings under pressure trying to do things that they find difficult."

In the end, these characters' difficulties come down to agency in a culture of learned powerlessness, a dynamic that Kirkwood gestures to in the title of her play. The play's eponymous children may refer to the two daughters and two sons of Hazel and Robin or to an abstract sense of the rising generation and the poisoned legacy their parents leave them. To Kirkwood, it refers at least in part to the sexagenarians of her cast: "The state of a child is to feel you can't affect your world, and

the whole play is a conversation about how we can affect our world." To the charge that this is a play about a younger generation condemning its elders, Kirkwood confesses, "I believe that if I had been 20 in 1970 I would have made similar choices to the characters in the play." Who among us would not choose our comfort? Who among us can distinguish between our necessities and luxuries: 24/7 electricity, year-round air conditioning, any fruit in any season, and all the meat we're interested in eating? But, Kirkwood asks, what will happen if we don't bring our appetites into scale?

#### **Q&A: PLAYWRIGHT LUCY KIRKWOOD**

#### Where did the first seed for The Children come from?

I had been trying to find a form for a long time to write about climate change in a way that was emotionally rather than intellectually driven. What is important and theatrical to me is not the facts of climate change – we all know the facts now, and most of the average theatre audience will believe in them too. What is interesting is this: if we know the facts, why are we failing so catastrophically to change our behaviours? I wanted to write something that didn't harangue or nag an audience, but was generous, honest and unsentimental about how difficult it will be to make the changes that we need to, about how overwhelming that might feel – an awakening perhaps, but a terrifying one. The idea you can do nothing because the disaster is already too large is an infantilising one (one of the many reasons for the title), and the play is about three people growing up into active agents. And of course the way in which they do that was very much inspired by what happened at Fukushima. When I heard about the heroism of the retired work-force returning to the plant to help with the clean up, lots of different and long gestating ideas started to finally come together for me.

You've woven politics into many of your works, do you set out to create theatre that challenges its audience, or does this happen organically?

To write a play takes a long time. This means that whatever I choose to write about has to sustain my interest for at least a couple of years, sometimes much longer. So, I find myself drawn to writing about things where the roots of the emotions and ideas go deep and the branches go high. This

isn't consciously political, it's just about what holds me. Hopefully, if something can hold me for three years it will hold an audience for two hours. And I do believe that most theatre is an inherently political act because it demands we step outside of ourselves and imagine others. And it demands that we do that communally.

#### **GLOSSARY**

allotment - a plot of land rented by an individual for growing vegetables or flowers

backache – prolonged pain in one's back

**bargepole** – a long pole used to propel a barge and fend off obstacles

belligerence - aggressive or warlike behaviour

cagoule - a lightweight, hooded, thigh-length waterproof jacket

cannon fodder – soldiers regarded merely as material to be expended in war

chiropody – the treatment of the feet and their ailments

crackpot - an eccentric or foolish person

Croesus – a person of great wealth; 6th century B.C. last king of Lydia

c. 560–546 B.C. Renowned for his great wealth, he subjugated the Greek cities on the coast of Asia Minor before being overthrown by Cyrus the Great.

**cul de sac** – a street or passage closed at one end; a route or course leading nowhere **exclusion zone** – a territorial division established for various case specific purposes. These zones are created for control of populations for safety, crowd control, or military purposes, or as a border zone, and they may be temporary or permanent. Large-scale geographic exclusion zones have been established after major disasters in which nuclear power plants went into meltdown.

facetious - treating serious issues with deliberately inappropriate humour; flippant

flake - a very thin piece of something, broken away or peeled off from a larger piece

**Gremlin** – a folkloric mischievous creature, made popular by the 1984 film Gremlins, produced by Steven Spielberg featuring evil and destructive monsters

hacksaw – a saw with a narrow fine-toothed blade set in a frame, used especially for cutting metal

halitosis - madical term for bad breath

**hedgerows** –a rough or mixed hedge of wild shrubs and occasional trees, typically bordering a road or field.

**hoarders** – people with hoarding disorder, an excessive acquisition of and an inability or unwillingness to discard large quantities of objects that cover the living areas of the home and cause significant distress or impairment

**insulate** – protect from unpleasant influences or experiences

latch – a metal bar with a catch and lever used for fastening a door or gate

**layman's terms** – the term derives from the 16th-century idiom "in plain English", meaning in clear, straightforward language; language that is clear and concise

**macerator** – (sewage), machine that reduces solids to small pieces. Macerating toilets use a grinding or blending mechanism to reduce human waste to a slurry, which can then be moved by pumping.

**nondenominational** – open or acceptable to people of any Christian denomination

slush fund – a reserve of money used for illicit purposes, especially political bribery

**Peperami** – a salami sausage snack manufactured by Jack Link's, a global leader in meat snacks. It is manufactured in Ansbach, Germany and sold in the United Kingdom and Ireland, across multiples and independent retailers.

pram - a four-wheeled carriage for a baby

radiation spike – a sharp increase of radiation

sanguine - optimistic or positive, especially in

an apparently bad or difficult situation

shingle - a mass of small rounded pebbles,

especially on a seashore

silt – fine sand or clay, carried by running water and deposited as a sediment

**skol** – a drinking toast; good health! (from Danish skaal bowl)

soppy - self-indulgently sentimental

squeamish - easily made to feel sick or disgusted

**squelching** – a soft sucking sound made when pressure is applied to liquid or mud

**The Crystal Maze** – The Crystal Maze is a British game show in which a team of contestants take on a range of challenges set within a labyrinth of the same name consisting of four time zones, winning a time crystal for each one they successfully complete.

**tweezers** – a small instrument for plucking out hairs and picking up small objects.

#### **ACTIVITIES AND DISCUSSIONS**

#### Before the show

The context for this play echoes that of the 2011 Fukushima Daiichi nuclear disaster in Japan. Research this energy accident caused by the Tōhoku earthquake and ensuing tsunami.

What impact did this have on surrounding communities? What is happening at the site now?

#### Post-show Activities

Look at the production photos and imagine what the rehearsal process entailed. Which elements of the set, props and costumes were used in rehearsal?

Write an epilogue for The Children. This could be from the perspective of characters unseen in The Children,

such as Hazel's sons.

Read a Q&A with Lucy Kirkwood to gain more insight into the script

Consider what you would do in these characters' shoes. Use the following words as stimuli for discussion: responsibility; life experience; survival; guilt.

Recall Simon Kenny's set design and discuss how the very detailed, realistic set is arranged to function theatrically. How do you think the plumbing effect was achieved?

Playwright Lucy Kirkwood identifies the line "I don't know how to want less" as 'perhaps the most crucial line in the play'. Capitalism depends on growth, says Lucy. 'Our entire economic system depends on us wanting more and more, on boundless desire — and if we continue to pursue those desires they will destroy us.' Discuss this line from the play and its implications.

#### **CLIMATE CHANGE: How Do We Know?**

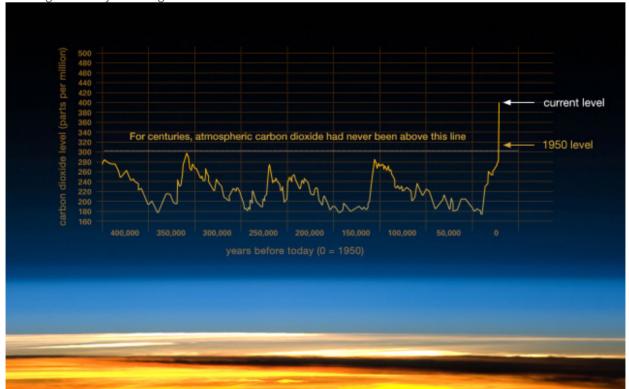
The Earth's climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 7,000 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.

The current warming trend is of particular significance because most of it is extremely likely (greater than 95 percent probability) to be the result of human activity since the mid-20th century and proceeding at a rate that is unprecedented over decades to millennia.

Earth-orbiting satellites and other technological advances have enabled scientists to see the big picture, collecting many different types of information about our planet and its climate on a global scale. This body of data, collected over many years, reveals the signals of a changing climate.

The heat-trapping nature of carbon dioxide and other gases was demonstrated in the mid-19th century. Their ability to affect the transfer of infrared energy through the atmosphere is the scientific basis of many instruments flown by NASA. There is no question that increased levels of greenhouse gases must cause the Earth to warm in response.

Ice cores drawn from Greenland, Antarctica, and tropical mountain glaciers show that the Earth's climate responds to changes in greenhouse gas levels. Ancient evidence can also be found in tree rings, ocean sediments, coral reefs, and layers of sedimentary rocks. This ancient, or paleoclimate, evidence reveals that current warming is occurring roughly ten times faster than the average rate of ice-age-recovery warming.





Here we address some of the common questions raised about the changing climate and the science involved in studying it.

#### What is climate change?

Climate change refers to any long-term trends or shifts in climate over many decades.

#### How has climate changed in the past?

There is a great deal of evidence that the Earth's climate has warmed over the past century.

#### Why do sea levels change?

Sea levels can change for a variety of reasons over a range of different time scales.

#### How is climate likely to change in the future?

The Earth's future climate will depend on whether the world manages to slow or even reduce green-house gas emissions, but warming is likely to continue.

#### How is extreme weather changing?

A changing climate leads to changes in the frequency, intensity, spatial extent and duration of extreme weather and climate events.

#### What are the impacts of climate change?

Increases in extreme climate events will pose challenges for Australia in the future.

#### Is the science settled?

A distinction needs to be made between science that is robust and science that is relatively uncertain. All conclusions should be based on peer-reviewed literature.

#### Where can I find more information about climate change?

Peer-reviewed papers provide a reliable and quality-assured source of information on climate change science.



#### FREQUENTLY ASKED QUESTIONS

#### Is the ozone hole causing climate change?

Yes and no. The ozone hole is not causing global warming, but it is affecting atmospheric circulation.

#### What's the difference between climate change and global warming?

"Global warming" refers to the long-term warming of the planet. "Climate change" encompasses global warming, but refers to the broader range of changes that are happening to our planet, including rising sea levels; shrinking mountain glaciers; accelerating ice melt in Greenland, Antarctica and the Arctic; and shifts in flower/plant blooming times.

#### Do scientists agree on climate change?

Yes, the vast majority of actively publishing climate scientists – 97 percent – agree that humans are causing global warming and climate change.

#### What's NASA got to do with climate change?

NASA's role is to make observations of our Earth system that can be used by the public, policymakers and to support strategic decisions. Its job is to do rigorous science. However, the agency does not promote particular climate policies.

#### What is the greenhouse effect?

The greenhouse effect is a process that occurs when gases in Earth's atmosphere trap the Sun's heat. This process makes Earth much warmer than it would be without an atmosphere. The greenhouse effect is one of the things that makes Earth a comfortable place to live.

#### How do we know what greenhouse gas and temperature levels were in the distant past?

Ice cores are scientists' best source for historical climate data. Other tools for learning about Earth's ancient atmosphere include growth rings in trees, which keep a rough record of each growing season's temperature, moisture and cloudiness going back about 2,000 years. Corals also form growth rings that provide information about temperature and nutrients in the tropical ocean. Other proxies, such as benthic cores, extend our knowledge of past climate back about a billion years into the past.

#### Is the Sun causing global warming?

No. The Sun can influence the Earth's climate, but it isn't responsible for the warming trend we've seen over the past few decades.

#### What's the difference between weather and climate?

"Weather" refers to the more local changes in the climate we see around us, on short timescales from minutes to hours to days to weeks. Examples are familiar — rain, snow, clouds, winds, thunderstorms, heat waves and floods. "Climate" refers to longer-term averages (they may be regional or global), and can be thought of as the weather averaged over several seasons, years or decades.



#### Is it too late to prevent climate change?

Humans have caused major climate changes to happen already, and we have set in motion more changes still. Even if we stopped emitting greenhouse gases today, global warming would continue to happen for at least several more decades, if not centuries.

#### What do volcanoes have to do with climate change?

Overall, volcanoes release less than 2 percent of the equivalent amount of CO2 released by human activities. Quite small.

#### Can you explain the urban heat island effect?

While urban areas are warmer than surrounding rural areas, the urban heat island effect has had little to no effect on our warming world, because scientists have accounted for it in their measurements.

#### What happens if the next solar cycle becomes less active? Will we go into a new ice age?

No. Even if the amount of radiation coming from the Sun were to decrease as it has before, it would not significantly affect the global warming coming from long-lived, human-emitted greenhouse gases. Further, given our greenhouse gas emissions to date and those expected to come, the evidence points to the next "ice age" being averted altogether.

#### Has Earth continued to warm since 1998?

Yes, evidence shows warming from 1998 to the present, with the four most recent years (2014, 2015, 2016 and 2017) being the four warmest years globally since 1880.

#### Are the land-based ice sheets in Greenland and Antarctica continuing to lose mass (ice)?

Data from NASA's GRACE satellites, which measured Earth's gravity field, show that the land ice sheets in both Antarctica and Greenland have been losing mass (ice) since 2002. Both ice sheets have seen an acceleration of ice mass loss since 2009.

#### How is Earth's sea ice faring in our warming world?

Arctic sea ice volume and extent have been declining since record-keeping began in the late 1970s and prior. Antarctic sea ice extent is currently below the long-term average of prior decades since 1979.

#### Is the ocean continuing to warm?

Yes, the ocean is continuing to warm. Notably, all ocean basins have been experiencing significant warming since 1998, with more heat being transferred deeper into the ocean since 1990.



#### SOME THINGS YOU CAN DO ABOUT CLIMATE CHANGE

**Get charged up with renewables** – The global push for cleaner, healthier energy is on. With costs dropping every day, renewable energy is the best choice for the environment and the economy.

**Green your commute** — The many ways to reduce your transportation emissions will also make you healthier, happier and save you a few bucks. Whenever you can: take public transit, ride a bike, car-share, fly less.

Use energy wisely, save money, too! — By getting more energy efficient, you'll pollute less and save money. The small changes you make add up.

**Eat for a climate-stable planet** — Here are four simple changes you can make: eat meat-free meals, buy organic and local whenever possible, don't waste food, grow your own. You can also help save the planet by eating insects!

**Consume less, waste less, enjoy life more** — Focusing on life's simple pleasures provides more purpose, belonging and happiness than buying and consuming. Sharing, making, fixing, upcycling, repurposing and composting are all good places to start.

**Divest from fossil fuels** – Fossil fuels are a sunset industry. They're a risk for investors. As Arnold Schwarzenegger said, "I don't want to be the last investor in Blockbuster as Netflix emerged."

**Invest in renewables** — Even if you can't install solar panels or a wind turbine, you can be a part of the clean-energy economy. Simple measures such as insulating lofts and draft-proofing doors and windows would see a big drop in energy consumption.

**Help put a price on pollution** — Most market economists agree that pricing carbon is an efficient and business-friendly way to reduce emissions. The federal governments are trying to put a national prices on carbon, but they need your support.

**Vote** — Make sure you are registered to vote and then get informed for all elections. Research the party, ask questions about climate change.

### QUIZ

Robin and Rose are married. True False				
In what year was The Children first produced? 2016 2006 1996 1986				
What is the name of Robin and Hazel's eldest daughter? Rebecca Rachel Lauren Lucy				
Where did Rose, Robin and Hazel use to work together? Television Nuclear Power station Post Office				
The Children was inspired by a real-life nuclear disaster.  True  False				
How many children do Robin and Hazel have in total?  1  4  3  5				
What illness did Rose have? Ovarian Cancer Leukemia Breast Cancer Pancreatic Cancer				
Which animal does Robin return to the farm to look after? Pigs Chickens Horses Cows				

Where does Hazel hi	t Rose when	she first sees	her?
Stomach			
Nose			

Chest Hand

#### What type of wine does Robin pour out?

Parsnip Wine Elderflower Wine Pear Wine

Peach Wine

Rose has been living in America for many years.

True False

What does Hazel pull off Rose at the end of the play?

Her wig Her coat Her bag

Her glasses

#### CLIMATE CHANGE QUIZ

True or False: Wasting less food is a way to reduce greenhouse gas emissions.

True

False

#### Which of the following is a greenhouse gas?

C02

CH<sub>4</sub>

Water vapor

All of the above

#### What is the Greenhouse Effect?

The name of climate change legislation that passed by congress

When you paint your house green to become an environmentalist

When the gasses in our atmosphere trap heat and block it from escaping our planet

When you build a greenhouse

#### Which of the following are consequences associated with climate change?

The ice sheets are declining, glaciers are in retreat globally, and our oceans are more acidic than ever

Surface temperatures are setting new heat records about each year

More extreme weather like droughts, heat waves, and hurricanes

Global sea levels are rising at an alarmingly fast rate — 17 centimeters (6.7 inches) in the last century alone and going higher.

All of the above

#### What can you do to help fight climate change?

Divest from fossil fuel companies

Engage yourself in the science behind climate change

Vote for political candidates who will advocate for climate-related legislation and policy improvements

All of the above

True or False: The overwhelming majority of scientists agree that climate change is real and caused by humans.

True

False



### What was agreed to in the "Paris Agreement" that came out of COP-21, held in Paris in 2015?

To protect biodiversity and end the deforestation of the world's rainforests

To keep global temperature rise well below 2<sup>12</sup> pre-industrial levels and to pursue a path to limit warming to 1.5<sup>12</sup>

To limit sea level rise to 3 feet above current levels

To pursue a goal of 100% clean, renewable energy

### Which of these countries emits the most carbon dioxide? China

USA

UK

Russia

### What percentage of the global greenhouse gas emissions does the transportation sector emit?

1%

14%

33%

70%

### Globally, which of the following economic sectors emits the largest percentage of green-house gas emissions?

Transportation

**Buildings** 

Industry

Electricity and heat production

#### How much has the average global temperature risen by since 1880 (in Fahrenheit)?

o.5 degrees

1.69 degrees

5 degrees