That Science Gang presents...

HEALPHABET SIME SCIENCE SCIENCE

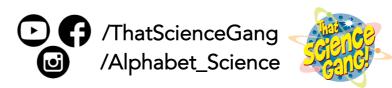


EDUCATION RESOURCES

Pre-Visit and Post-Visit notes

For additional resources, please visit: https://www.alphabetscience.com/schools

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ABOUT THAT SCIENCE GANG

Established in 2002, That Science Gang is dedicated to the creation of unique and innovative science-inspired experiences that *engage*, *entertain*, and *educate*.

ABOUT THE ALPHABET OF AWESOME SCIENCE

A scientific race through the alphabet ...

... where fascinating words inspire spectacular science!

The Alphabet of Awesome Science is an utterly unique, multi-award-winning theatrical experience – a spectacular character-driven 'Science Theatre' show that both figuratively *and* literally fizzes with fun.

The Alphabet of Awesome Science promotes both English language literacy as well as science literacy, encouraging audiences to engage with beautiful words, as well as captivating scientific phenomena. Professors Lexi Con and Noel Edge are a positive celebration of all things geeky – emboldening audiences to embrace their own individual passions.

ABOUT THESE NOTES

These education resources are divided into two halves – PRE-VISIT NOTES and POST-VISIT NOTES. Each collection provides discussion points and activity ideas that encourage an exploration of *character*, the *English language*, and *scientific ideas*.

We will be adding other resources to our website during 2022. Make sure you check them out (including our curriculum links): https://www.alphabetscience.com/schools

CREATIVES

Writer / Director David Lampard

Cast David Lampard – Professor Noel Edge

Emma Bargery – Professor Lexi Con

Stage Manager Amanda Rowe

Composer Mark Simeon Ferguson

Voice Over Artists Sharon Robertson and Rodney Hutton

Sound Designer Rodney Hutton Lighting Designer Mark Oakley



PRE-VISIT NOTES

ABOUT THE SHOW

Join professors Lexi Con and Noel Edge (the Word Nerd and the Science Freak) for a thrilling voyage through the alphabet – where great big chewy sesquipedalian words inspire mind-blowing scientific surprises.

Professor Lexi Con has curated a curious collection of her favourite words (one for every letter of the alphabet) with each word providing Professor Noel Edge with an inspirational jumping off point for 26 quirky scientific demonstrations - that squish and squirt, float and fly, erupt and explode.

Together, this dad-joke quipping, prank-pulling pair of polished professors strut their stuff in a performance that's equal parts explosive, messy, spectacular, hilarious, fascinating, and gross.

And if things weren't exciting enough, every show is completely different, with audiences determining the order in which the letters are revealed and explored.

Plus, did we mention, this is a race? This plucky pair of professors have just 52 minutes to complete their alphabetical, scientifical countdown. That's just 2 minutes per experiment!

Will they make it in time...?



THE CHARACTERS

The Alphabet of Awesome Science is performed by two professors – Professor Lexi Con and Professor Noel Edge. Lexi is an expert lexicographer (she prefers to be called a 'word nerd') and Noel is an expert science communicator (he prefers to be called a 'science freak').

As a class, or in small groups, consider the following questions:

- What do you think a lexicographer might do?
- What do you think a science communicator might do?
- Is there a 'thing' that you are passionately 'geeky' about?
- Do you think it would be possible to turn that passion into a career?
- How many different types of careers / jobs can you think of?
- What job do you want to do when you leave school?

THE WORDS

During **The Alphabet of Awesome Science**, Professor Lexi Con will introduce you to a delightfully delicious degustation of uncommon, rare, archaic and even obsolete words – one for every letter of the alphabet (plus a whole lot more thrown in for free!).

Before you are introduced to Lexi's list, you might like to explore your own relationship with words...

As a class, or in small groups, consider the following questions:

- Do you have a favourite word? Why do you think you like this word so much?
- Do you have a least favourite word? Do you know why you don't like this word?
- What is the longest word you can think of (or find)? What does it mean?
- What is the shortest word you can think of (or find)? What does it mean?

ACTIVITY: CREATE YOUR OWN "ALPHABET OF AWESOME..."

Imagine that you are going to create your own "Alphabet of Awesome...". What would that alphabet be? Maybe *The Alphabet of Awesome Animals...* or *Food...* or *Anatomy...* or *Gross Things*? Or perhaps something else entirely? Pick a topic, and then find a word related to that topic for each letter of the alphabet...

EXPLORE THESE AWESOME WORDS!

In addition to the words compiled for **The Alphabet of Awesome Science** stage show, Lexi will be building ANOTHER alphabet during 2022 (there are just sooo many words that that she wants to share!). Check out her progress here:

https://www.alphabetscience.com/words



WORD SEARCH!

25 of Lexi's words from **The Alphabet of Awesome Science** can be found in the *Word Search* puzzle below – that's ALMOST one for every letter of the alphabet. Lexi's word for the letter F is waaaaaay too big to fit in this puzzle! You'll have to see the show to discover what it is! Can you find ANY of these tricky words?

Each word runs either horizontally or vertically - there are no diagonal words!

						1	1	1	1	1	1	1	1	1	1	1		1	
Ν	Q	G	Q	Z	K	Υ	Χ	М	V	0	R	Ν		С	Е	Α	U	Χ	Χ
В	U	Α	С	Ν	W	L	U	С	-	F	Ε	R	0	U	S	0	Р	Α	U
D		Ν	S	R	Χ		D	Е	0	Р	R	Α	Χ	-	S	Т	Κ	Ν	Κ
Н	С	Ν	В	Ε	Q	В	W	Т	Υ	U	S	Н	U	Ζ	Χ	Т	Υ	Т	Υ
D	О	J	R	V	V	Н		М	Z	Р	Α	В	U	L	0	U	S	Н	R
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С	D	R	R		Т	R	L	Р	L	Е	Ν	1	S	Р	Н	Е	R	Е	L
0	L	G	Υ	S	I	U	Е	Q	Z	Χ	D	Е	D	0	L	Е	Α	Т	Е
S		-	В	С	G	М	В	K	L	W	Q	Ζ	Χ	V	В	Υ	Κ	Q	Χ
Е	В	Т	Α	Е	U	0	С	V	W	S	W	Z	Е	Р	Н	Υ	R	Υ	Υ
R	Е	Η	Ν	Ν	М	U	Χ	Р	W	Χ	Ζ	Q	Q	W	В	L	Р	U	Υ
	Т	Ε	Т	С	F	S	Α	0	S	Р	U	М	Ε	S	С	Ε	Ν	Т	Е
0	O	R	1	Е	I	Z	V	В	Ν	М	0	В	Т	U	R	Α	Т	Е	Р
U	U	М	С	G	Α	Q	Ν	J	K	Т	Е	F	G	D	R	G	Κ	K	S
S	L	Е	G	D	Т	Т	М	Е	Т	Α	G	R	0	В	Α	L	ı	S	Е
Χ	L	Ν	W	Ε	Е	F	K	Ε	R	U	М	Р	Ε	Ν	Т	Υ	Н	J	Ν
0	Α	Т	R	Т	Ν	Е	Р	Н	Е	L	0	С	0	С	С	Υ	G		Α
J	G	S	G	Н	Н	0	R	R	Ε	S	С	Ε	Ν	Т	V	М	G	Т	R
Χ	Е	W	Т	Е	Ν	Е	В	R	0	U	S	В	С	G	М	Ζ	Z	Ν	Υ
												-			-				

A	J	S
B	K	T
C	L	U
D	M	V
E	N	W
F ???	O	X
G	P	Υ
H	Q	Z
I	R	

THE SCIENCE

During **The Alphabet of Awesome Science**, Professor Noel Edge is inspired by Lexi's words to create and present a series of quirky and spectacular science demonstrations – exploring the fields of chemistry, physics, biology, meteorology, cryogenics, acoustics... as well as many more.

Scientists are always discovering new things about the world around us (and inside us... and beyond our atmosphere!) so Noel will never run out of fascinating facts to share with audiences.

As a class, or in small groups, consider the following questions:

- People often want to know, "Why is the sky blue?" or "How do flies walk on the ceiling?" or "What is belly button lint?". What do you want to know about the world?
- What are some of the problems facing the world right now that scientific research might be able to help with or even solve?
- Have you seen any science reported recently in the news?
- Can you think of any scientific breakthroughs or discoveries?
- If you could make a scientific breakthrough, what would it be? That is, what would you like to discover or solve?

TRY THIS!

Are you a budding scientist? There are heaps of fun science experiments you can try out in class... and Noel would like to share a few of his favourites!

Check them out here: https://www.alphabetscience.com/science



POST-VISIT NOTES

THE CHARACTERS

Professors Lexi Con and Noel Edge are what's known as a 'double act'. That is, a comedy performance involving two people.

Double acts were originally created for British musical hall and American vaudeville performances. They have evolved over the years and can now be found in many types of theatre performance, as well as on television and in film.

Famous double acts include:

- Abbot & Costello
- Laurel & Hardy
- Matt Lucas & David Walliams (Little Britain)
- Adam Savage & James Hyneman (MythBusters)
- Lano & Woodley
- Kath & Kim
- Hamish & Andy
- The Umbilical Brothers
- Tom & Jerry
- Bert & Ernie

Double acts often rely on an 'imbalance' between two characters to create comedic situations. This creates 'tension', as well as an opportunity for misunderstandings and misinterpretation.

Professor Lexi Con and Professor Noel Edge are very similar in many ways, however, they are also very different.

As a class, or in small groups, consider the following questions:

- Describe Professor Lexi Con. What are her personality traits? What do you think she likes? What do you think she dislikes?
- Describe Professor Noel Edge. What are his personality traits? What do you think he likes? What do you think he dislikes?
- How are Lexi and Noel similar?
- How are Lexi and Noel different?
- Describe the relationship between the two characters? Are they friends? Or do they just work together? Or something else...?
- How do you think Lexi and Noel met? Create a backstory for these two characters...

ACTIVITY: CREATE YOUR OWN DOUBLE ACT

Working in pairs, create your own double act! Consider the questions below and then create a script for your new comedy duo. Is your act best suited to the stage or screen? Consider performing your act for the class – or creating a video.



- Who are the two characters?
- What are their jobs?
- What are their character traits?
- How are the two characters similar? How are they different?
- Why do the pair work so well together?
- What kind of a performance would they create together?

THE WORDS

On the next page, you'll find a list of all the crazy cool words that Lexi Con introduced as part of **The Alphabet of Awesome Science** – as well as their definitions. Were there any words on that list that you recognised? If so, well done! Lexi's collection includes examples of uncommon, rare, archaic and obsolete words.

Uncommon: An out of the ordinary or unusual word

Rare: A word that is not often used Archaic: A very old or old-fashioned word Obsolete: A word that is no longer used

As a class, or in small groups, consider the following questions:

- What is your favourite word on the list? Why?
- What is your least favourite word on the list? Why?
- Can you create a sentence (or story!) using any one of the words?

ACTIVITIES: WORD GAMES

Below are suggestions for some fun and creative word games. Work individually or in small groups to build sentences, poems, and stories according to an increasingly difficult set of rules and ideas...

- Create a pangram
 - o That is, a sentence that includes every letter in the alphabet
- Create an acrostic
 - o That is, a poem where the first letter of each new line spells out a word
- Write a sentence where each new word begins with a new letter of the alphabet
 - o Try this using the letters of the alphabet in sequence (from A to Z)...
 - o Try this using the letters of the alphabet in any sequence...
- Write a complete story where each new sentence begins with a word that begins with a new letter of the alphabet.
 - o Try this using the letters of the alphabet in sequence (from A to Z)...
 - o Try this using the letters of the alphabet in any sequence...



LEXI's ALPHABET

A is for... ANNULAR ring-like, ring-formed, ringed

B is for... BRUMOUS foggy, wintry

C is for... CORYBANTIC wild: frenzied

D is for... **DEDOLEATE** to cease being unhappy

E is for... **ERUMPENT** bursting forth

F is for... FLOCCINAUCINIHILIPILIFICATION the action of estimating something as

worthless

G is for... **GUMFIATE** to puff up, cause to swell

H is for... HORRESCENT shuddering; expressive of horror

I is for... **IDEOPRAXIST** a person who is impelled to carry out an

idea

J is for... **JOCOSERIOUS** half jocular, half serious

K is for.. **KYRIOLEXY** the use of literal expressions

L is for... LUCIFEROUS that brings, conveys, or emits light

M is for... **METAGROBALISE** to puzzle, mystify, confound

N is for... NEPHELOCOCCYGIA the act of seeking and finding shapes in

clouds

O is for... **OBTURATE** to block or stop up

P is for... **PLENISPHERE** a perfect sphere

o is for... **QUICQUIDLIBET** whatever one pleases

R is for... **REVIVISCENCE** revival

S is for... **SPUMESCENT** having the appearance of foam or froth

T is for... **TENEBROUS** full of darkness, dark

U is for... **ULLAGE** unfilled space in a container

V is for... **VERTIGINATE** to tun around, spin, or rush dizzily

W is for... **WIRBLE** to whirl; to eddy

X is for... **XANTHIC** relating to a yellow colour

Y is for... YEPSEN an amount that can be held in a person's

hands cupped together

Z is for... **ZEPHYR** of a wind: to blow gently or mildly

For even more information about these words, visit our website: https://www.alphabetscience.com/answers



WORD SEARCH!

25 of Lexi's words from **The Alphabet of Awesome Science** can be found in the *Word Search* puzzle below – that's ALMOST one for every letter of the alphabet. The word that is missing is *floccinaucinihilipilification* – it's waaaaaay too big to fit in this puzzle!

Each word runs either horizontally or vertically - there are no diagonal words!

Ν	Q	G	Q	Z	Κ	Υ	Χ	М	V	0	R	Ν	I	С	Е	Α	U	Χ	Χ
В	U	Α	С	Ν	W	L	U	С	I	F	Е	R	0	U	S	0	Р	Α	U
D		Ν	S	R	Χ	ı	D	Е	0	Р	R	Α	Χ		S	Т	K	Ν	K
Н	С	Ν	В	Е	Q	В	W	Т	Υ	U	S	Н	U	Ζ	Χ	Т	Υ	Т	Υ
D	О	J	R	٧	V	Н	ı	М	Ζ	Р	Α	В	J	L	0	U	S	Н	R
J	C	L	С	I	Е	F	R	W	С	Χ	Т	J	V	W	U	Υ	G	I	
О		Α	0	٧	R	В	В	D	Ζ	Χ	Q	F	Ζ	Χ	0	0	Α	С	0
С	D	R	R	ı	Т	R	L	Р	L	Е	Ν	ı	S	Р	Н	Е	R	Е	L
О	L	G	Υ	S	1	U	Е	Q	Z	Χ	D	Е	D	0	L	Е	Α	Т	Е
S	I	J	В	С	G	М	В	Κ	L	W	O	Z	Χ	V	В	Υ	K	Q	Χ
Ε	В	М	Α	Ε	1	0	С	V	W	S	W	Ζ	Ε	Р	Н	Υ	R	Υ	Υ
R	Е	F	Ν	Ν	Ν	U	Χ	Р	W	Χ	Z	Q	Q	W	В	L	Р	U	Υ
	Т		Т	С	Α	S	Α	0	S	Р	J	М	Е	S	С	Е	Ν	Т	Е
О	Q	Α	1	Е	Т	Z	V	В	Ν	М	0	В	Т	U	R	Α	Т	Е	Р
U	U	Т	С	G	Е	Q	Ν	J	Κ	Т	Е	F	G	D	R	G	K	K	S
S	L	Е	G	D	R	Т	М	Е	Т	Α	G	R	0	В	Α	L	ı	S	Е
Χ	L	Ν	W	Е	R	F	Κ	Е	R	U	М	Р	Е	Ν	Т	Υ	Н	J	Ν
О	Α	Т	R	Т	Ν	Е	Р	Н	Е	L	0	С	0	С	С	Υ	G	ı	Α
J	G	S	G	Н	Н	0	R	R	Е	S	C	Е	Ν	Т	V	М	G	Т	R
Χ	Ε	W	Т	Ε	Ν	Ε	В	R	0	U	S	В	С	G	М	Z	Z	Ν	Υ

Annular Jocoserious Spumescent Brumous **Kyriolexy** Tenebrous Luciferous Corybantic Ullage Dedoleate Metagrobalise Vertiginate Nephelococcygia Wirble Erumpent F - TOO BIG for the puzzle! Xanthic Obturate Gumfiate Yepsen Plenisphere Horrescent Quicquidlibet Zephyr Ideopraxist Revivisence



THE SCIENCE

During The Alphabet of Awesome Science Professor Noel Edge introduced you to a whole stack of scientific facts – and performed some pretty spectacular demonstrations.

As a class, or in small groups, consider the following questions:

- How many of Noel's demonstrations can you remember?
- Can you remember which demonstrations matched to which of Lexi's words... and why?
- Of all the things you learned, what would you like to know more about?
- Which of Noel's demonstrations would you like to try?

TRY THIS AWESOME SCIENCE!

There's an almost endless list of awesome and surprising science experiments that you can easily try out using simple, everyday objects. Noel has a whole stack of favourites that he'd love to show you how to do...

TRY THIS AWESOME SCIENCE!: https://www.alphabetscience.com/science

THIS SHOW IS NOT RUBBISH!

If you'd like to spend a little more time with some science in the classroom, then check out the web series of Noel and Lexi's good friend The Trash Can Man...

www.thisshowisNOTrubbish.com/web-series

