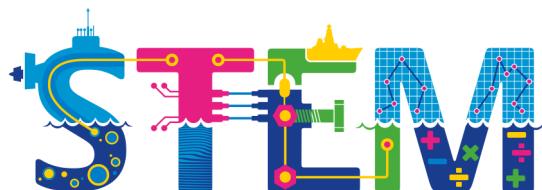




# Cavendish nuclear

part of Babcock International Group



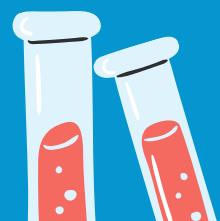
SCIENCE | TECHNOLOGY | ENGINEERING | MATHS

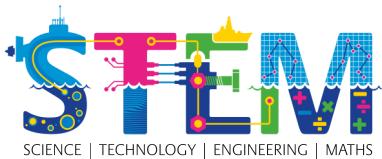


## ACTIVITY BOOK



Summer Edition





## Introduction

👋 **Welcome, Young Scientists!**



Get ready to explore the amazing world of nuclear energy! At Cavendish Nuclear, we use science to split tiny atoms and create powerful energy that helps run homes, schools, and even cities.

We also help build nuclear-powered submarines that can travel deep underwater for months! These subs are used for exploring the ocean, doing science, and keeping people safe.

This booklet is full of fun activities to spark your imagination. Let's dive in and discover the power of nuclear together!





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## Submarine word search

Submarines are amazing underwater vehicles that can travel deep below the ocean's surface. Some are powered by nuclear energy, which means they can stay underwater for a very long time without needing to refuel! In this word search, you'll discover words all about submarines.

Ready to dive in?

R	E	P	O	C	S	I	R	E	P	P	R	L	S
A	S	S	R	A	D	A	R	M	A	S	T	U	I
N	M	S	N	A	L	P	L	A	N	E	S	A	L
O	E	U	B	U	L	K	H	E	A	D	D	F	E
S	T	B	U	R	U	C	L	S	E	E	D	I	N
M	S	M	N	O	N	D	O	O	L	N	S	N	T
O	Y	A	D	T	D	H	R	V	R	R	E	S	O
O	S	R	E	C	E	E	U	A	E	T	F	E	T
R	R	I	T	A	R	T	D	N	N	R	A	N	S
D	M	N	E	E	W	H	D	T	T	C	T	P	N
R	I	E	C	R	A	C	E	U	S	R	B	N	V
A	R	O	T	C	T	T	R	E	S	C	A	P	E
W	T	A	E	P	E	A	O	D	E	U	A	S	A
S	S	R	D	I	R	H	U	G	N	I	S	A	C

Patrol Underwater Planes Bulkhead Sonar Hatch  
Radar mast Submarine Fin Undetected Systems  
Periscope Reactor Casing Rudder Trim

# Design Your Own Nuclear Submarine!

You're the chief engineer on a top-secret mission! Your task is to design a brand-new nuclear-powered submarine that can explore the deepest parts of the ocean.

Think about:

- How will your submarine move?
- Where will the nuclear reactor go?
- What special tools or rooms will it need?
- How will the crew live and work underwater?

Use the space below to draw your submarine, label its parts, and add cool features like a science lab, robot arms, or even a mini-sub for deep dives!



# Discover Energy Sources

Did you know that energy is all around us—and it comes from many different places?

We use energy every day to turn on lights, cook food, play games, and even ride in cars and buses! Some energy comes from the Sun, some from the wind, and some from deep inside the Earth. In this activity, you'll match each type of energy with its picture and description.

Let's get started and become Energy Experts! 

**Solar Energy**

Splits atoms to make heat and power

**Wind Energy**

Uses water to turn turbines

**Fossil Fuels**

Uses sunlight to create electricity

**Hydro Power**

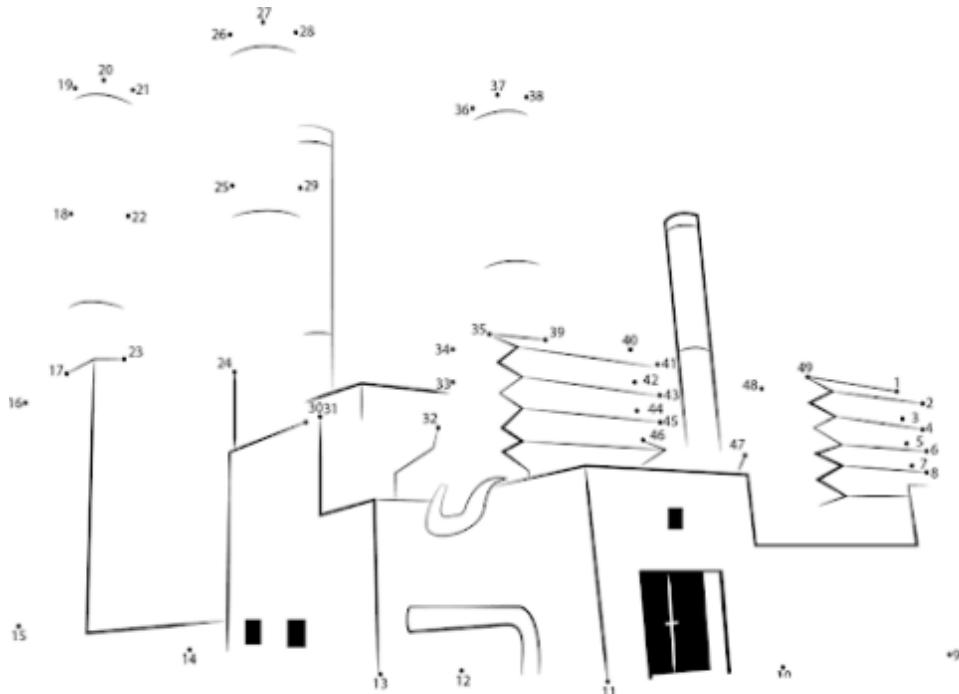
Burning coal, oil or gas for energy

**Nuclear Energy**

Energy from moving air

# Connect the Dots – Build a Power Station

Connect the dots and bring energy to life! In this electrifying activity, you'll reveal the shape of a power station—one dot at a time. As you draw, think about how power stations help light up our homes, schools, and cities!



# STEM Through Your Eyes

What does STEM mean to you?

STEM stands for Science, Technology, Engineering, and Maths—and at Babcock, it powers everything we do!

From designing submarines and maintaining aircraft, to using robotics, coding, and clean energy solutions—STEM jobs at Babcock help keep people safe, protect the planet, and build the future.

## Your Mission:

Draw a picture that shows what STEM means to you. Be creative, be bold, and most of all—have fun!

## Send It In:

We'd love to feature your artwork in our STEM engagement campaigns! Ask an adult to help you **take a photo or scan your drawing** and send it to:

[STEM@cavendishnuclear.com](mailto:STEM@cavendishnuclear.com)



# Women in Engineering

Engineering is for everyone who loves to build, create, and solve problems! Women all over the world are designing bridges, coding apps, inventing new technologies, and even helping astronauts explore space. If you're curious, creative, and love a challenge—you can be an engineer too!





## Number Crossword

Engineers are Problem-Solving Heroes! Being an engineer means tackling challenges and finding smart solutions to make the world a better place.

Now it's your turn to think like an engineer! Use your amazing number skills to crack the problems below and show off your problem-solving superpower.

12	+		=	36			
		÷		÷			+
	-		=	4			23
x		=		=	÷		=
		6			x	5	
=						=	
56		20	-		=	11	3
				x			x
84	÷		=				13
							=
				63	-		
						=	

# Nuclear Power – Fill in the Blanks!

Think you're a nuclear power expert? Let's find out! Test your knowledge by filling in the blanks using the Word Box. Each sentence will teach you something cool about how nuclear energy works!

 Nuclear power helps make \_\_\_\_\_ that we use to turn on lights and TVs. 

 It comes from tiny things called \_\_\_\_\_ that are too small to see! 

 When atoms are split, they make a lot of \_\_\_\_\_. 

 Special \_\_\_\_\_ work hard to make sure nuclear power is used safely. 

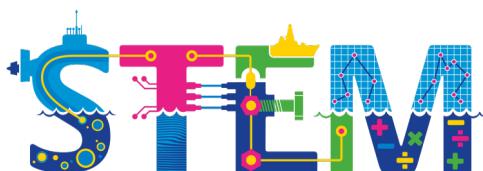
 When used the right way, nuclear power is clean and \_\_\_\_\_. 

## Word Box:

electricity | atoms | energy | safe | scientists

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SCIENCE | TECHNOLOGY | ENGINEERING | MATHS



Contact Us:  
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