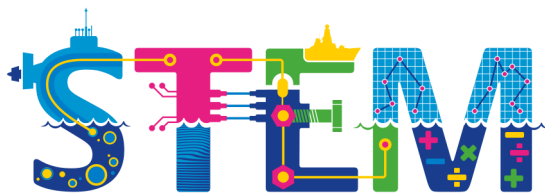


Cavendish nuclear

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

Wind Energy

Fossil Fuels

Hydro Power

Nuclear Energy

Splits atoms to make heat and power

Uses water to turn turbines

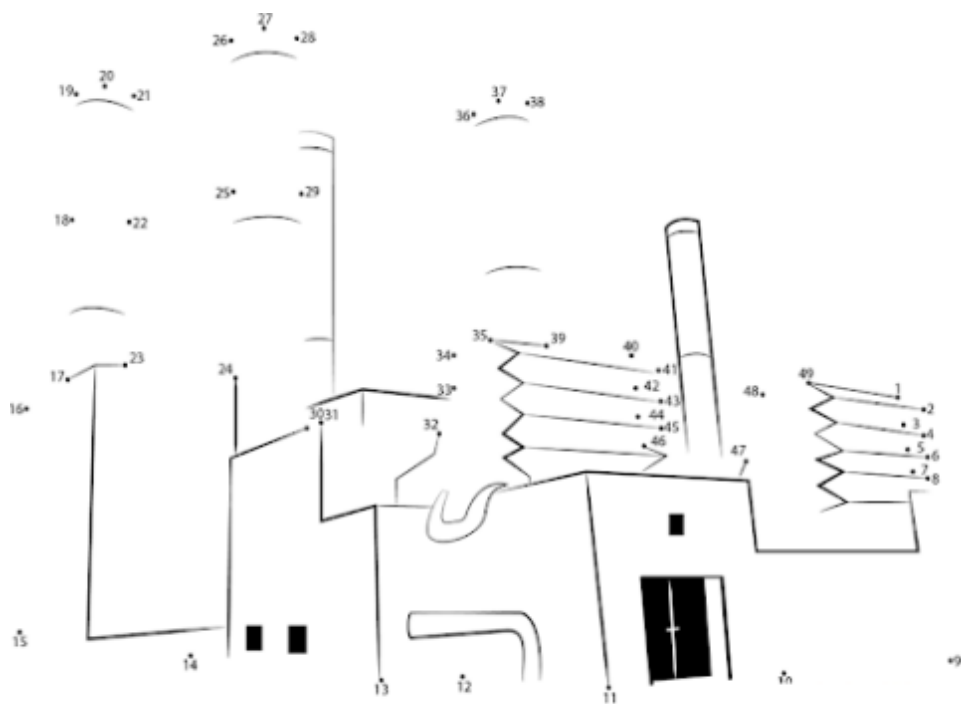
Uses sunlight to create electricity

Burning coal, oil or gas for 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



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!









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. 

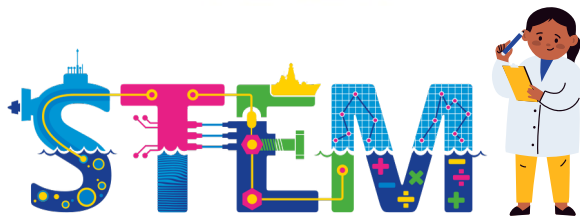
 When used the right way, nuclear power is clean and _____. 

Word Box:

electricity | atoms | energy | safe | scientists

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Contact Us:
STEM@cavendishnuclear.com