



# **Nuclear Science Activity Book**

**Learn about the wonderful  
world of nuclear**

# Word Search



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

Electricity

Fission

Electron

Medicine

Radiation

Fusion

Neutron

Research

Power

Alpha

Atom

Science

Uranium

Beta

Proton

Technology

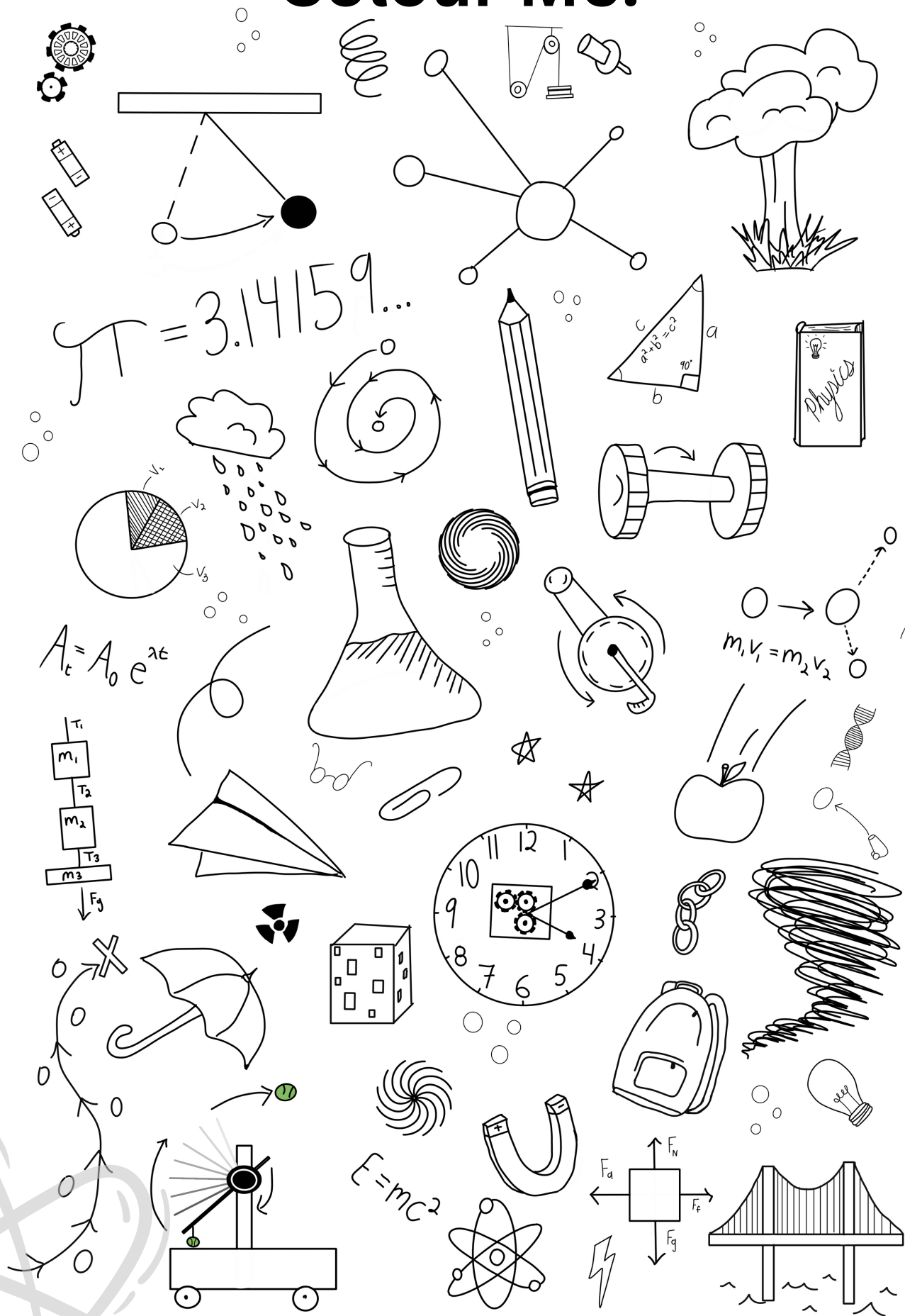
Decay

Gamma

Isotope

Fuel

# Colour Me!



# Secret Message

## Symbol Key

☀	C	🏠	L	💬	F	◻	R	➡	S	◯	O
◊	T	☁	M	★	A	▽	P	➡	E	♥	I
↓	N	✦	Y	+	D	△	U	↔	W		

♥ ↓      ☀ ★ ↓ ★ + ★

15%

◯ 💬      ◯ △ ◻

➡ 🏠 ➡ ☀ ◊ ◻ ♥ ☀ ♥ ◊ ✦

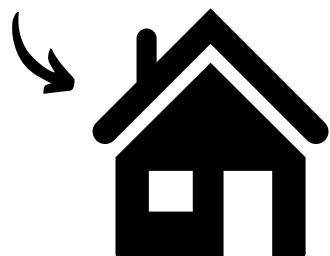
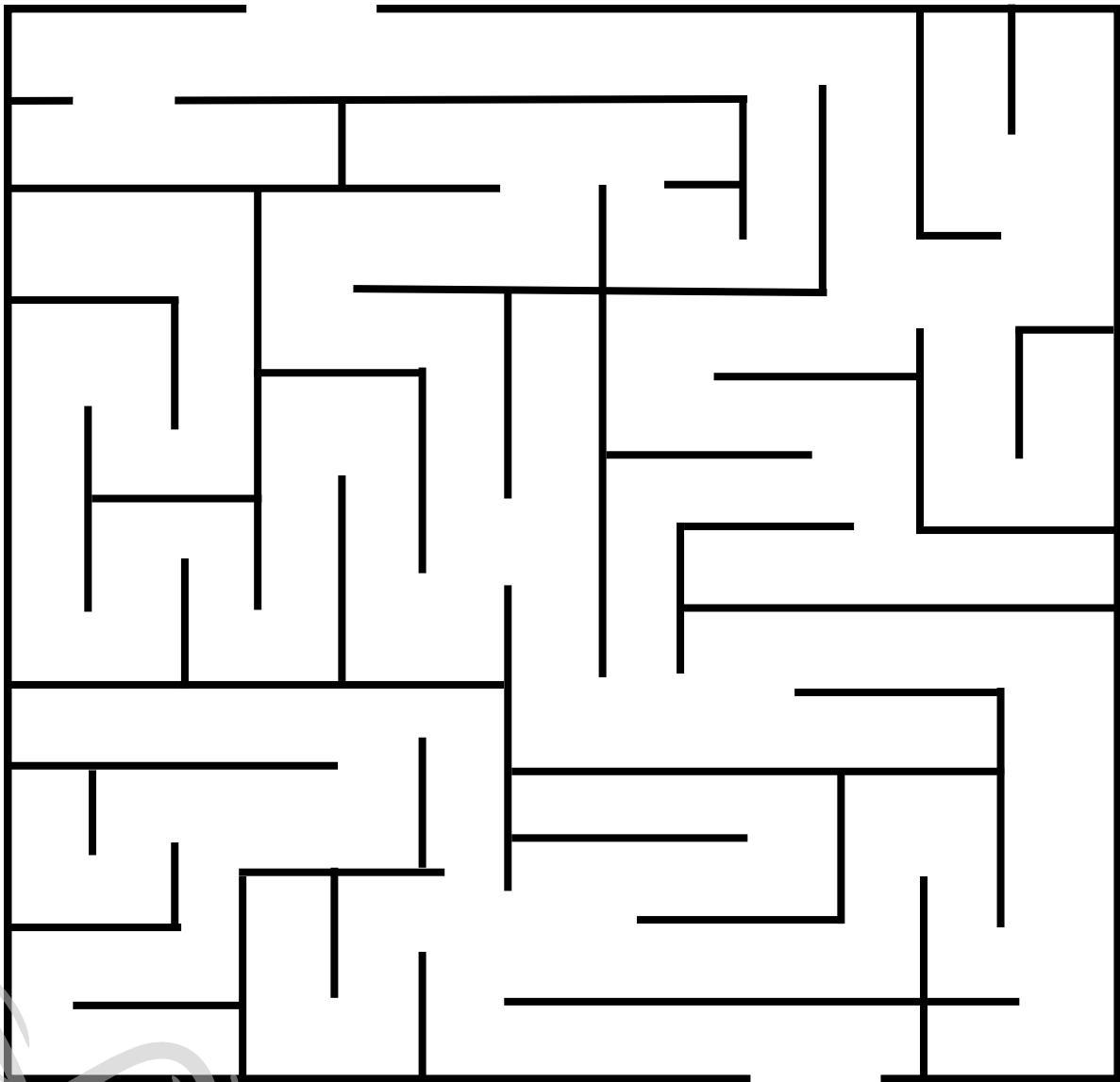
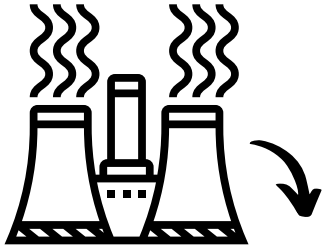
☀ ◯ ☁ ➡ ➡      💬 ◻ ◯ ☁

↓ △ ☀ 🏠 ➡ ★ ◻      ▽ ◯ ↔ ➡ ◻

# Maze

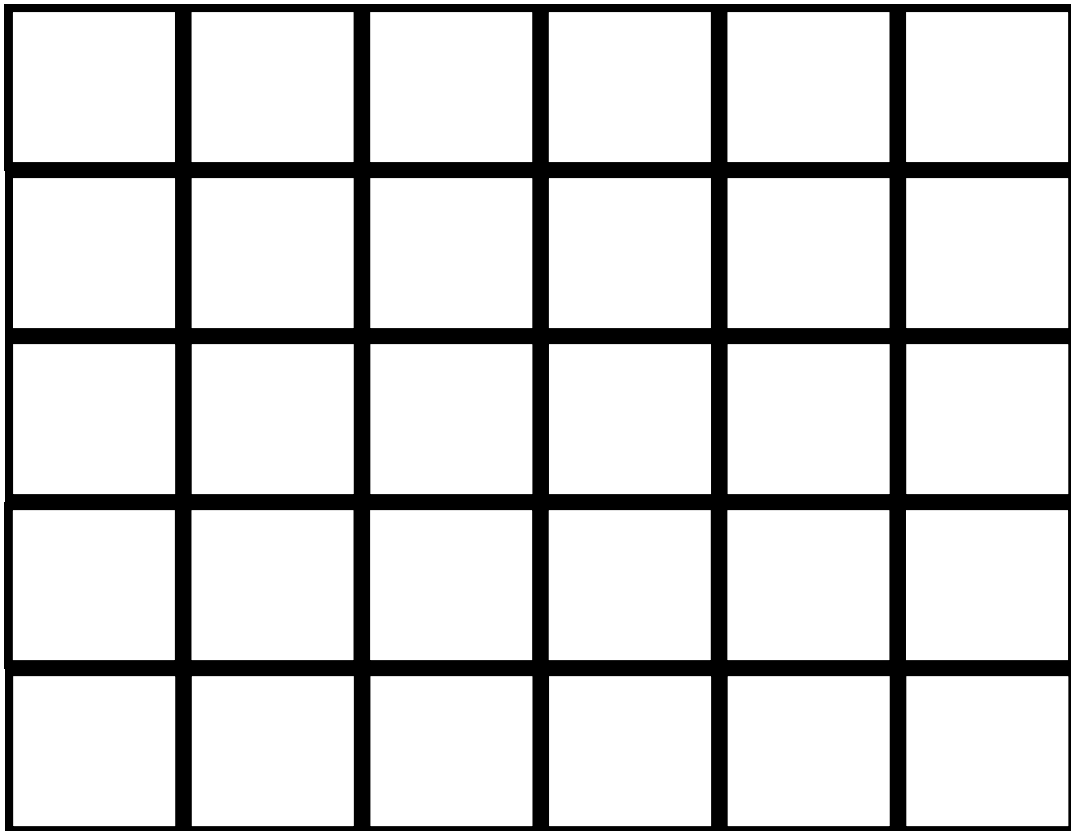
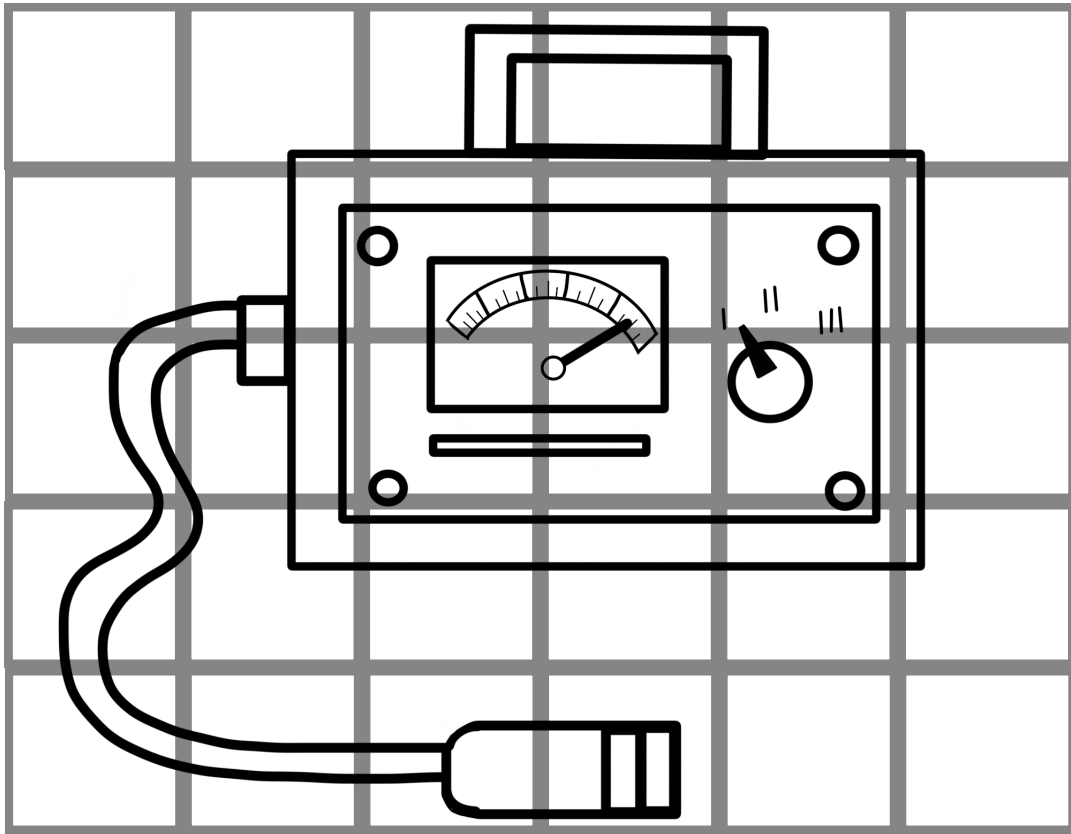


Help the electricity find it's way from the power station to your house



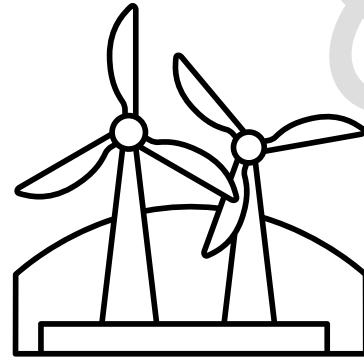
# Learn to Draw

Copy the picture of a radiation detector

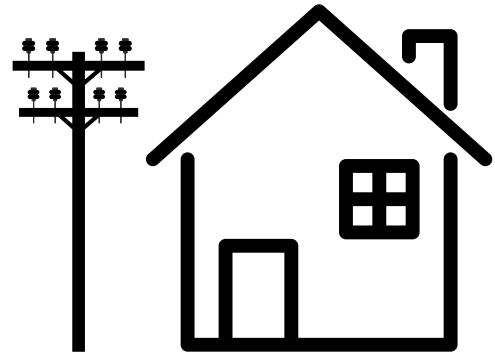
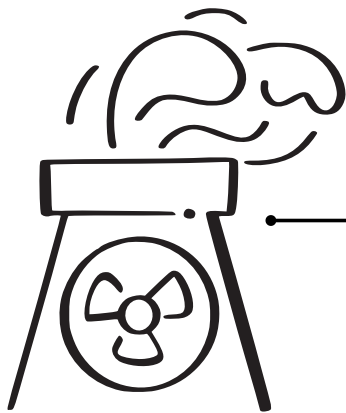


# Colour Me!

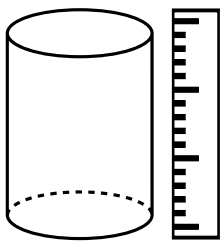
And learn some nuclear math



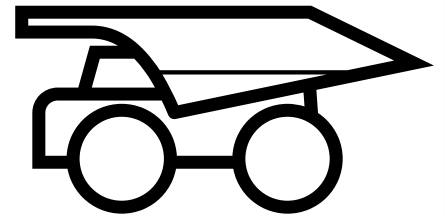
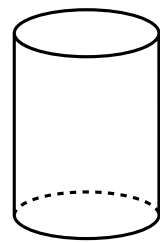
1 CANDU Reactor = 250 Wind Turbines



1 CANDU reactor powers 600,000 homes

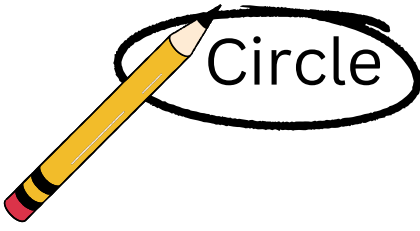


One fuel pellet is  
the size of a  
gummy bear

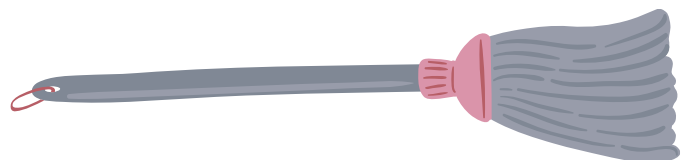
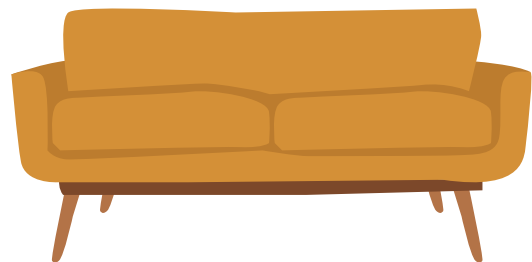
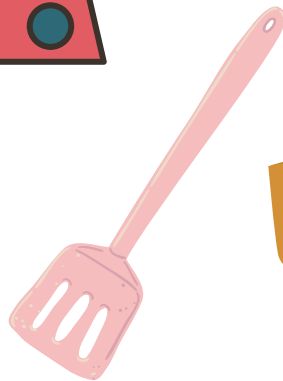
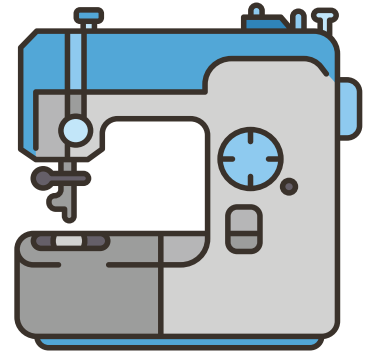
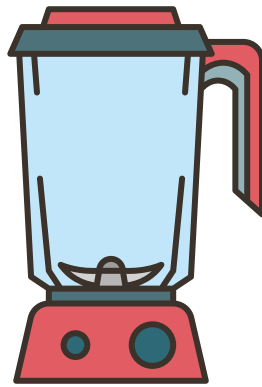
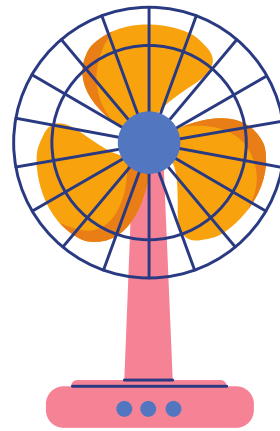
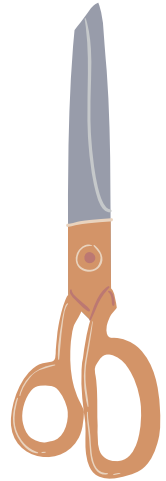
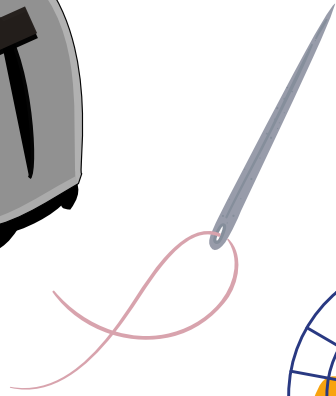
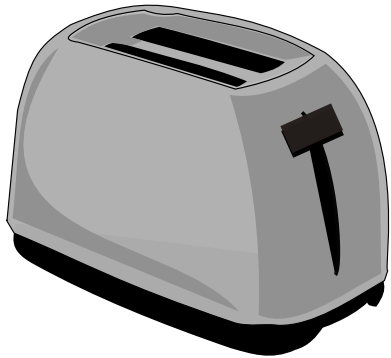


1 fuel pellet has as  
much energy as 1 TON  
of coal

# Activity Sheet



Circle the household items that use electricity







# Solve The Clues

A medical scan to see broken bones

X -         Y

The colour we use to describe  
renewable energy

    R     E    

The star in the sky that emits light from  
nuclear fusion

S        

The fuel used in nuclear reactors

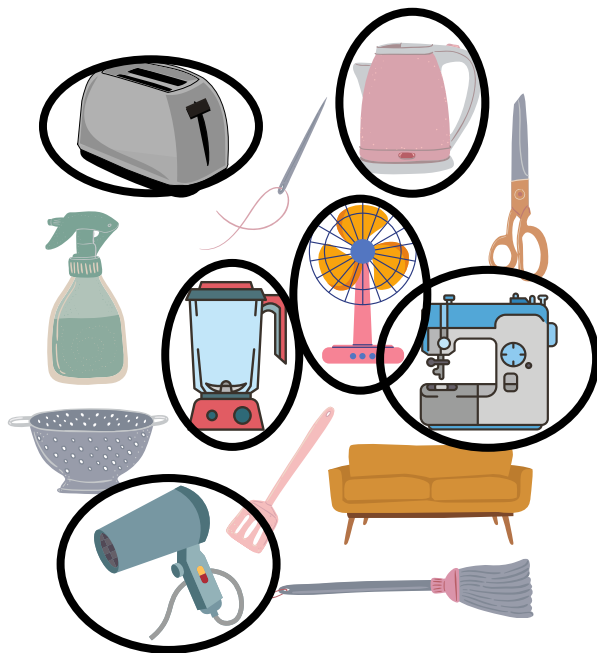
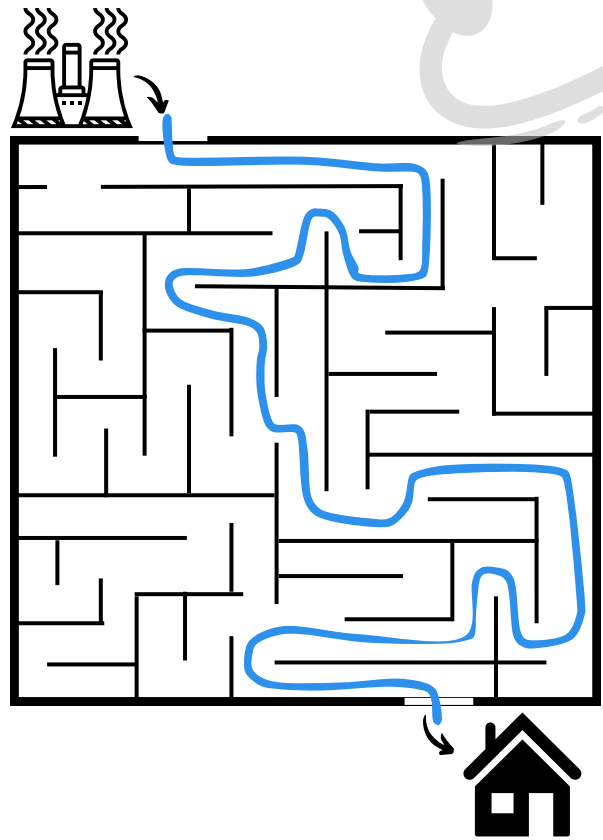
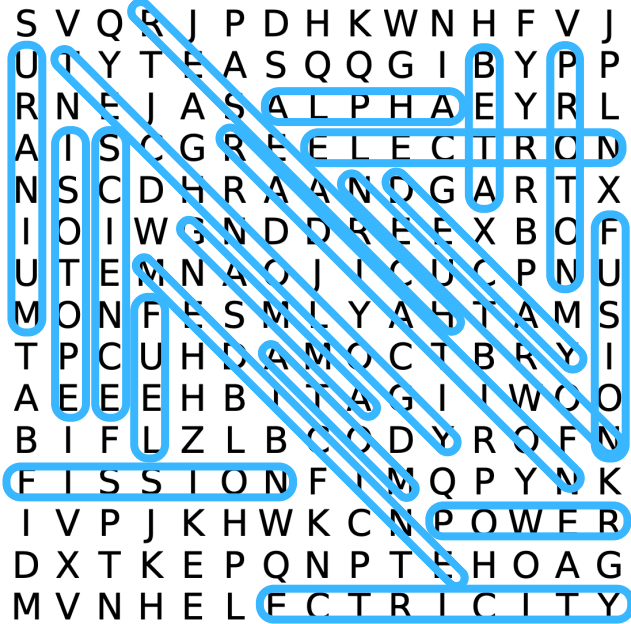
U     A N         M

Detectors that alert you to fires in your  
home (they use a radioactive isotope)

S M     K         A         R M



# Answer Key



## Secret Message:

In Canada,  
15% of our  
electricity  
comes from  
nuclear power

## Solve the Clues:

A medical scan to see broken bones: **X-RAY**

The colour we use to describe renewable energy: **GREEN**

The star in the sky that emits light from nuclear fusion: **SUN**

The fuel used in nuclear reactors: **URANIUM**

Detectors that alert you to fires in your home: **SMOKE ALARM**