



get into  
energy

The  
**COLORFUL  
WORLD OF  
ENERGY**

**Discover What Powers Our Lives**

Created by the Center for Energy Workforce Development



# The COLORFUL WORLD OF ENERGY

On each page of this activity and coloring book, you'll explore power plants, renewable resources, new technologies, career paths, and everything in between. From towering wind turbines to sparkling solar panels, you will discover all the ways energy shapes our lives. Who knows? You might want a job in energy one day. You'll see there are powerful possibilities ahead!

**GET READY TO GET INTO ENERGY.**

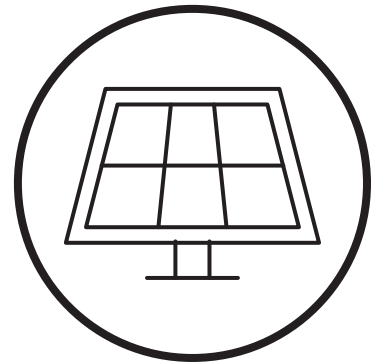
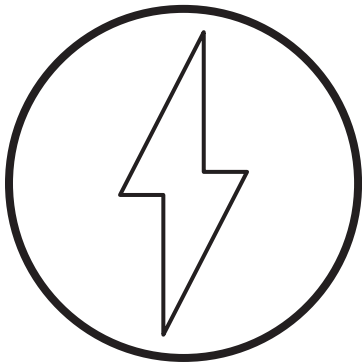
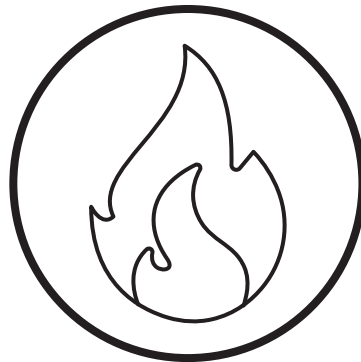


Learn more at **[GetIntoEnergy.org](https://www.getintoenergy.org)**

Get Into

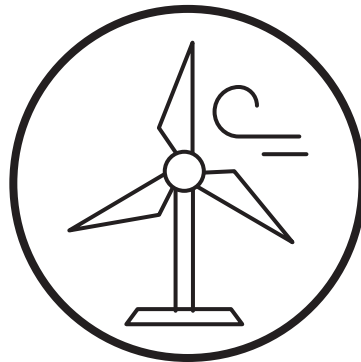
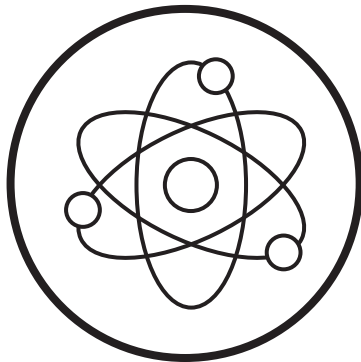
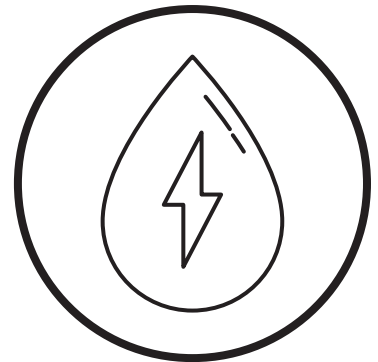
ENE

RGY



# What is Energy?

Energy helps us turn on our lights, cook our food, and even drive cars. Energy comes from many different sources. When the sun shines, wind blows, and water and gas flow, they can create the energy that powers our lives.



# Energy Efficiency

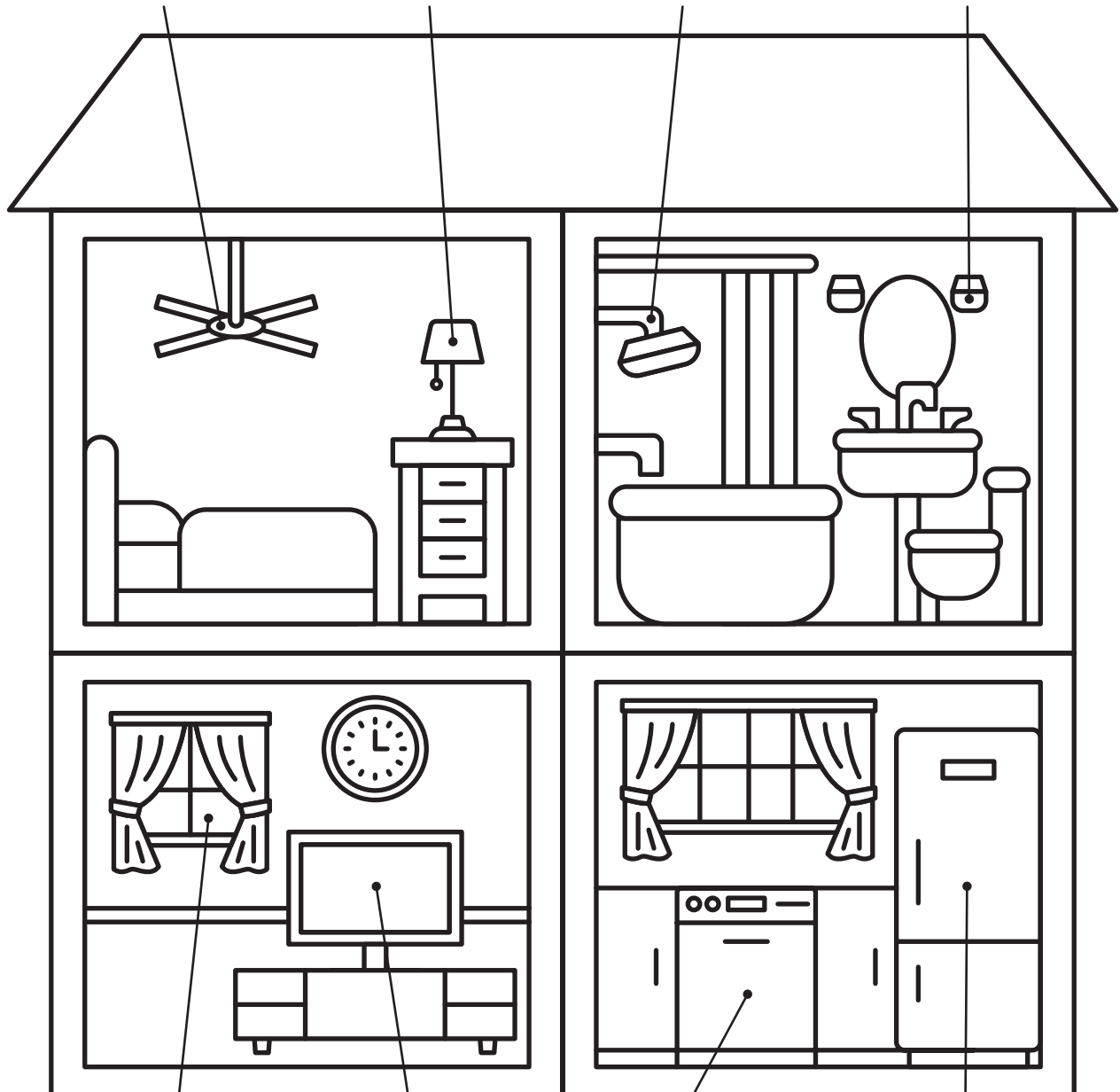
Saving energy helps the planet. Even small changes, like turning off a light at home, can make a big difference.

Use a ceiling fan to move air around the room.

Turn off lights when not in use.

Take a shower instead of a bath.

Upgrade lighting to energy-efficient bulbs.



Let sunshine brighten the house during the day.

Read a book instead of watching TV.

Run appliances that produce heat, like your dishwasher, at night when it is cooler.

Don't keep the refrigerator door open too long.

# Find the Hidden Energy

Find the hidden words in the scramble to uncover the power of energy around us.

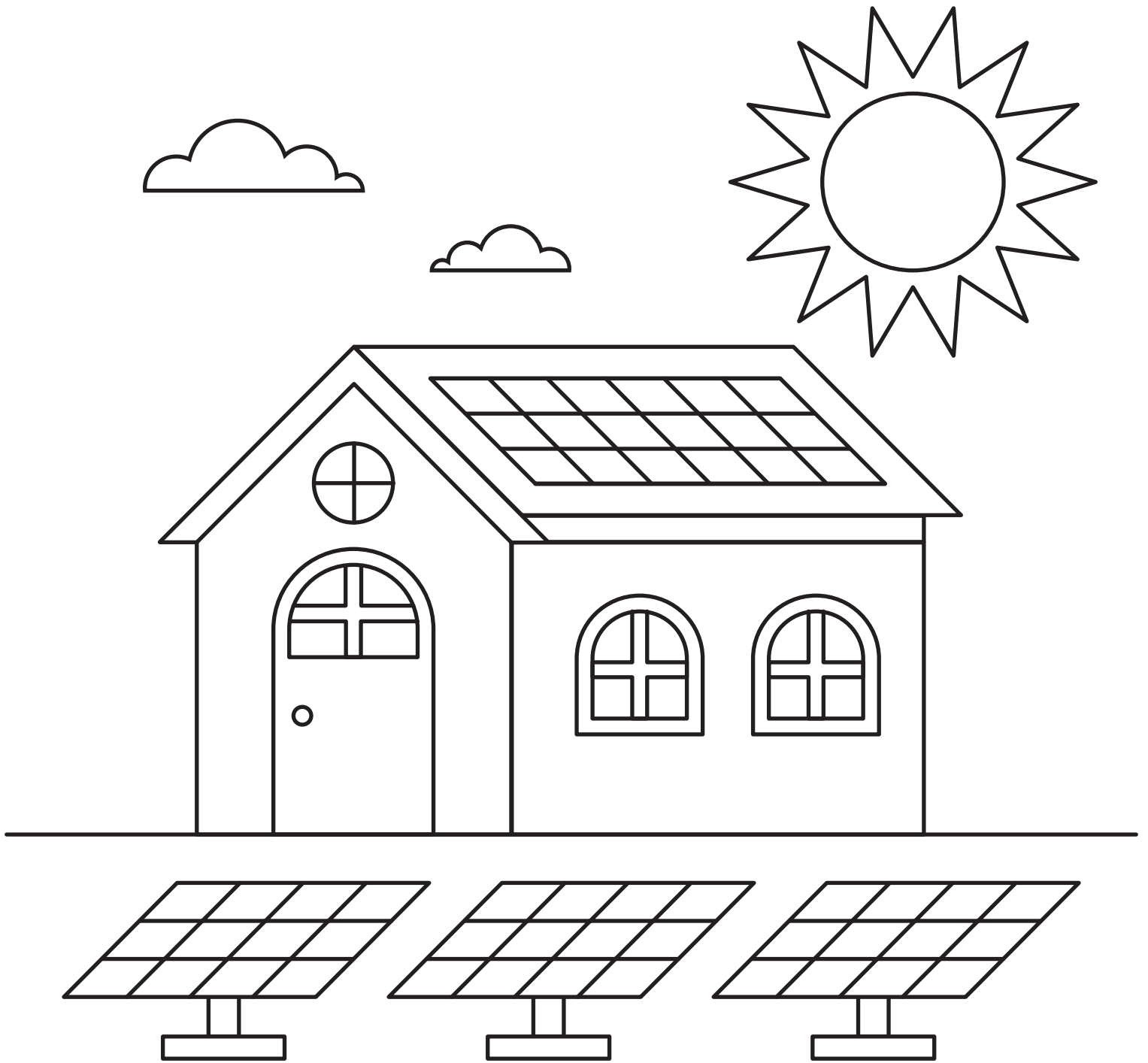
O P D L S I O A H C O N T R A C T O R W  
T E C H N I C I A N L I T R A D E O I I  
A S O Y W Q G D U G B G D W P Y W W L N  
G D I L I N E W O R K E R I N M I T H D  
C O N S T R U C T I O N F H A C C K X C  
J H X N C P E N G I N E E R T S O L A R  
J M J Z E O N U C L E A R J U K V P T S  
A N A J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

AGRICULTURE  
APPRENTICE  
CONSTRUCTION  
CONTRACTOR  
ENERGY  
ELECTRICITY

ENGINEER  
FUEL  
GAS  
HYDROGEN  
HYDROPOWER  
JOURNEYPERSON

LIGHT  
LINEWORKER  
MANUFACTURING  
NATURAL RESOURCES  
NUCLEAR  
POWER

RENEWABLE  
SOLAR  
STEM  
TECHNICIAN  
TRADE  
WIND



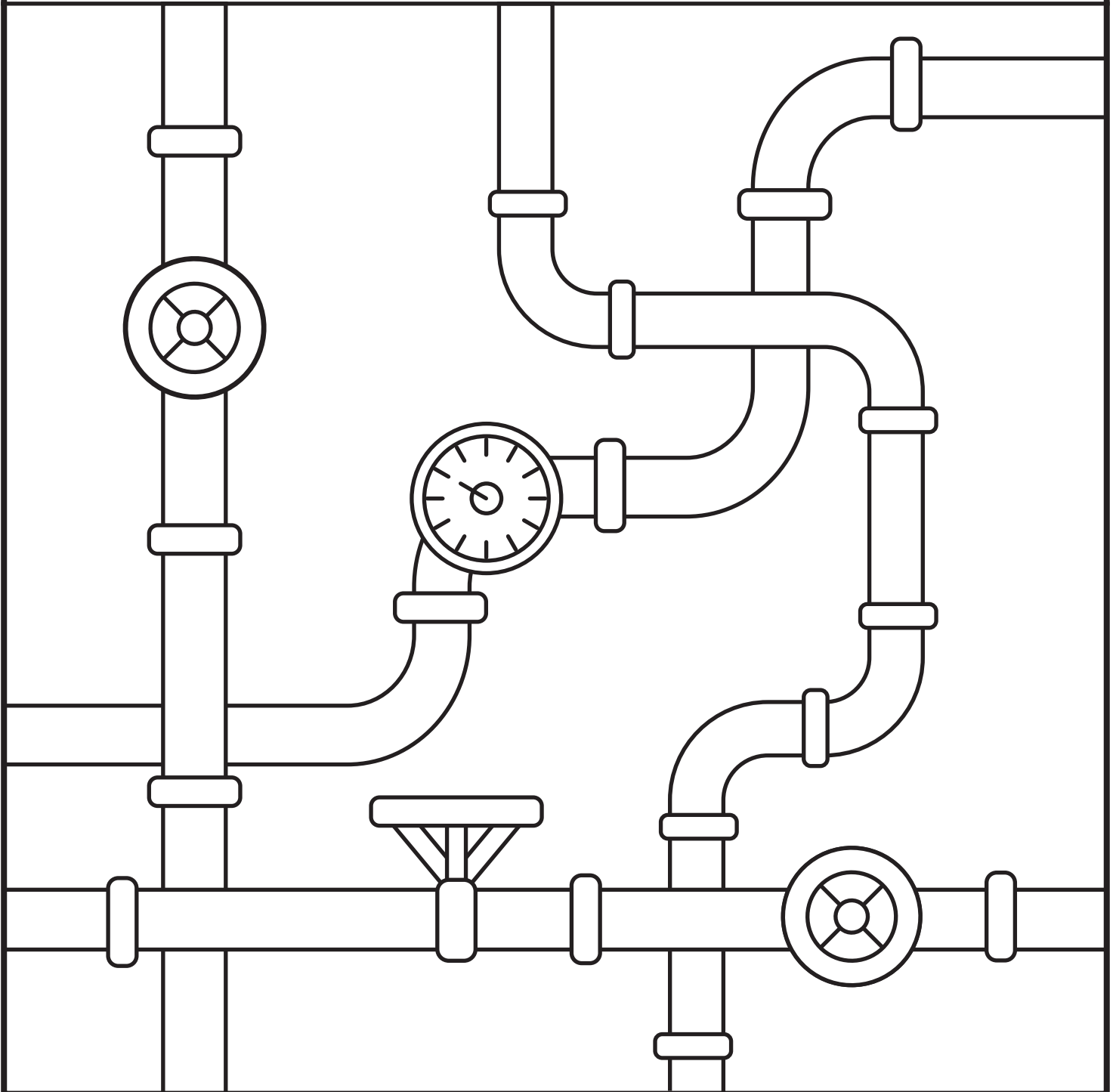
# What is Solar Power?

The sun's rays are packed with energy and travel millions of miles to reach Earth. When the rays hit solar panels, they turn into electricity that can power our homes and schools. In the United States, solar power can light up almost 20 million homes.



# What is Natural Gas?

Natural gas comes from deep beneath the Earth's surface and can be used in many ways. At home, it can keep us warm, cook our food, and even dry our clothes. It's also used to generate electricity and power vehicles.

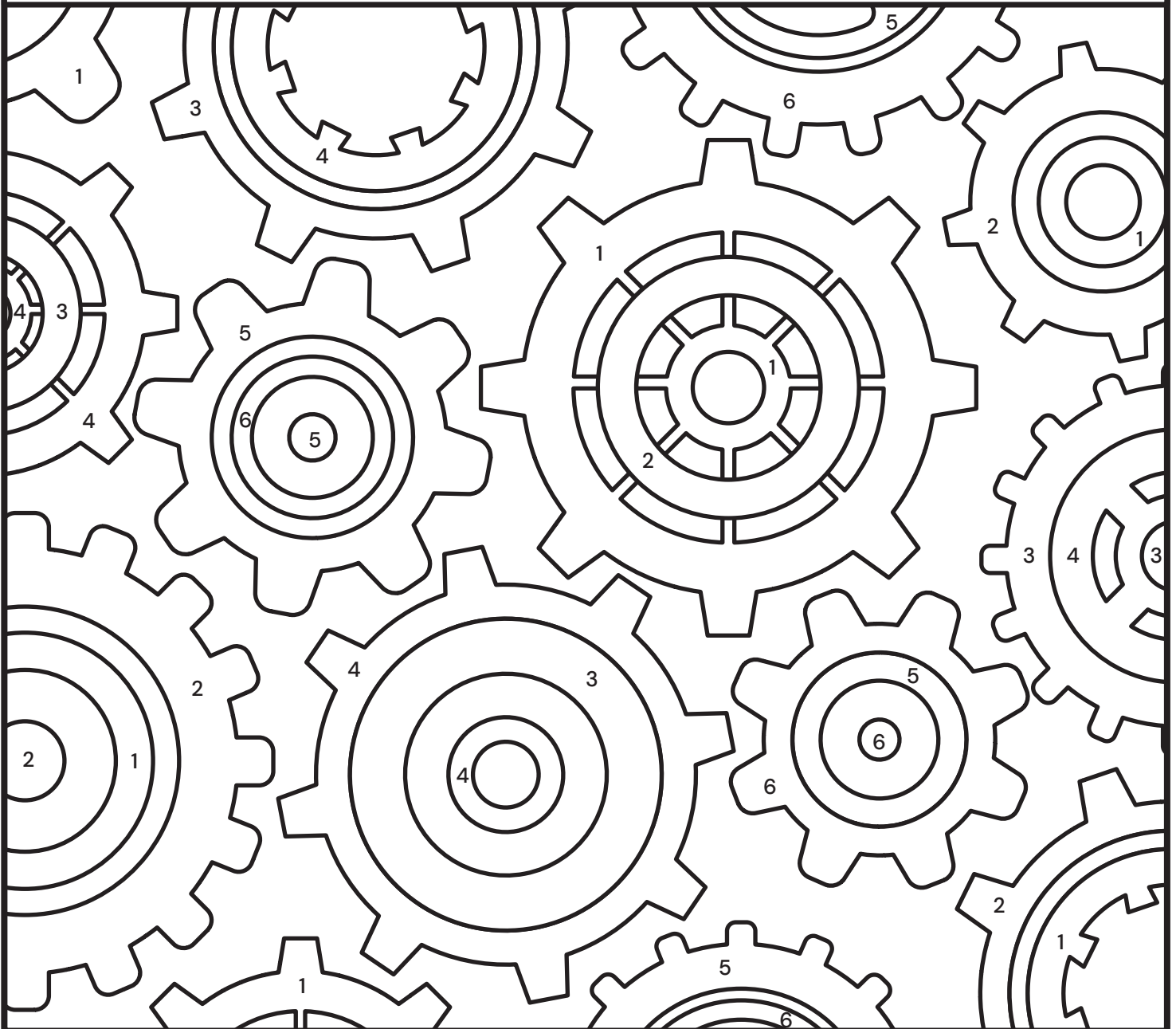


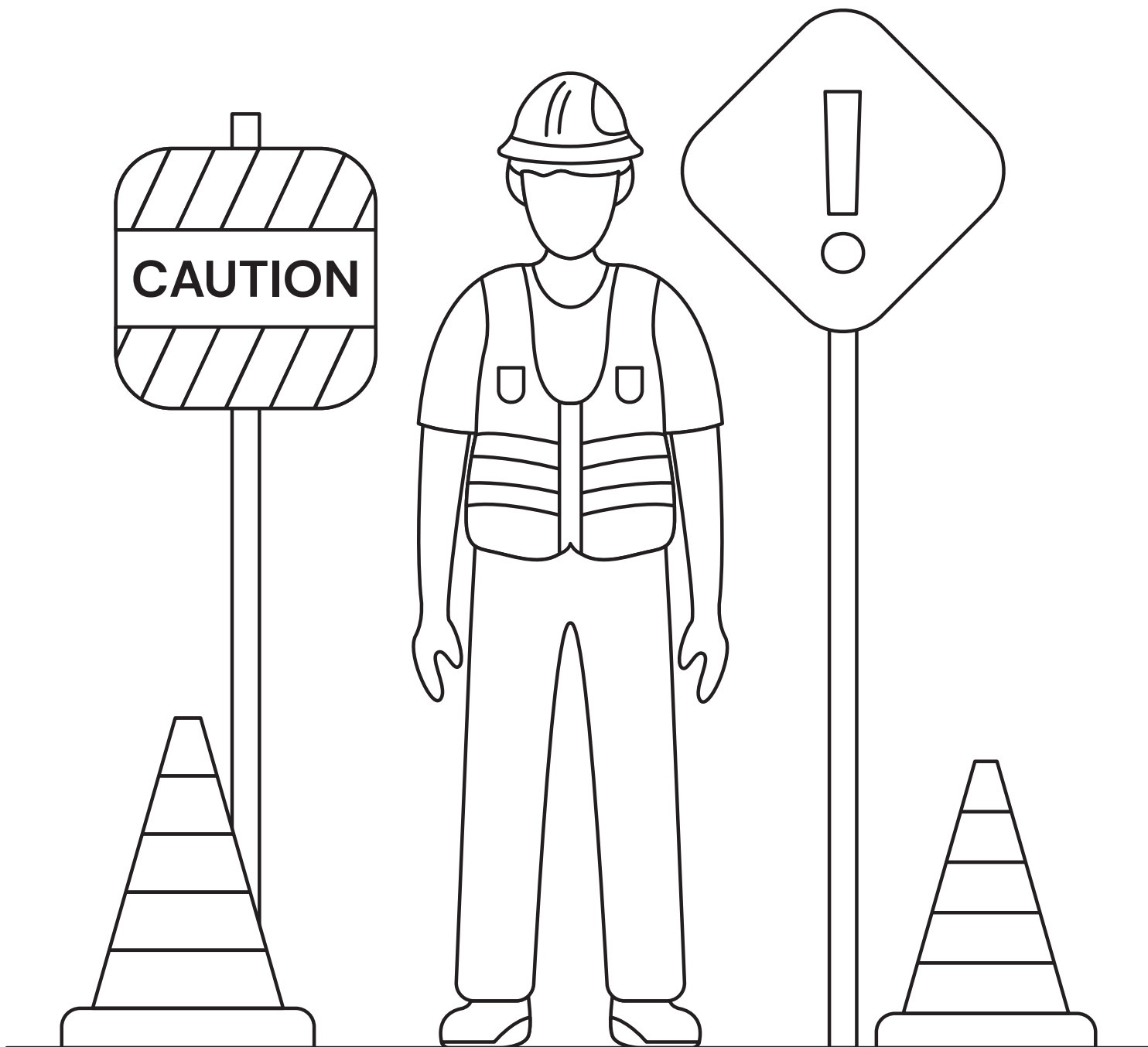
# Gears in Motion

There are almost as many different types of engineers in the energy industry as there are letters in the alphabet. These workers solve problems and use tools, like gears and levers, to help make things run smoothly.

**Color the picture by number to show the gears.**

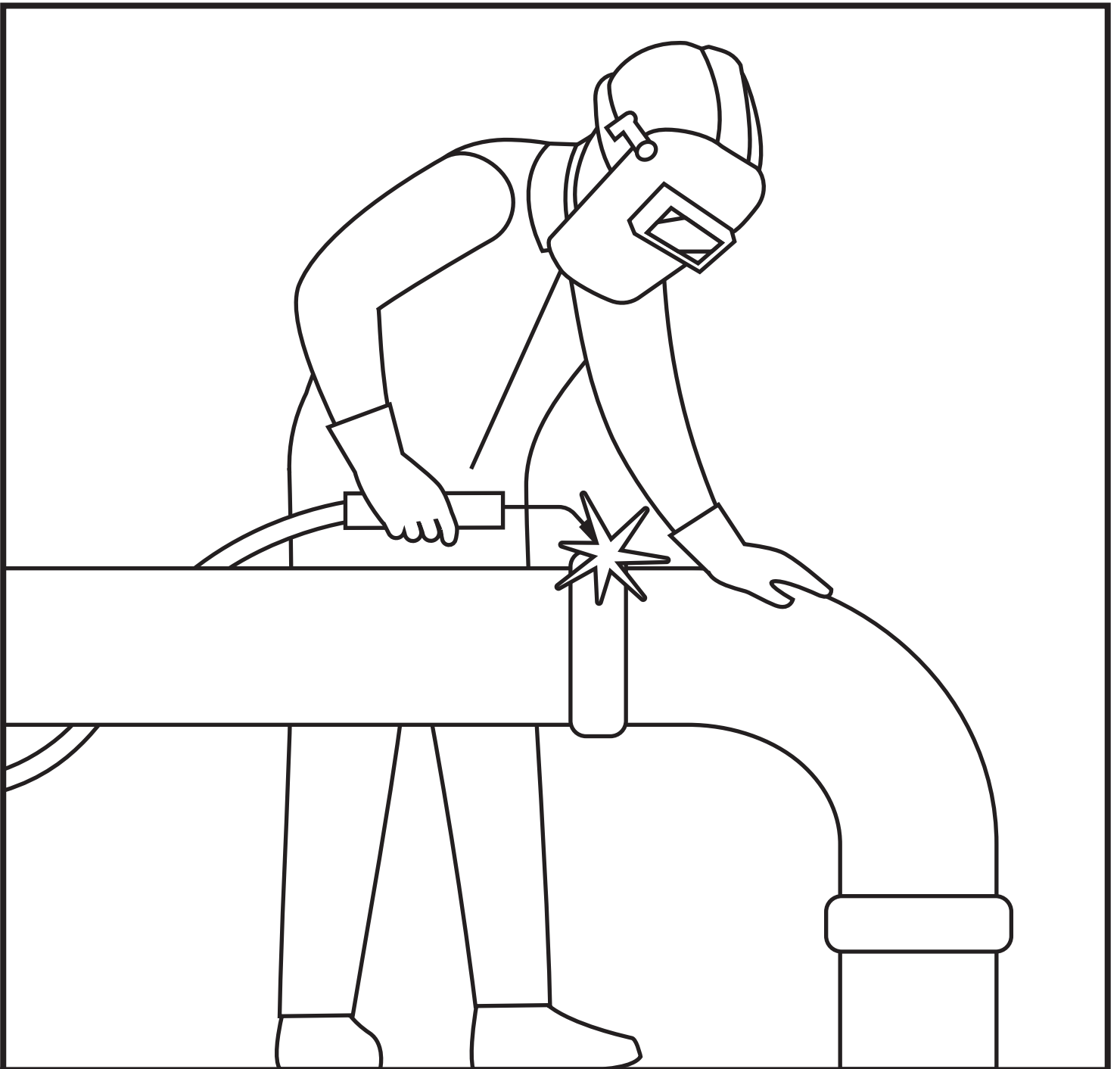
1 - Blue   2 - Purple   3 - Yellow   4 - Green   5 - Red   6 - Orange





# Who are Construction Workers?

Construction workers in the energy industry are individuals who build and maintain energy-related infrastructures like distribution facilities, solar farms, wind turbines, and more.

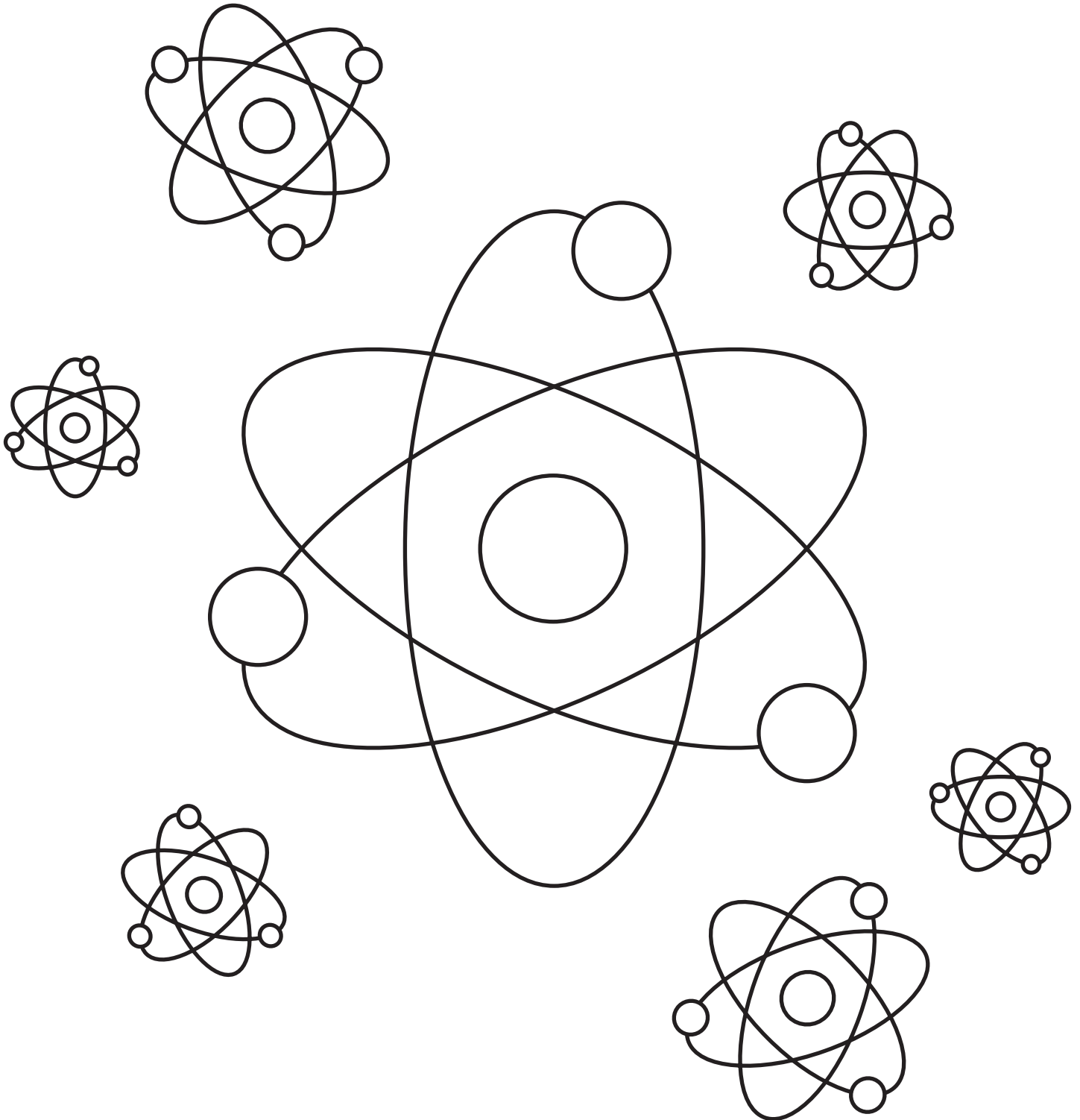


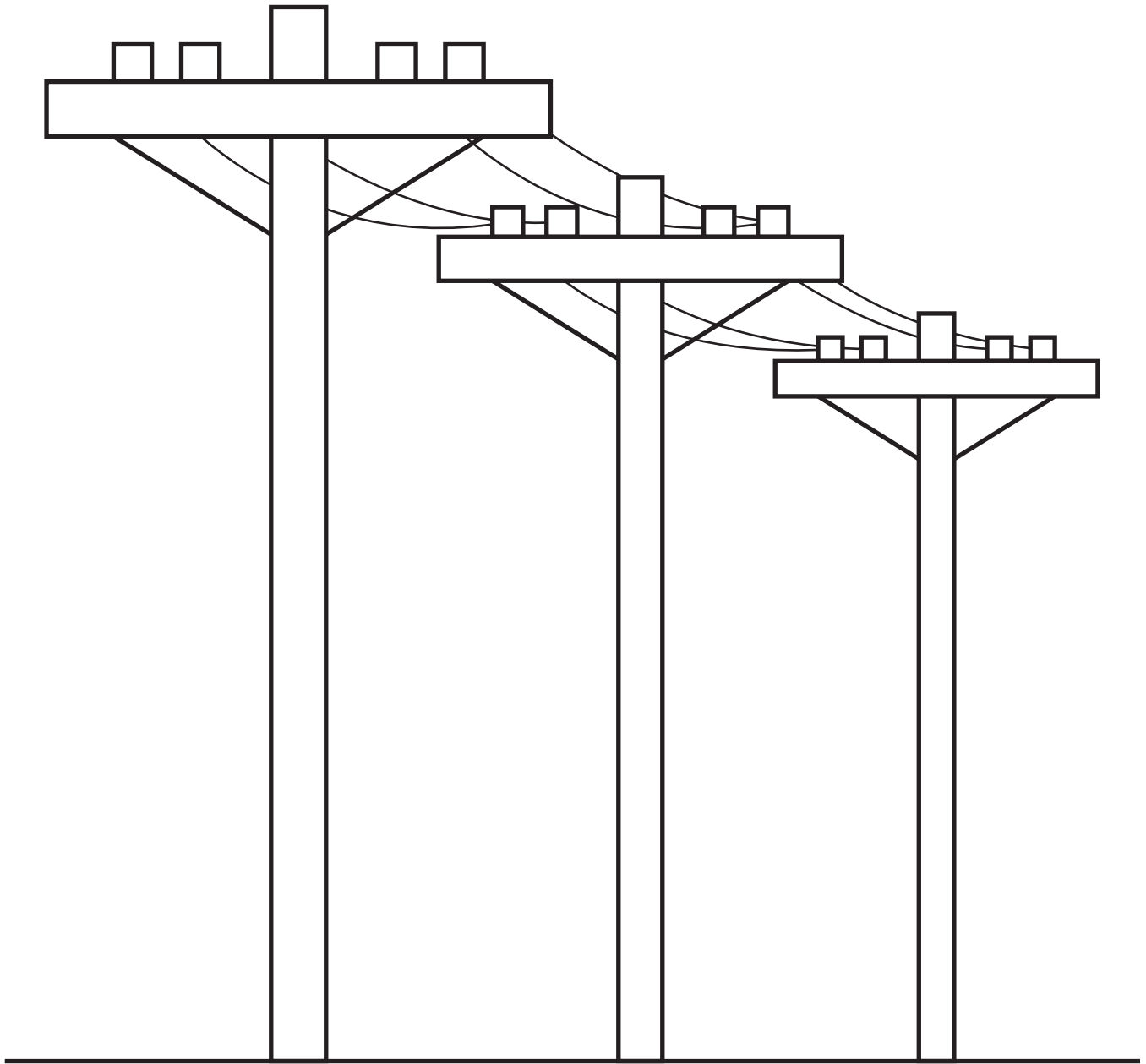
# Who are Welders?

Welders build and fix equipment that brings us power and fuel. Using special tools, they join pieces of metal together to create sturdy structures, like pipelines, oil rigs, and wind turbines. Welders must be very precise and accurate to ensure the safety and reliability of these structures.

# What is Nuclear Energy?

Nuclear energy is a low-emission power source that comes from the core of an atom. It can be used to generate electricity, sterilize medical equipment, and turn saltwater from the sea into freshwater for drinking.

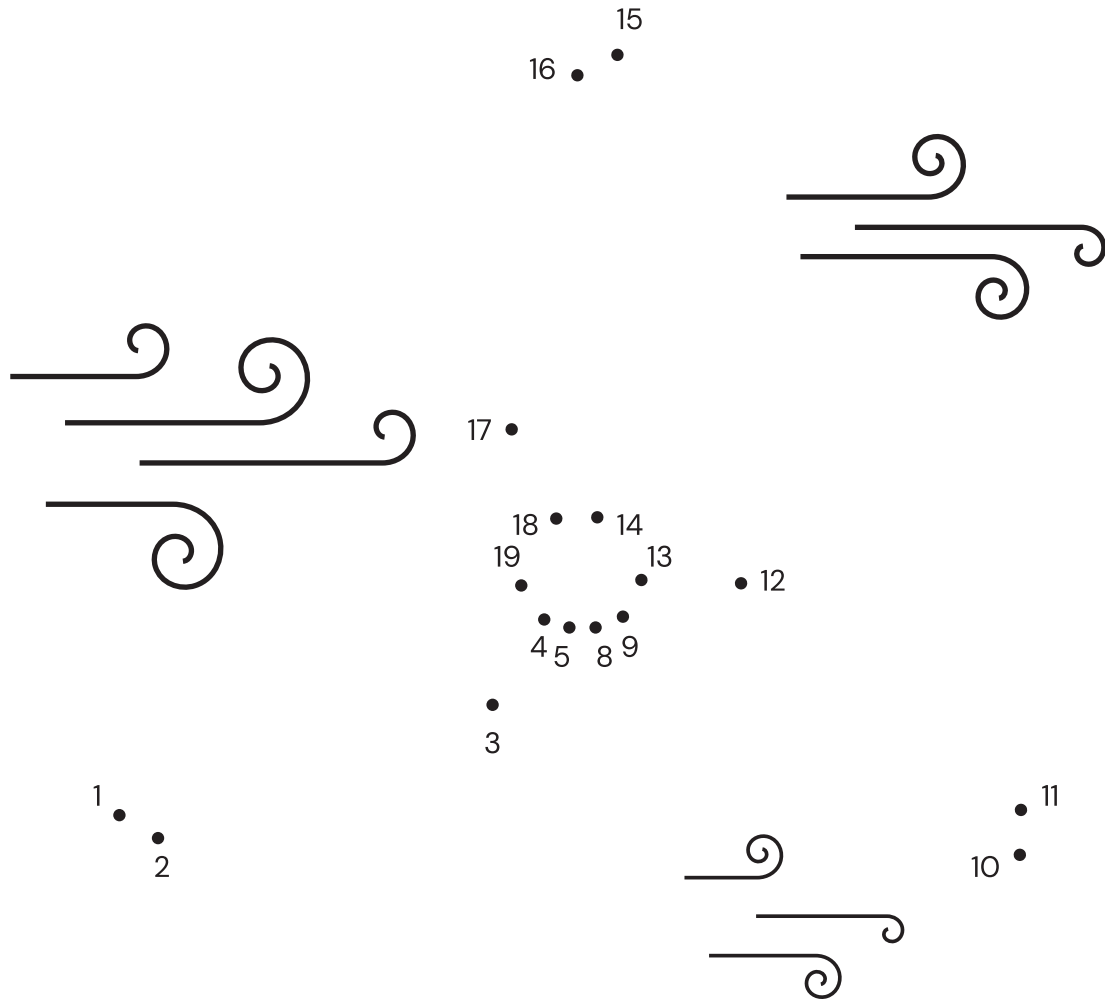




# Who are Lineworkers?

Lineworkers climb utility poles to fix the wires that bring electricity to our homes and businesses. When there's a storm or a power outage, they're the first ones on the scene to get the lights back on in their communities.

**Draw a lineworker at the top of the pole.**



# What is Wind Power?

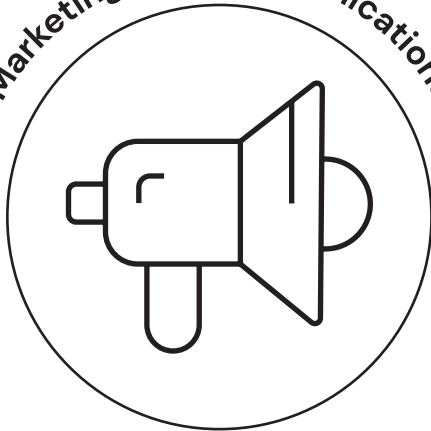
Wind turbines are like giant windmills that turn the wind's energy into electricity. When the wind blows, the turbine's blades spin. The stronger the wind, the more electricity the turbine can produce.

Uncover the power of wind energy by connecting the dots to reveal a wind turbine.

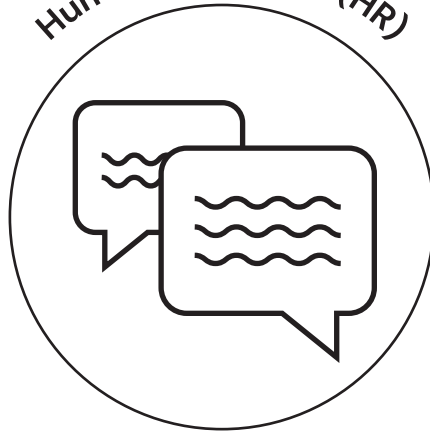
# What are Energy Companies?

Did you know energy companies are businesses? That means they need people with all kinds of skills, like a math wizard or a team captain, to make sure they run smoothly. These behind-the-scenes workers provide support and guidance to power our communities.

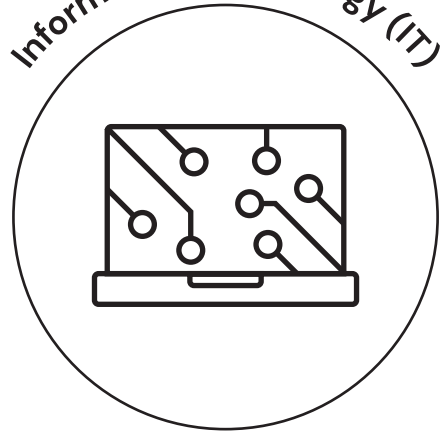
Marketing and Communications



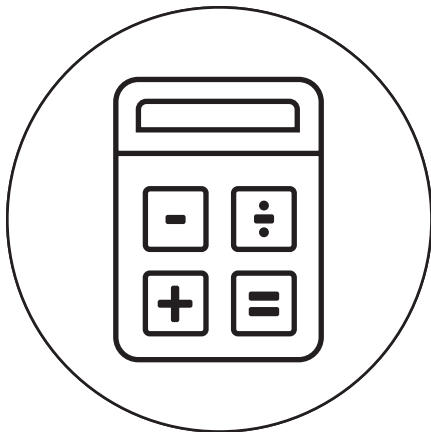
Human Resources (HR)



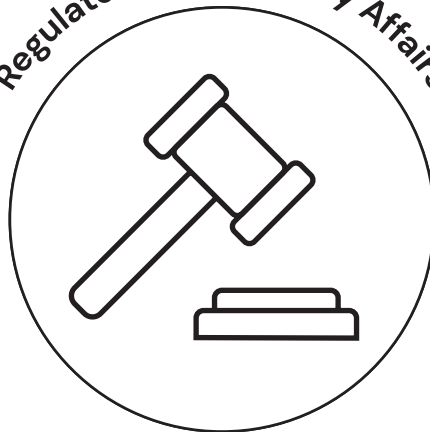
Information Technology (IT)



Accounting



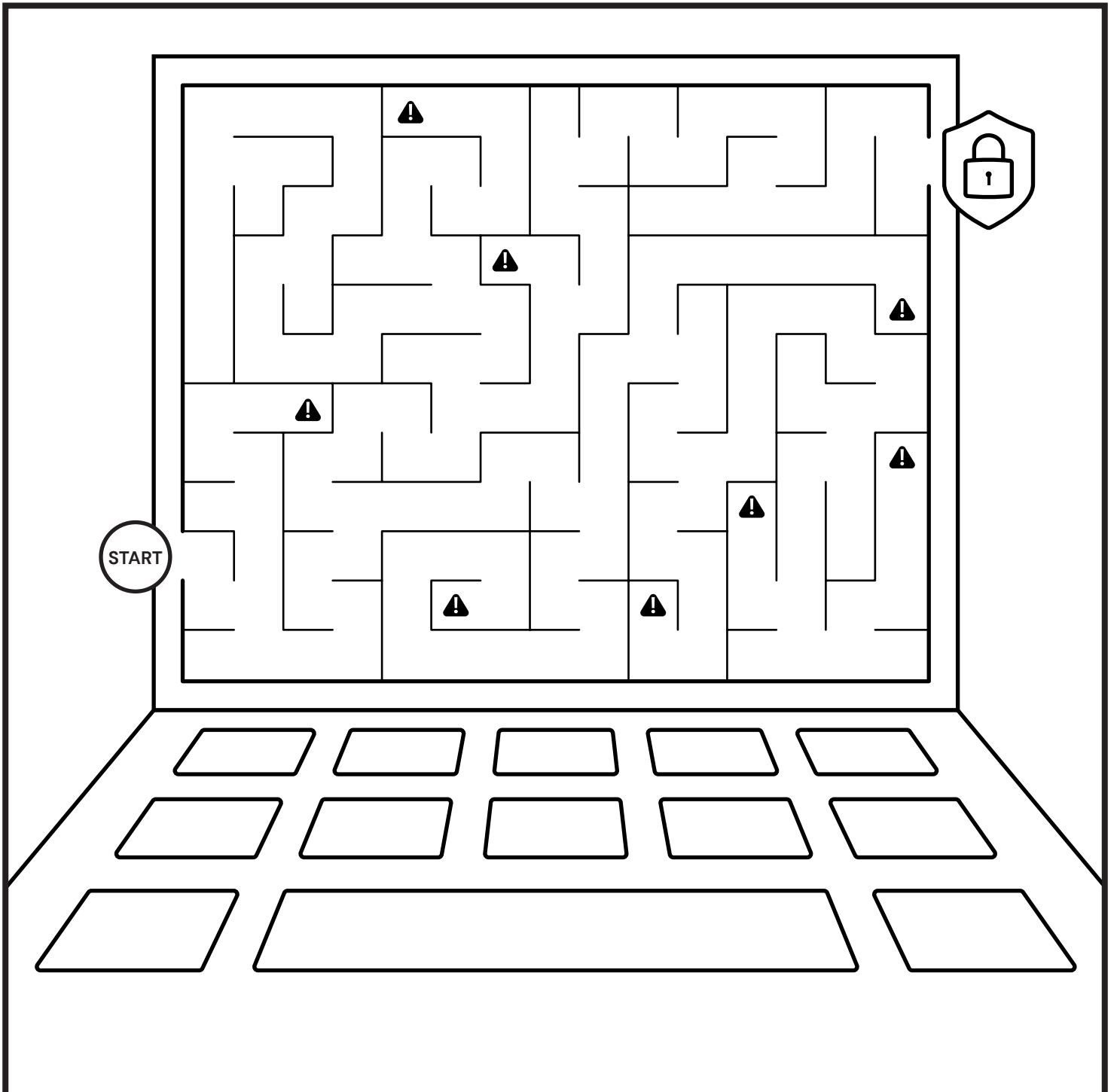
Regulatory/Community Affairs



Government Affairs







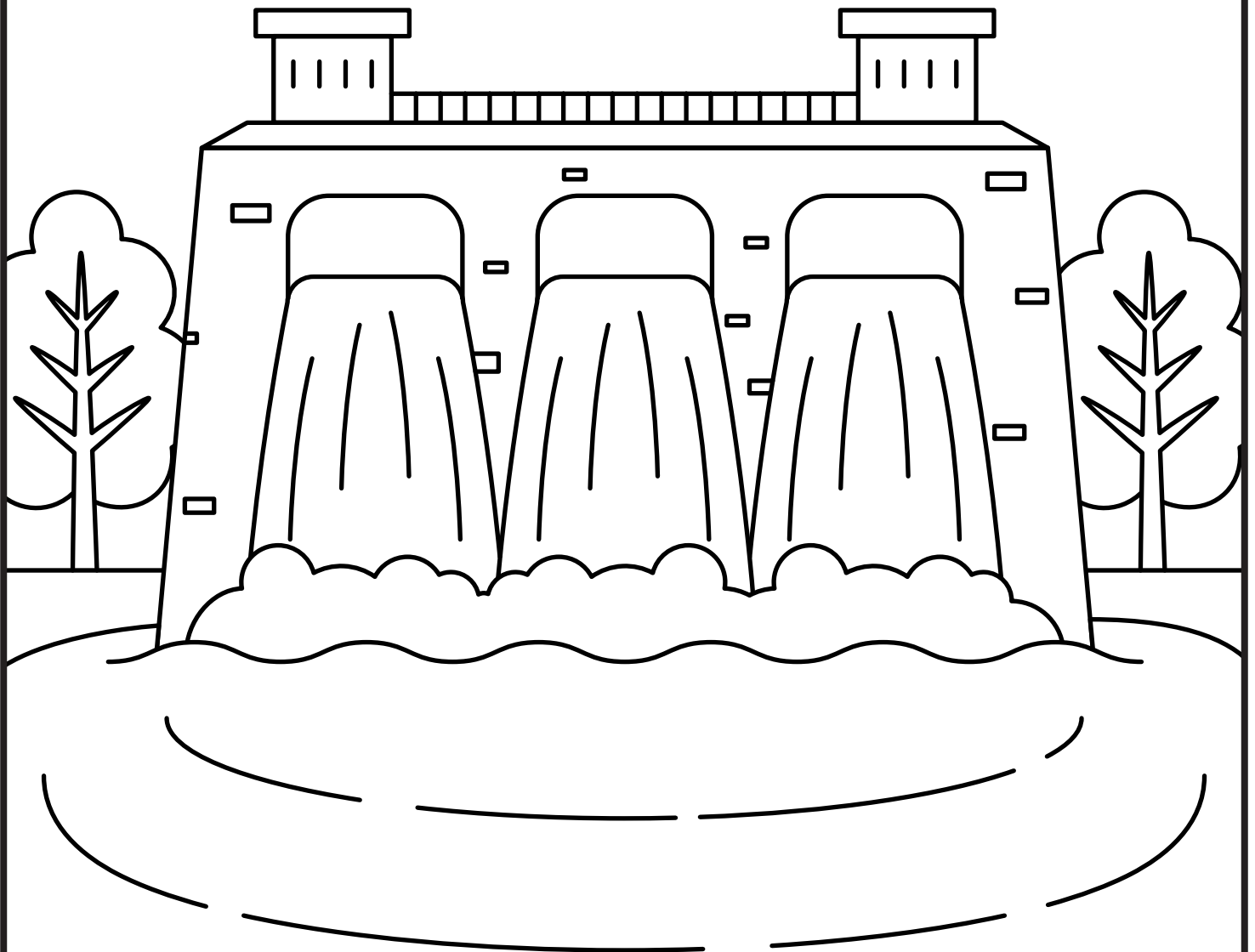
# Secure the Network

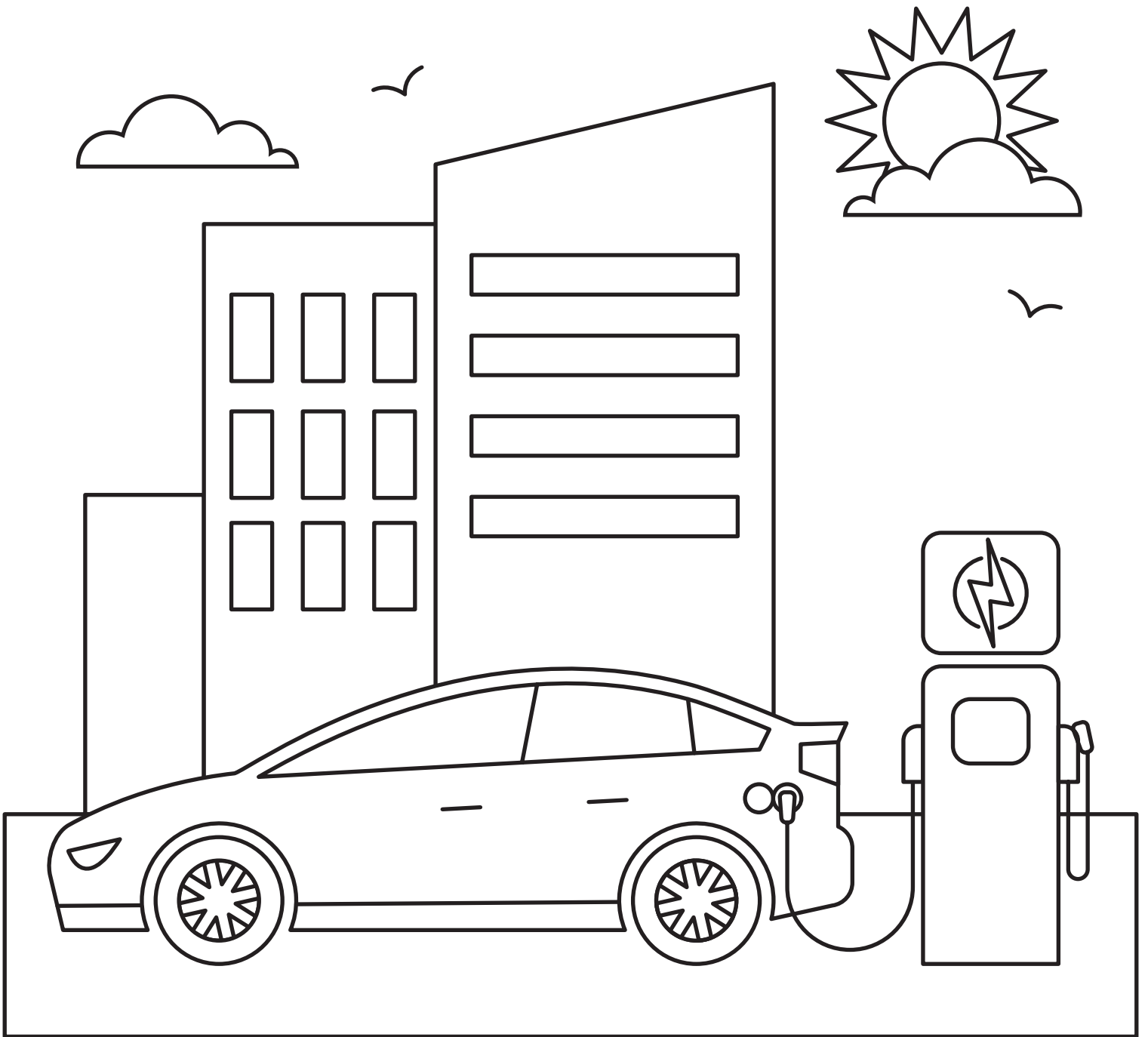
Cybersecurity experts protect and secure digital data. They keep our energy networks safe from hackers who might steal information or cause problems, like planned power outages.

**Make your way through the maze to defend the network data from cyberattacks.**

# What is Hydropower?

Hydropower is a renewable energy source that uses moving water to create electricity. A conventional hydropower system has three points: a plant where electricity is produced, a dam that controls water flow, and a reservoir to store water.



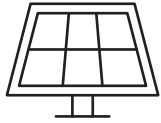
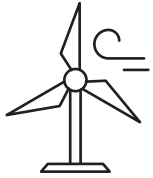


# What are Electric Vehicles?

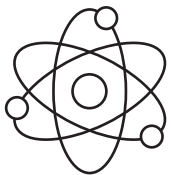
Electric vehicles, or EVs, run on electricity instead of gas. These cars are built with rechargeable batteries that give them the power to drive. When the batteries need more energy, they can be recharged at a charging station or plugged in at home.

# Match the Energy

How well do you know energy? Test your knowledge by matching the pictures with the correct word below.



H<sub>2</sub>



ELECTRICITY

NATURAL GAS

NUCLEAR

WIND

SOLAR

HYDROPOWER

HYDROGEN



# Who are Energy Workers?

Energy workers can be anyone. No matter who you are or what skills you have, there is a place in the energy industry for you.



# Resources

Parents, educators and students can learn more about all the energy industry has to offer at [www.GetIntoEnergy.org](http://www.GetIntoEnergy.org). To find additional information, lesson plans, games and experiments that spark joy, check out the educational resources below.

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## **ALLIANCE TO SAVE ENERGY**

[https://www.ase.org/  
strategic-initiatives/  
empowered-schools](https://www.ase.org/strategic-initiatives/empowered-schools)

## **DEPARTMENT OF ENERGY**

[https://www.energy.  
gov/energysaver/clean-  
energy-resources-  
educators](https://www.energy.gov/energysaver/clean-energy-resources-educators)

## **ENERGY INDUSTRY FUNDAMENTALS 2.0**

[https://getintoenergy.org/  
eif-2-0/](https://getintoenergy.org/eif-2-0/)

## **ENERGY KIDS**

<https://www.eia.gov/kids/>

## **KIDWIND**

<https://kidwind.org/>

## **NATIONAL ENERGY EDUCATION DEVELOPMENT (NEED)**

[https://www.need.  
org/educators/basic-  
curriculum-units/](https://www.need.org/educators/basic-curriculum-units/)

## **SCIENCE BUDDIES**

[https://www.  
sciencebuddies.org/](https://www.sciencebuddies.org/)

## **SCIGIRL CONNECT**

[https://why.  
pbslearningmedia.org/  
collection/scigirls/](https://why.pbslearningmedia.org/collection/scigirls/)

## **STEM LABS**

[https://www.fun.com/  
stem-toys-and-games.  
html](https://www.fun.com/stem-toys-and-games.html)

## **U.S. NUCLEAR REGULATORY COMMISSION**

[https://www.nrc.gov/  
reading-rm/basic-ref/  
students.html](https://www.nrc.gov/reading-rm/basic-ref/students.html)

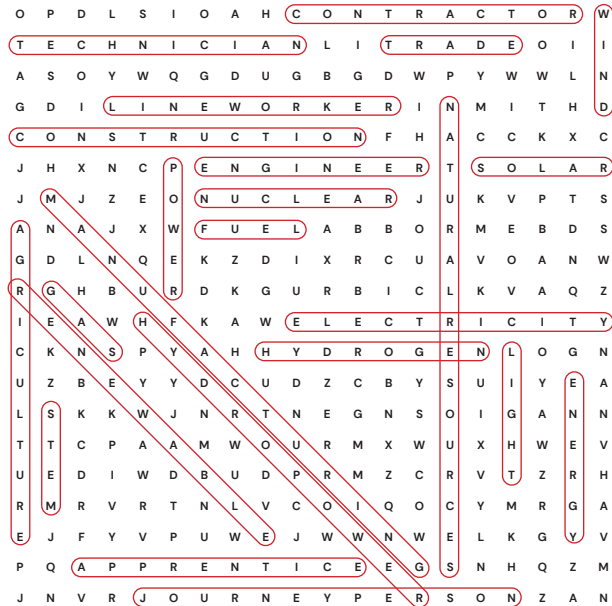
## **WHYVILLE**

[whyville.net](http://whyville.net)

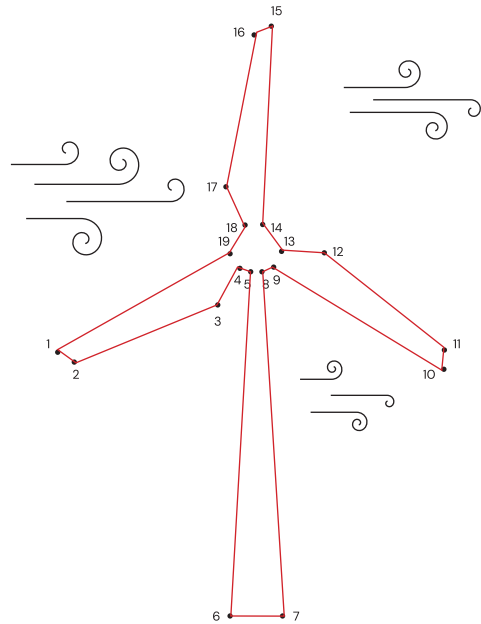
# Thank you for coloring the World of Energy!

Answers:

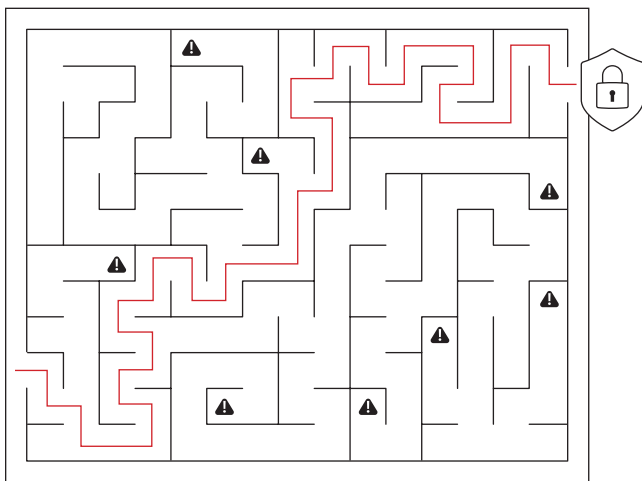
## Match the Energy



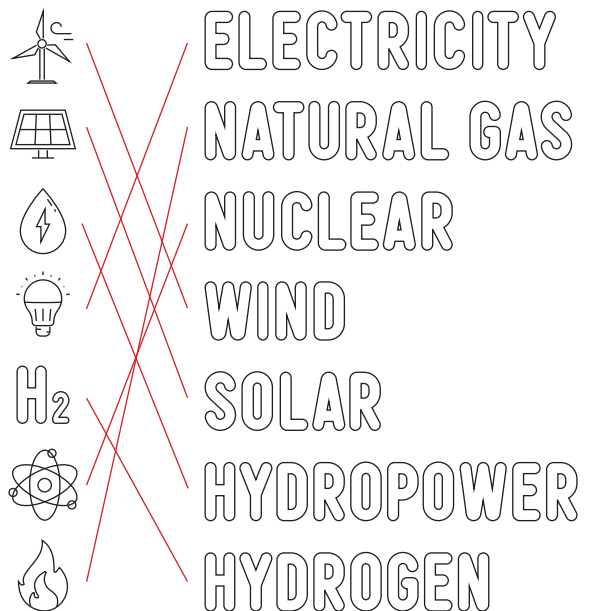
## What is Wind Power




## Secure the Network



## Find the Hidden Energy





Presented by the  
Center for Energy Workforce  
Development and our partners.

To learn more, visit  
**[GetIntoEnergy.org](https://www.getintoenergy.org)**

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