

Name: _____



ENERGY EXPERT PATCH

Tiger & Wolf Workbook

Consumers Energy

Count on Us

PROVIDING ENERGY EDUCATION TO STUDENTS IN THE COMMUNITIES
WE SERVE. THAT'S OUR PROMISE TO MICHIGAN.

For more great energy resources visit:
www.ConsumersEnergy.com/kids

Hey there Scouts!

Ready to earn your Energy Expert patch? This book will help you become an expert at:

Page 1- Electric Safety

Page 2- Natural Gas Safety

Page 3- Respect the Flags

Page 4- Sources of Energy

Page 5- Electricity Generation

Page 6- Energy Careers

Leaders:

This book is designed to be completed as a group. Please visit www.ConsumersEnergy.com/scouts to download the leader guide that includes the answers to this book, talking points for discussion, and how to order your patches.

Questions? Feel free to email us at education@consumersenergy.com



ELECTRIC SAFETY

3 things can happen if you touch electricity, you can be:

1. _____
2. _____
3. _____

_____ allow electricity to flow.

_____ stop the flow of electricity.

Do this with your pack: pretend a jump rope is a downed power line. Act out what you should do, then draw a picture of it here.

Remember!

Electricity, people, water DON'T mix!

Look up for POWER LINES when climbing a tree or flying a kite

Stay away from downed power lines and call Consumers Energy right away (800) 477-5050

NATURAL GAS SAFETY



Can you see natural gas if it's leaking?

Circle one: Yes / No

What can happen if natural gas is leaking? Write your answer.

Natural gas smells like _____.

Take the Right Steps

Write the safety phrase under the right picture, then act out what you should do if you smell natural gas!

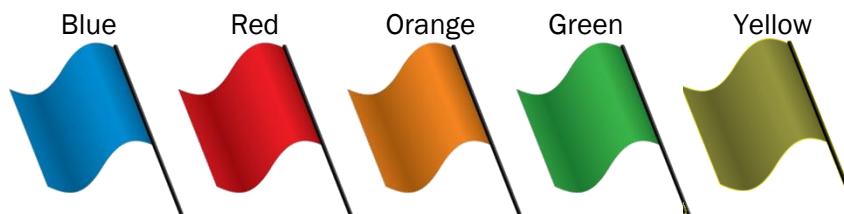
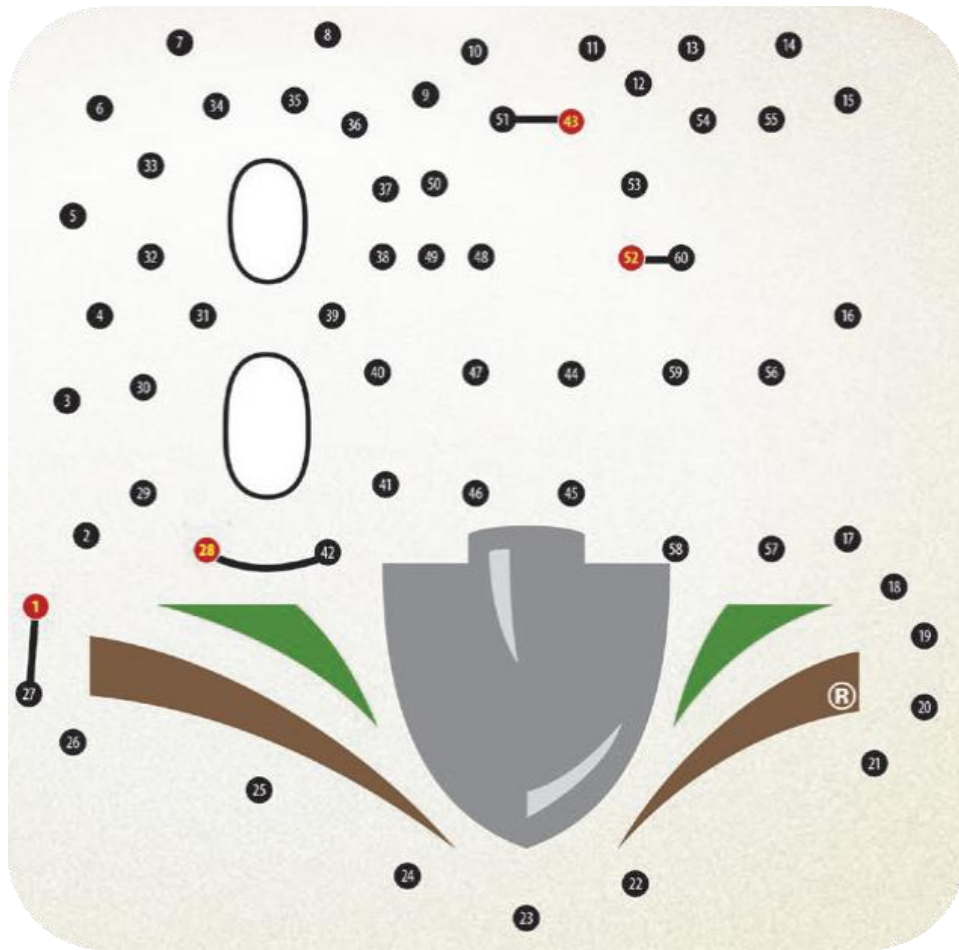


RESPECT THE FLAGS

Flags are used to mark

_____ that are buried underground.

Before you start digging, you must always call MISS DIG. Connect the dots to find out the phone number!



Match the flag to the right utility





SOURCES OF ENERGY

_____ energy sources we will never run out of.

_____ energy sources once they are used, they are gone.

Draw what you think these energy sources look like

COAL

NUCLEAR

- This rocky source comes from old dead plants
- It must be mined deep out of the ground and sent on ships and trains

- This source comes from uranium atoms splitting
- These power plants have large cylinder shaped stacks

HYDRO

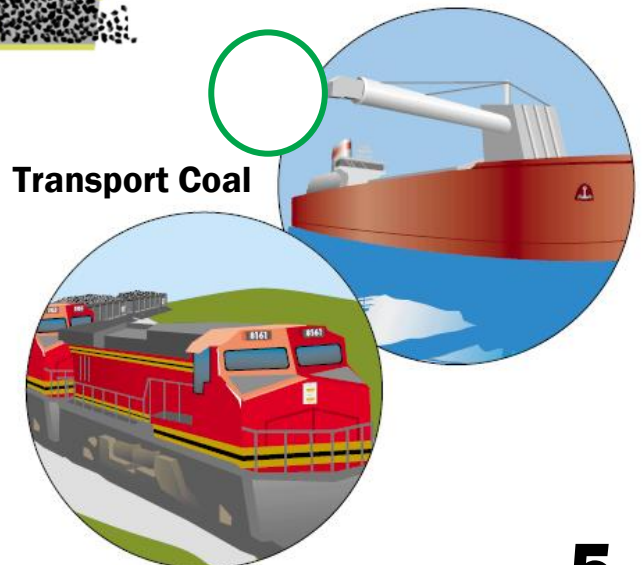
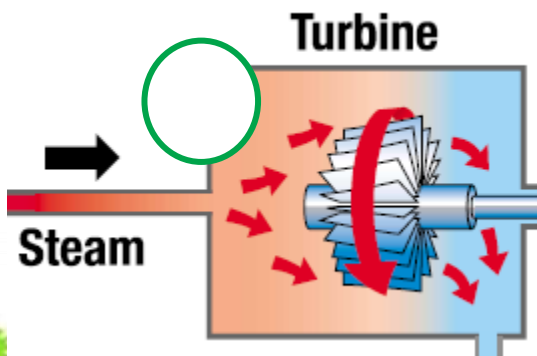
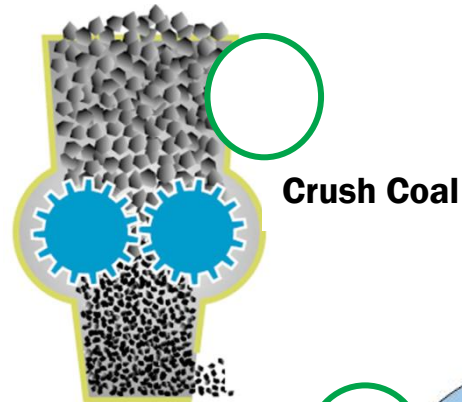
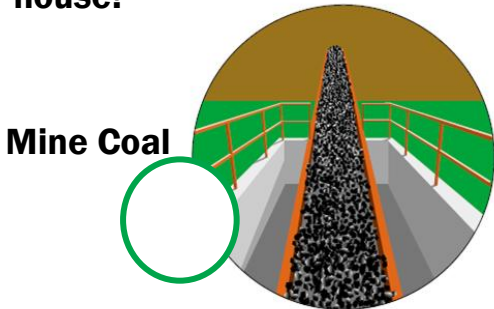
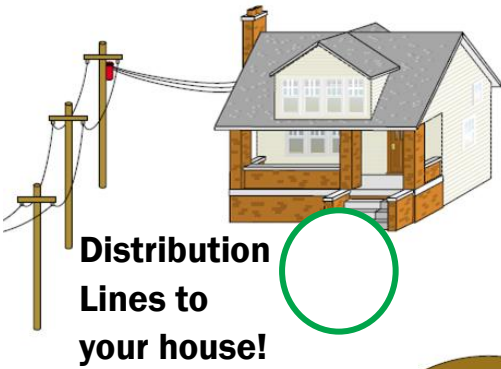
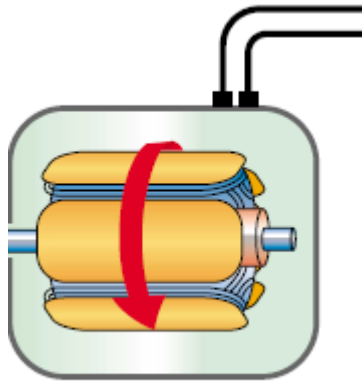
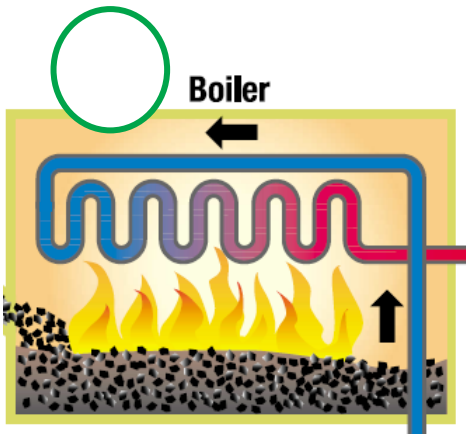
WIND

- This source uses water to turn turbines on rivers and dams
- Consumers Energy has 13 hydro power plants in Michigan

- This source uses wind to turn really tall turbines
- Michigan is the 14th windiest state in the country

ELECTRICITY GENERATION

How is electricity made? Put the pictures in the right order.





ENERGY CAREERS

Match the right career with the work they like to do.

Engineer

I like working on the computer and solving problems.

Customer Service Representative

I like writing and talking in front of groups of people.

Executive Communications

I like to design things, and I'm good at math.

Information Technology (IT)

I like to talk to people and help solve problems.

Electric Lineworker

I like to be outside, ride in vans, and help people.

Forestry

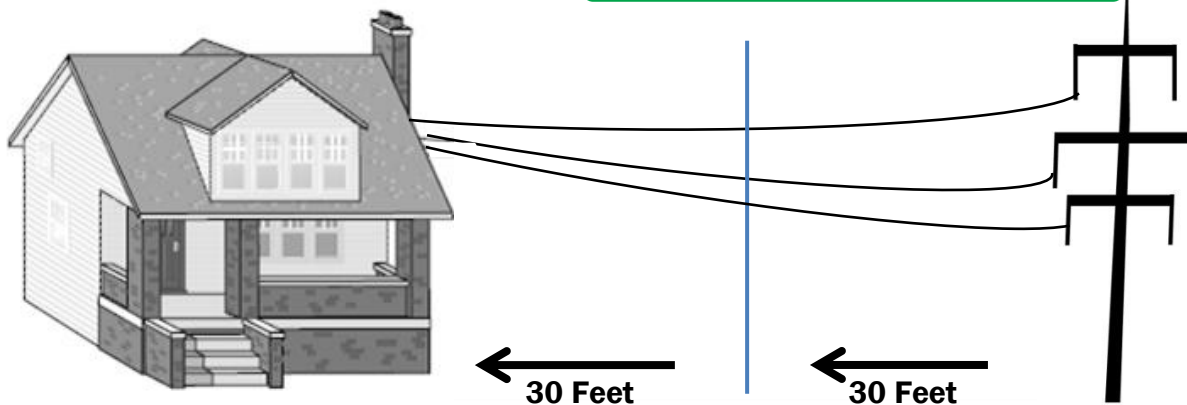
I like to walk, work independently and meet new people.

Natural Gas Worker

I like to work with trees and help the environment.

Meter Reader

I like to be outside, climb high and ride in trucks.



Forestry employees at Consumers Energy help to make sure trees are planted far enough away from power lines to be safe. **Draw the right size trees in the right places at this house.**