

## Michelle L. Mitchell Education Programs Lead



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





## **Supporting Education**

# 350,000+ students

Reached over the past 25 years with programs like EmPOWERed Kids and Respect the Flags.



## BINGO! Fill in your squares with these words

App

Generation Genius • Scouts

**Brain Eraser** 

Lesson Plans

Scratch & Sniff

Calendar

Natural gas

Stickers

Education

**Parents** 

**Students** 

**Electricity** 

Pencil

**Tablets** 

EmPOWERed Kids •

Power Up

Teachers

**Energy Unit** 

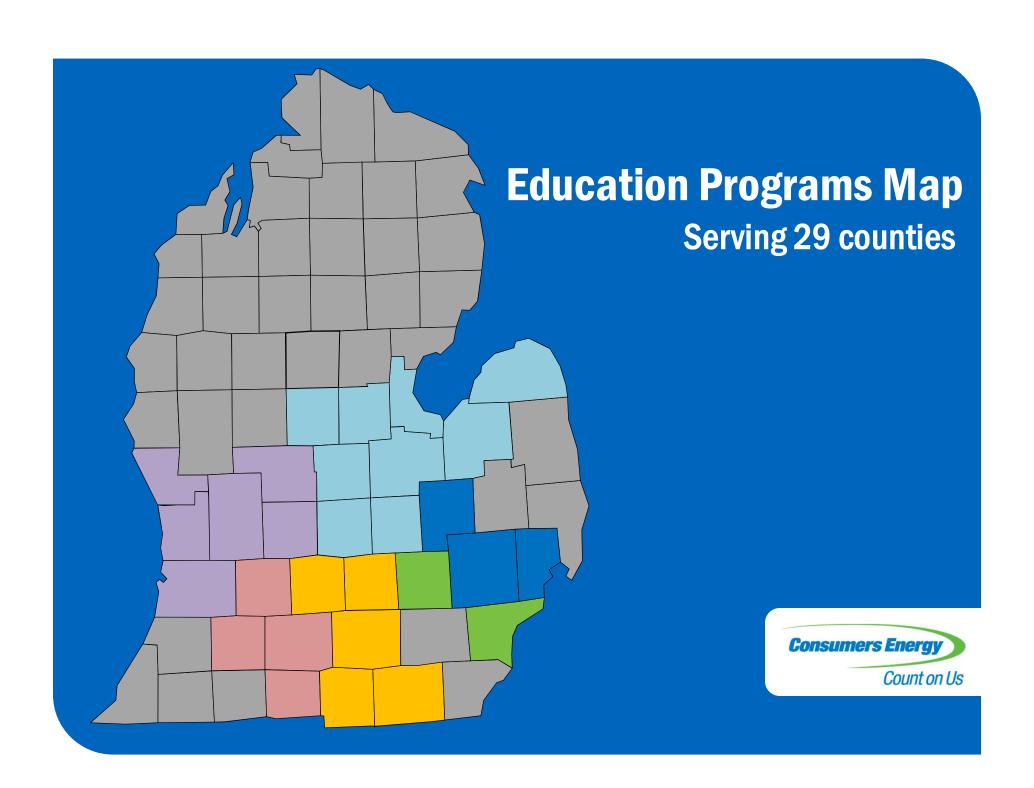
Respect the Flags • Teacher Guide

Games

Safety

Website





## Respect the Flags

- FREE natural gas safety presentation for 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> grades
- 45 minutes
- Students receive:
  - Pencils & Brain Erasers
  - Stickers
  - Scratch & Sniff Cards
  - Safety activity books







## **EmPOWERed Kids**

 FREE app for kids, K-6<sup>th</sup> grade, that includes presentations and games about electricity and natural gas, with a focus on safety

 45-60 minute long class presentations that provide students with an interactive experience through the use of child-friendly tablets

 Teachers and parents can also download the app on Android and Apple devices for classroom and personal use







## **CO** Presentation

- New in 2017
- Focuses on dangers of CO
- Talks about symptoms of CO poisoning & having a detector on each level of the home
- Safety message on how to react & report CO
- 15 minute long supplemental program or can be added to natural gas presentation







## Safety Presentation Request

 To request a safety presentation for a class visit our website:

#### www.consumersenergy.com/teachers

- Safety Education Section
- Select which program you are requesting
- Fill out form and submit
- Someone from the education team will contact you!

- Not available in your county? No problem!
- Teacher guides are available to do EmPOWERed Kids in your classroom!

## **EmPOWERed Kids™**

Teacher Guide

(NATURAL GAS 3-6)





## **Teacher Guides**

#### **TABLE OF CONTENTS**

4 Anticipatory Set

Procedures

- 5 Group Configurations
- 6 Home Versus School Mode Technology Buttons
- 7 Anticipation Guide
- 8 Introduction

  How Natural Gas Gets to Your Home
- The Flags Keep Us Safe
- Call 811 Before You Dig!You Can't See, Touch, or Taste Natural Gas
- 11 Things to Know about Natural Gas
- 12 What to Do When You Smell Gas
- 13 Closure
- 14 Natural Gas Games
- 15 Additional resources
- 16 Natural Gas Vocabulary





#### CALL 811 BEFORE YOU DIG!

[Click first icon on left with the garden]

Does anyone know how we get the flags in the ground to learn where the natural gas pipes are located?

(NEXT)

Let's say you wanted to plant a garden. You didn't have any flags in the ground and you wanted to make sure you were not digging right over a natural gas pipe.

(NEXT)

If someone breaks a gas pipe and there is an explosion, people could get seriously hurt or even die.

(NEXT)

Before you dig, make sure you call someone from MISS DIG by calling 811. It is a very special number!

(NEXT)

MISS DIG is the only company who can help you get the flags in your yard before you dig. Make sure you call three days ahead of your project.

(NEXT) (NEXT)

Know what's below. Call MISS DIG at 811!

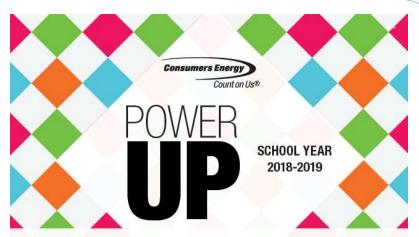
(NEXT)





## Safety Calendar & Power Up





#### **Host an Energy Education Program**



RESPECT THE FLAGS is a free 45-minute, inclass program for second, third and fourth grade

students. It is a hands-on and interactive presentation that teaches students about the colored flags used to mark underground pipes and wires, and how to recognize, react to and report a natural gas leak. Teachers may choose to add our NEW carbon monoxide safety overview to this session. See page 2 for more details.



EMPOWERED KIDS is a free 45- to 60-minute interactive program

interactive program designed to educate K-6 students about utilities and how

to be safe. The app-based program helps students learn to identify electrical and natural gas hazards at home, school and in their neighborhood. Download the app for free on the Google Play or Apple® App stores.



THINK! ENERGY is a free 60-minute, interactive presentation teaching the importance of renewable resources and environmental stewardship. Each student receives energy efficient items to install at home.

The programs are officially endorsed by the Michigan Department of Education and correlate with the Grade Level Content Expectations and Common Core State Standards, Visit Consumers Energy com/

kids or email education@cmsenergy.com to request a free presentation. We also offer home school self-study curriculum and a middle and high school energy unit under the lesson plans section.

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



## www.ConsumersEnergy.com/kids

#### Education ~

Welcome to Generation Genius, the place for resources about electricity and natural gas. Find lesson plans, games and more to power your education.





TEACHERS





#### Genius Always Starts with a Question

At Consumers Energy, we believe there's a little genius inside all of us. Genius needs nurturing, at home and in the classroom. We can help. We have been engineering new ways to produce and deliver energy for 130 years.

Like kids, the energy business never sits still. We are always curious, asking questions and digging for answers. We are on a never-ending quest to power Michigan smarter. We want to make our state even better for generations to come. We hope to inspire others to do the same.

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



## Students Page



#### **Energy Safety**

Energy is powerful, and it can be dangerous. Be smart. Learn how to be safe around energy.

#### Learn More



#### Sustainable Energy

Sustainable energy includes renewable resources like solar, wind and water. But that's only part of the story for us. We have big plans to make your future even brighter.

#### Learn More

Contact us at education@cmsenergy.com



#### Natural Gas

How does natural gas get from the ground to your kitchen stove? Learn all about the fuel that heats our homes.

#### Learn More



#### STEM Education

STEM stands for science, technology, engineering and math. STEM careers are in big demand and can lead to big things for you.

#### Learn More



#### Electricity

What's the magic behind the outlet? Where does electricity come from? We have power plants around the state to make the electricity your family needs.

#### Learn More



#### **Energy Games**

Design a pipeline or a power path. Spot the hazards and be a safety hero. Do this and more by playing our energy games online or in our app, EmPOWERed Kids™.

#### Learn More



## **Teachers Page**

#### Teachers v





#### Safety Education

Our team visits classrooms to help you teach kids how to be safe around electricity and natural gas. Schedule a presentation now.

Learn More

Contact us at education@cmsenergy.com



#### Think! Energy

Thinkl Energy is a free, interactive, hands-on presentation which teaches students about energy efficiency and sustainable energy.

Learn More



#### Lesson Plans

We work with a team of certified Michigan teachers to provide energy curriculum that your students will find interesting and fun.

Learn More





## **Lesson Plans for Teachers!**

#### **Lesson Plans**



#### Our Lesson Plans are Kid Tested and Teacher Approved

You and the State of Michigan both have high teaching standards. This is why we work directly with the experts to develop energy lesson plans. We employ state-certified teachers and work with energy experts on our team to craft lesson plans, so you can be confident they're on point and on track. You may inspire the next generation of STEM talent. At the very least, maybe they'll turn off the lights when they leave a room.

GRADES K-2	~
GRADES 3-5	~
GRADES 6-12	~
EMPOWERED KIDS	~



## High School/Middle School Unit

- Can be downloaded from website
- Multiple lessons on topics such as: Renewable & nonrenewable resources we use to make electricity, transmission, energy efficiency, energy conservation, energy careers, safety & more!
- Meets Common Core State
   Standards



Middle School & High School TEACHER GUIDE



## HS/MS Unit- Lesson Layout

- Materials and time needed
- Objectives covered
- Questions
- Introduction
- Activity
- Procedure
- Closing questions/discussions
- Glossary of terms and appendix in back

#### Lesson 3

#### The Power of Water and Hydroelectricity

#### **OBJECTIVES:**

- Discuss the ways humans have utilized water in the past and present.
- . Explain and draw a dam and the process of how electricity is made.
- Discuss the pros and cons of this renewable resource.

#### **ESSENTIAL QUESTION(S):**

. How does the power of water and hydroelectricity improve the quality of life?

#### MATERIALS NEEDED/TIME (TWO, 55 MINUTE CLASS PERIODS):

- Copies of Timeline Activity (found in Appendix C)
- Copies of Hydropower Experiment (found in Appendix D)
- Pencil
- Ruler/meter stick
- Crayons/colored pencils/markers
- Poster board
- · Map of Michigan
- · Access to internet
- Two days of instruction (typical 55 minute classes) \*\*dependent upon what you assign for homework and class work

#### INTRODUCTION TO HYDROPOWER:



## Parents Page

#### Parents ~





#### Why We're Involved

We're investing in school programs like FIRST Robotics to get kids interested in science, technology, engineering and math-skills that are in high demand.

Learn More

HOME SCHOOL MATERIALS



#### How to Get Involved

Are you looking for a great way to get involved in your child's education? Michigan FIRST Robotics has immediate openings for parents just like you.

Learn More



#### **Teachable Moments**

Want to raise your child's energy IQ? Motivate them to save energy? Here's your chance. We point out everyday opportunities that can help make your case.

Learn More

Contact us at education@cmsenergy.com



## Scouts Page

#### Scouts ~





#### **Girl Scouts**

We've been helping Girl Scouts earn the exclusive Energy Expert patch since 2006. From Daisies to Ambassadors, we have your energy activities ready to go.

Learn More

Contact us at education@cmsenergy.com



#### **Cub Scouts**

Want to be an energy expert and have the badge to prove it? We have a badge just for you.

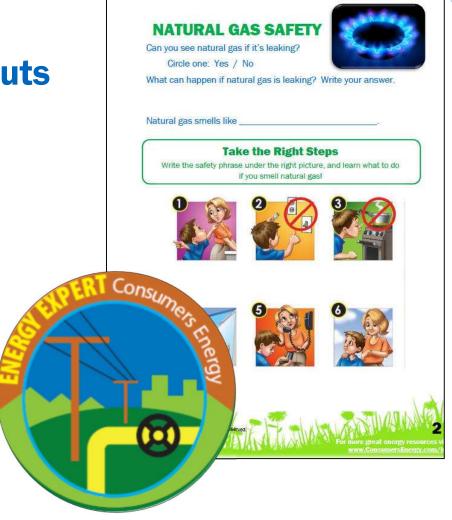
Learn More



## Scout Patch Program

# **Go To: ConsumersEnergy.com/scouts**

- Download your Scout workbook & Leader Guide.
- Complete the activities with your pack or troop.
- Order your FREE patch!



Our patch program has been so successful that starting June 1, 2014 we had to limit the program to Michigan residents to help curb demand



## **Events**

- 1. Energy Day
- 2. MSTA & MACUL



3. Professional Development Day





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



## Contact Us!

Michelle Mitchell- Saginaw
Michelle.Mitchell@cmsenergy.com
989-791-5960

**Website:** 

www.ConsumersEnergy.com/kids

**Email:** 

education@cmsenergy.com

