October activities

National Energy Awareness Month

Your School Uplift kickoff is a great time to tie in October's National Energy Awareness Month. Below are some suggested activities that focus on raising awareness of energy. (Don't forget, all activities are optional!)

Energy in action

Keep it fun! Help students find and identify all the ways energy is used every day in their lives at school, at home and everywhere they go!

EnergyRight® Monsters coloring sheets

Use the included EnergyRight® Monsters coloring sheets with your class. These resources help students learn about energy sources like nuclear, solar, natural gas, hydro, wind and coal.







Find your coloring sheets at the end of this section. Or to download and print them, visit energyright.com/business-industry/school-uplift/resources/.

Class Lightkeeper

This activity gives each student an opportunity to lead the class in turning off the lights when the classroom is empty. Depending on the size of your class, you can introduce a new Lightkeeper every week, every other week or once a month. Highlight the Lightkeeper with a poster showing their name and photo!



Find the "Official Class Lightkeeper certificate" at the end of this section. Or visit energyright.com/business-industry/school-uplift/resources/ to download and print it.

Outdoor scavenger hunt

This activity is designed to help students make the connection that energy is all around them. In this activity, challenge students to identify the different types of energy they see, feel, or hear during a walk through and around the school.

Teacher key

- 1. Give each student an Outdoor Scavenger Hunt sheet.
- 2. Help students identify types of energy as they walk through and around the school. Have students circle each type of energy they find.
 - **a. Kinetic (motion) energy:** Kinetic energy includes any object (even inanimate) that is in motion. As you walk, highlight objects in motion, like birds flying, cars moving or even students walking!
 - **b. Light energy:** Light energy is everywhere! Help students to notice the lighting systems inside the school. And don't forget about the sun outside!
 - **c. Heat energy:** Heat energy includes the sun, cars and even the human body anything that can transfer heat from one object to another is fair game!
 - **d. Electric energy:** The best example of electric energy outside the school building is power lines. Inside the school, look for electronic devices, mechanical equipment and lights.
 - **e. Sound energy:** Ask students to point out the things they hear, and help them make the connection that it's sound energy at work. Highlight cars driving past the school, birds chirping or people talking.
- 3. At the end of the scavenger hunt, ask students to share what types of energy they observed and circled on their Outdoor Scavenger Hunt sheet.
- 4. You can also use the handout as a coloring page.



Find your "Outdoor Scavenger Hunt sheet" at the end of this section. Or visit energyright.com/business-industry/school-uplift/resources/ to download and print it.

Local power company engagement

Your local power company (LPC) is a great resource for energy education and awareness materials. School Uplift is an opportunity for your LPC to connect with and educate its future customers. LPCs may provide their own ideas, show a video or give a presentation on the basics of how electricity is distributed and delivered within your service area. LPC-led education can be coordinated through your Energy Coach. They'll connect you with the right people for the activities listed below.

Ideas for LPC activities

- · Invite TVA or LPC employees to visit the school and share more about their jobs.
- Ask your LPC if it has an electric vehicle students could explore.
- See if your LPC can conduct an electricity safety demonstration.
- Invite your LPC to host a booth at an open house or parent-teacher conference.
- Take a field trip! Your school might be able to take advantage of proximity to
 energy-generation resources to help students become better acquainted with
 energy production. Field trip sites could include hydroelectric dams or solar farms.
 If you can't visit a hydroelectric dam in person, consider taking a virtual field trip
 using videos found on TVA's website at tva.com/kids/electricity/virtual-field-trips.

Celebrate Public Power Week

Held the first full week of October

Public Power Week is celebrated by the approximately 1,400 American Public Power Association member utilities in the U.S. to help customers better understand community-owned power and its benefits.

Public power is how your school, and most of the Valley, receives electricity. A focus on public power can help educate the school community on what public power is, its benefits and how it affects the school.

Celebrate Public Power Week by sharing resources from the American Public Power Association:

- Show this 90-second video during an assembly, a class or extracurricular discussion on energy. Find it at <u>youtu.be/Bz55GDIWL5U</u>.
- Print out these public power coloring sheets for students to use: publicpower.org/event/public-power-week#event-1.
- Learn more here: <u>publicpower.org/event/public-power-week</u>.

Additional resources

TVA has a ton of great resources available to K-12 schools. Don't miss our workshop for elementary-age students where we go over the basics of how energy is produced, how it's used and how it can be used wisely. This facilitated workshop is interactive and comes with take-home materials, including activity sheets, a memory game, sticker clings and more. Learn more about the workshop at energyright.com/residential/energy-monsters.



Check out all the available resources at tvastem.com.

TVA Kids offers online resources for schools, families and children to explore TVA's history, see how electricity is produced, take virtual field trips, learn about energy and the environment and much more. Learn more at tva.com/kids.

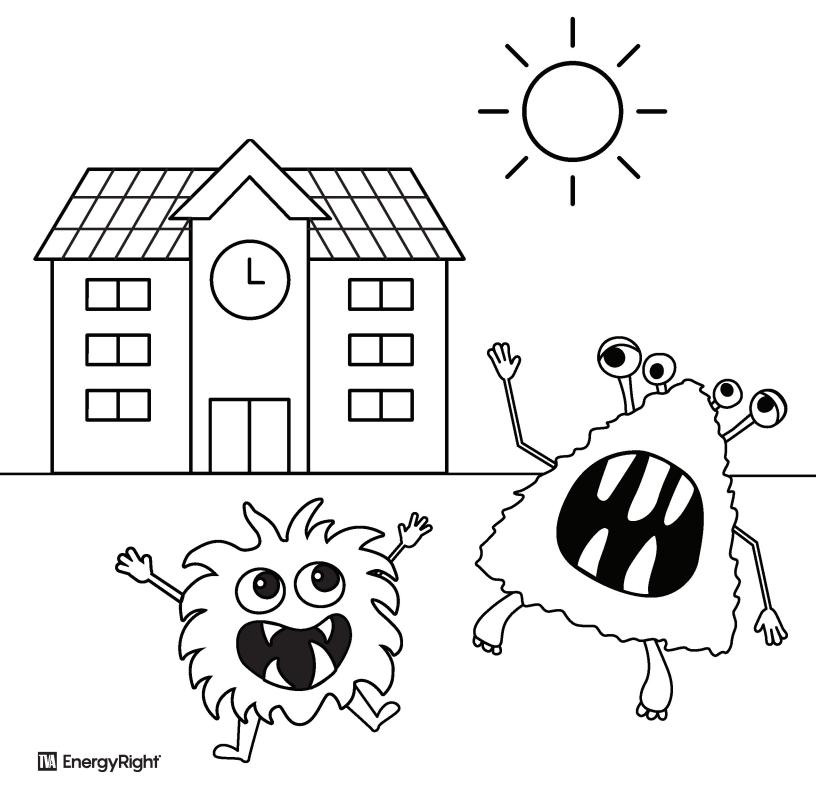
The U.S. Energy Information Administration offers a teacher guide with age-appropriate resources and activities. Learn more at eia.gov/kids/for-teachers/teacher-guide/.

The National Energy Education Development Project provides grade-appropriate activity books and games:

- K-2: issuu.com/theneedproject/docs/primaryinfobookactivities_7ec92aae6fd069.
- 3-5: <u>issuu.com/theneedproject/docs/elementary_energy_infobook_activities</u>.
- Energy Bingo: need.org/resources/energy-bingo-games/.

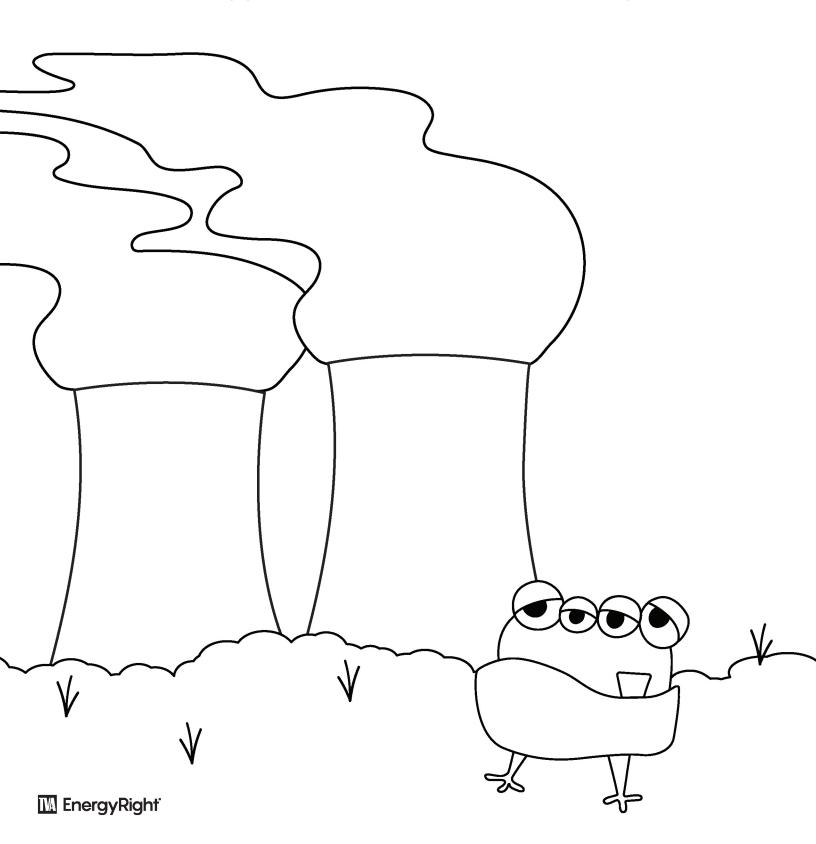
What is solar energy?

Solar energy comes from the sun! The sun's rays help keep the Earth warm and make it possible for plants to grow. Solar energy can even be collected in special panels and turned into electricity to heat homes and water!



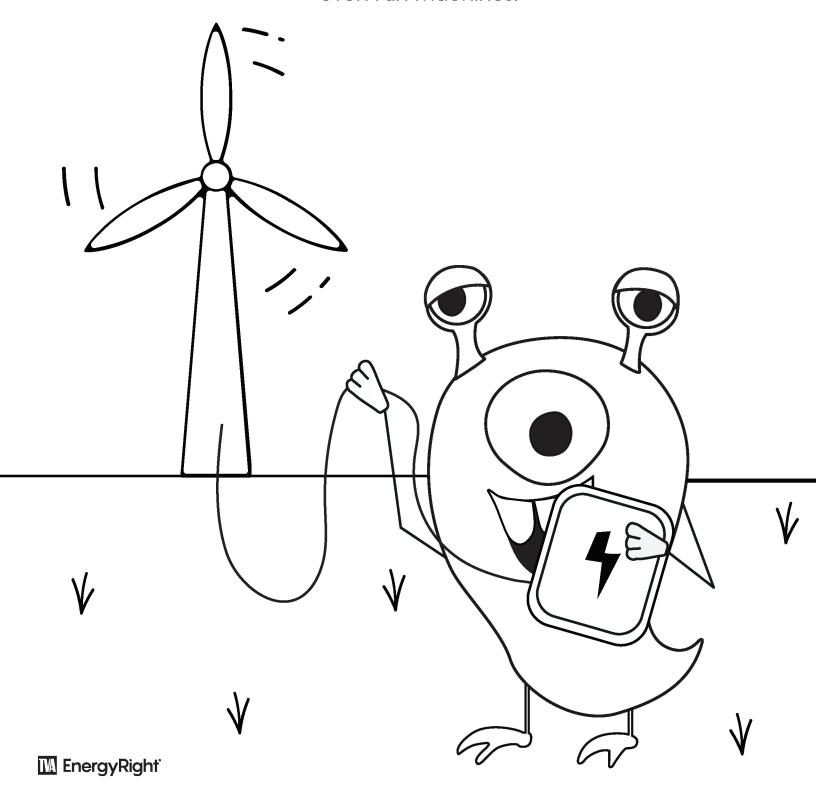
What is nuclear power?

Nuclear power is made when an atom is broken up into smaller atoms. This energy can be turned into electricity! Nuclear power is very powerful, so it has to be used carefully.



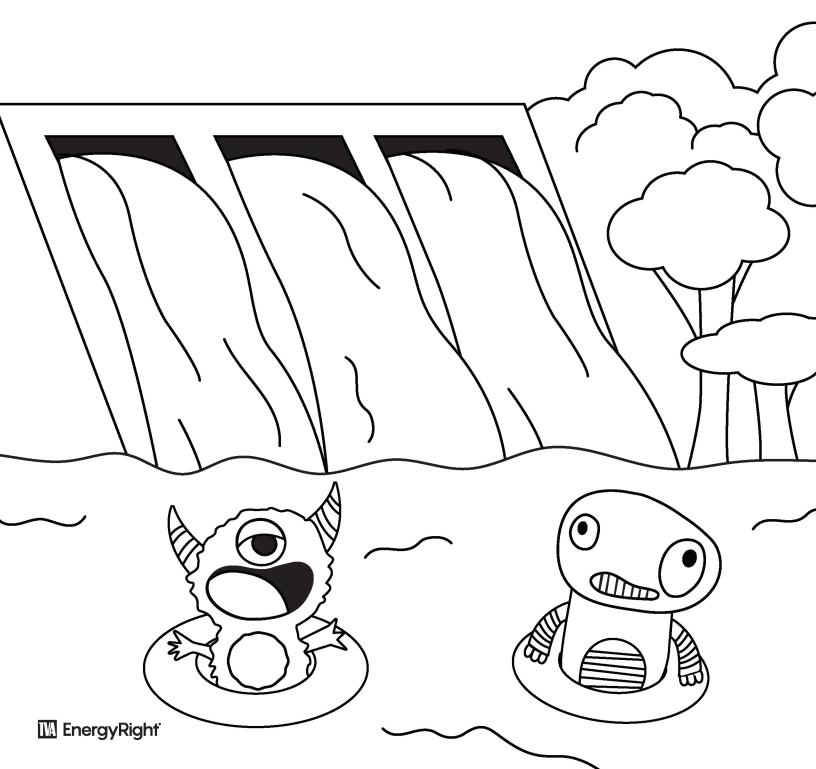
What is wind energy?

Wind can blow leaves around your yard or cool your face on a hot day. It can also make electricity! When giant wind turbines spin in the wind, they make energy that can be used to pump water and even run machines!



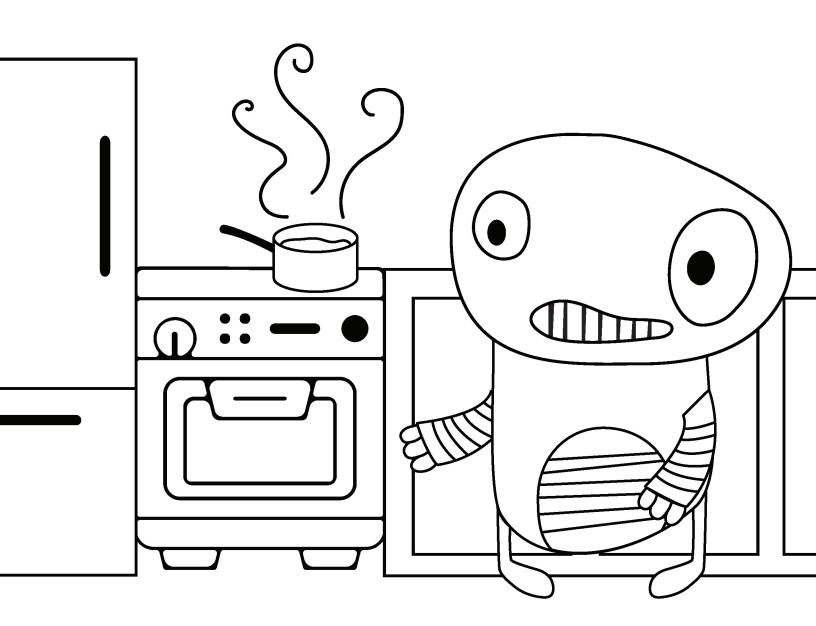
What is hydroelectricity?

Hydroelectricity is a fancy way of saying energy made by moving water! A dam blocks the flow of moving river water so that it can be collected in a giant reservoir. Then, when energy is needed to make electricity, the water is let go. The water pushes turbines that turn the water into power!



What is natural gas?

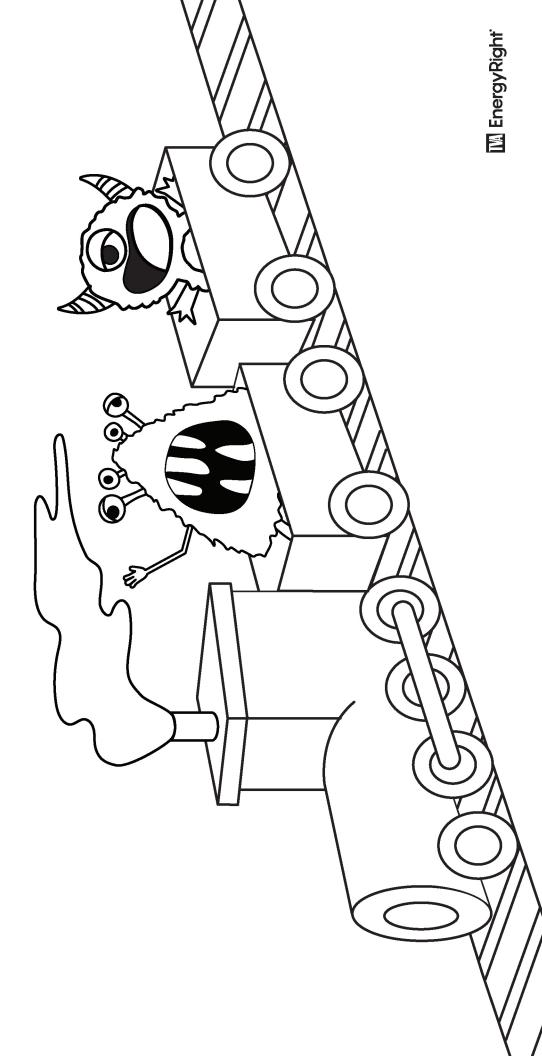
Natural gas takes millions of years to make! It's found deep in the ground. When natural gas burns, it can turn a generator that makes electricity. Some people have gas stoves and use natural gas to cook. Since natural gas is a nonrenewable resource and can run out, we have to be careful not to use too much.



What is coal?

electricity! Coal is a nonrenewable resource. That means it can run out, so we have Coal is a type of black rock that can be burned to heat water and make steam. The steam moves turbines that connect to a generator. The generator makes

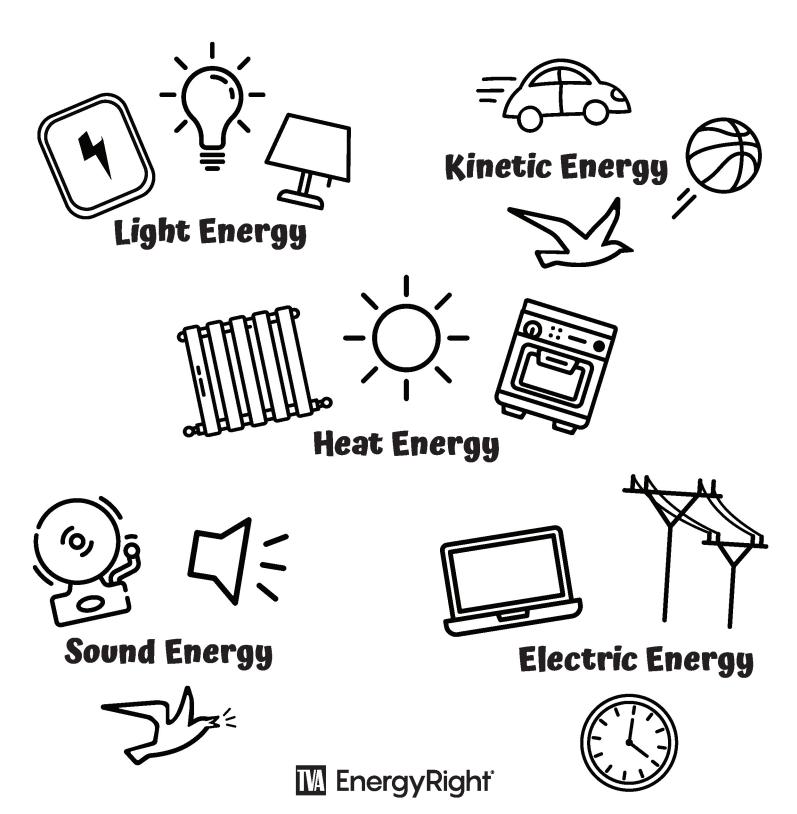
to be careful not to use too much.



Official Class Lightkeeper 's class This certificate shows that is the for **™** EnergyRight

Outdoor Scavenger Hunt

Energy is everywhere! Walk around your school, and look for how many different types of energy you can see, feel or hear. Circle what you find.



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National Energy Awareness Month

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Student social media campaign

We've put together some ideas for integrating student contributions into your school's existing social media platforms. We encourage you to let students craft these messages as part of an after-school club, a schoolwide contest or as an assignment in an English or communications class.

Pick a theme from the list below, and ask students to submit an image and caption for one or multiple posts. All posts should be published through your school's social media manager. Depending on the number of submissions, aim to share one or two posts per week to provide consistent content on your preferred social media platforms. When possible, give the student credit in the post.

Theme ideas for social media

- · Facts about energy in schools from the SEM for Schools Manual
- · Energy-saving tips students are learning through School Uplift
- Updates on monthly energy-saving activities
- · Monthly results from the Energy Dashboard
- · Students, staff or classrooms practicing energy-saving behaviors

Quick tip! Flip to the "Community Outreach Guide" for social and e-newsletter content you can copy and paste into your communication platforms.

Social media competition

Competition is a great way to engage students. Launch a video competition to get students excited and participating in energy-saving behaviors. Have students create videos for Instagram, YouTube, TikTok, etc., based on the month's energy theme. Each class or grade can vote on their favorite.

Encourage students to come up with their own ideas too. Here are some topics for students to brainstorm:

- · Energy efficiency tips
- · Energy superheroes
- Renewable energy sources and examples
- · Motivators for saving energy

Energy and art exhibition

Give students an opportunity to express their awareness and knowledge of energy through a student art exhibition. It could include photography, drawing, painting, woodworking, sculpting, recycled art, writing, poetry or graphic design — you name it! The only requirement is that the art piece be related to energy.

This activity can be done in a club, as a homework assignment or in an art class.

Student Sustainability Week

Choose a week to celebrate sustainability. Let students organize activities and events throughout the week that focus on sustainability. Student Sustainability Week can be implemented schoolwide, in the classroom or on a smaller basis, like in an afterschool club.

We recommend letting the students choose which events or activities to hold but have also provided some suggestions below!

Sustainability Show & Tell

- Hold a Show & Tell during which students can share the sustainable actions they
 take in their daily lives. They can show a picture, video or any related prop that
 goes with a sustainable action.
- Display students' pictures and videos on classroom or hallway TVs/monitors or bulletin boards.

Paperless Day

Go paperless! Choose a day where students only use scrap paper or paper from the recycling bin.

Vintage Day

It's like "pajama day," but instead of wearing PJs, students wear something vintage (maybe something from their parents' closet!) to highlight the importance of sustainable fashion. Talk about the environmental impact of fast fashion and the benefits of buying secondhand.

Movie Day

Show a sustainability, environmental or energy-related movie, miniseries or documentary during class. Check out:

- National Geographic: Renewable Energy 101 (available at <u>youtube.com</u>)
- National Geographic: Energy Conservation (available at <u>youtube.com</u>)
- Bill Nye: Energy (available at <u>billnye.com</u>)
- Bill Nye: Electricity (available at billnye.com)
- My Octopus Teacher (available at netflix.com)
- Just Eat It: A Food Waste Story (available at foodwastemovie.com)
- David Attenborough: A Life on Our Planet (available at netflix.com)
- Switch (available at switchon.org)
- The Boy Who Harnessed the Wind (available at netflix.com)
- National Geographic: Human Footprint (DVD available for purchase at amazon.com)
- U.S. Department of Energy: Energy Literacy Series (available at energy.gov)

Walk or Bike to School Day

Promote carbon reduction by encouraging students who live in the neighborhood to walk or bike to school once during the week.

Carpool Day

Promote carbon reduction by encouraging students to carpool to school during the week.

Local power company engagement

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