

GREAT ENERGY

ROCK PERFORMANCES

Use this activity to encourage student creativity while learning about energy.



GRADE LEVEL
3–12

SUBJECT AREAS
Science
Social Studies
Language Arts



Putting Energy into Education

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Teacher Advisory Board Vision Statement NEED Mission Statement

The mission of the NEED Project is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs.

In support of NEED, the national Teacher Advisory Board (TAB) is dedicated to developing and promoting standards-based energy curriculum and training.

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Correlations to National Science Content Standards

(Bolded standards are emphasized in the unit.)

PRIMARY (GRADES K-4) STANDARD–F: SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES

3. Types of Resources
 - a. Resources are things that we get from the living and nonliving environment to meet the needs and wants of a population.
 - b. Some resources are basic materials, such as air, water, and soil; some are produced from basic resources, such as food, fuel, and building materials; and some resources are nonmaterial, such as quiet places, beauty, security, and safety.
 - c. The supply of many resources is limited. If used, resources can be extended through recycling and decreased use.
4. Changes in Environments
 - b. **Changes in environments can be natural or influenced by humans. Some changes are good, some are bad, and some are neither good nor bad.**
 - c. **Pollution is a change in the environment that can influence the health, survival, or activities of organisms, including humans.**

INTERMEDIATE (GRADES 5-8) STANDARD–B: PHYSICAL SCIENCE

3. Transfer of Energy
 - a. Energy is a property of many substances and is associated with heat, light, electricity, mechanical motion, sound, nuclei, and the nature of a chemical.
 - b. Energy is transferred in many ways.
 - e. Electrical circuits provide a means of transferring electrical energy.
 - f. In most chemical and nuclear reactions, energy is transferred into or out of a system. Heat, light, mechanical motion, or electricity might all be involved in such transfers.
 - g. The sun is the major source of energy for changes on the earth's surface. The sun loses energy by emitting light. A tiny fraction of that light reaches earth, transferring energy from the sun to the earth. The sun's energy arrives as light with a range of wavelengths.

INTERMEDIATE–D: EARTH AND SPACE SCIENCE

1. Structure of the Earth System
 - a. The solid earth is layered with a lithosphere; hot, convecting mantle; and dense, metallic core.
 - b. Water, which covers the majority of the earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle.
3. Earth in the Solar System
 - a. Gravity governs the motion in the solar system. Gravity explains the phenomenon of the tides.
 - b. The sun is the major source of energy for phenomena on the earth's surface, such as growth of plants, winds, ocean currents, and the water cycle.

INTERMEDIATE–E: SCIENCE AND TECHNOLOGY

2. Understandings about Science and Technology
 - c. Technological solutions are temporary and have side effects. Technologies cost, carry risks, and have benefits.
 - d. Many different people in different cultures have made and continue to make contributions to science and technology.
 - f. Perfectly designed solutions do not exist. All technological solutions have trade-offs, such as safety, cost, efficiency, and appearance. Risk is part of living in a highly technological world. Reducing risk often results in new technology.

INTERMEDIATE–F: SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES

3. Natural Hazards
 - b. Human activities can induce hazards through resource acquisition, urban growth, land-use decisions, and waste disposal.

SECONDARY (GRADES 9-12) STANDARD–B: PHYSICAL SCIENCE

1. Structure of Atoms
 - f. Fission is the splitting of a large nucleus into smaller pieces.

SECONDARY–D: EARTH AND SPACE SCIENCE

1. Energy in the Earth System
 - a. Earth systems have internal and external sources of energy, both of which create heat. The sun is the major external source of energy. Two primary sources of internal energy are the decay of radioactive isotopes and the gravitational energy from the earth's original formation.
 - b. The outward transfer of earth's internal heat drives convection circulation in the mantle.
 - c. Heating of earth's surface and atmosphere by the sun drives convection within the atmosphere and oceans, producing winds and ocean currents.
 - d. Global climate is determined by energy transfer from the sun at and near the earth's surface.

SECONDARY–F: SCIENCE IN PERSONAL AND SOCIAL PERSPECTIVES

3. Natural Resources
 - a. Human populations use resources in the environment to maintain and improve their existence.
 - b. The earth does not have infinite resources; increasing human consumption places severe stress on the natural processes that renew some resources, and depletes those resources that cannot be renewed.
 - c. Humans use many natural systems as resources. Natural systems have the capacity to reuse waste but that capacity is limited. Natural systems can change to an extent that exceeds the limits of organisms to adapt naturally or humans to adapt technologically.
4. Environmental Quality
 - a. Natural ecosystems provide an array of basic processes that affect humans. Those processes include maintenance of the quality of the atmosphere, generation of soils, control of the hydrologic cycle, disposal of wastes, and recycling of nutrients. Humans are changing many of these basic processes, and the changes may be detrimental to humans.

Teacher Guide

BACKGROUND

Great Energy Rock Performances is an activity that can be adapted for use in grades 3-12. In this cooperative learning activity, student groups research energy sources, then write and perform their own energy songs, along with an introduction and interview. The students also create a persona for their vocal group by designing cover art and gathering props and costumes. During the performances, the teacher acts as host of the show and reads the interviews that the groups have prepared.

TIME

Three to five class periods. You can decrease the time required by designating assignments as homework or using the sample songs and interviews included in this booklet.

MATERIALS

- Sample **Geothermal Energy Rock Performance** sheet
- NEED's **Energy Infobooks** (or other information on energy topics)
- **Student Guide**
- Art supplies for cover art (posters, construction paper, etc.)

PROCEDURE

Step One—Preparation

This activity has been designed for use with NEED's **Energy Infobooks** (*which are included in your **NEED Membership Packet** or at www.need.org/guides.htm*). Make enough copies of the infosheets so that each student in the group has one copy, plus one **Student Guide** and **Sample Song** per student.

Step Two—Introduce Activity to Class

Introduce the activity to the class. Assign students to groups. This activity works well with four students per group.

Step Three—Conduct Sample Performance (Optional)

The **Student Guide** requires each group to go through the sample presentation on their own. You may, however, prefer to do this as a class activity. This may be an especially good idea if you have young students.

Step Four—Monitor Group Work

Once your students have begun their projects, your main tasks will be guiding students and checking their assignments. You will want to make sure students include important facts about their energy source in their songs and interviews.

Step Five—Energy Rock Performances

It's time for the group performances. You will be the host of the show. As host, you must coordinate student performances and interview the groups.

OPTIONAL ACTIVITY

Sample performances for all the energy sources are included in this booklet. You can assign one of the samples to each group of students instead of having them write their own.

Student Guide

WRITE AND PERFORM A SONG ABOUT AN ENERGY SOURCE.

ASSIGNMENTS

A ☆ by a set of instructions means there is an assignment that must be completed and then checked by your teacher. Write all of the assignments neatly, and check them for spelling, punctuation, and grammar. Here is a checklist of your assignments:

- List sample facts
- List your energy source facts
- Write a song
- Write an introduction
- Write an interview
- Design cover art

LET'S GO!

Step One—Read and Study the Sample Presentation

- Read the **Geothermal Energy Rock Performance** sheet as a group.
- Notice that the sample rock group has a name, a hit single, and an album. You'll create these for your group, too.
- The sample energy song uses a familiar song as a guide. The song is similar in rhyme and rhythm to the original version. The sample song also tells the audience important facts about geothermal energy.
- Look at the sample introduction and interview. They also tell important facts about geothermal energy in a creative way. During the interview, both the questions and the answers are used to give information about geothermal energy to the audience. *Your song and interview will need to convey important information about your energy source.*

Step Two—List Geothermal Energy Facts

- ☆ On a separate piece of paper, list all the facts about geothermal energy that you can find in the sample song and interview. Hand in your list to your teacher.

Step Three—Learn About Your Energy Source

- ☆ Working as a group, read your infosheet and underline the most important facts in each section. You will use these facts in your group's name, song, and interview. Try to find 10–20 facts and write them down on a piece of paper. Have your teacher check your list.

Step Four—Name That Group!

- ☆ Select a name for your rock group, using the information you have learned. Be clever, creative, and original! Let your teacher know your group name.

Step Five—Choose a Tune as a Guide for Your Song

Think about songs you can use as a guide. You don't have to use a rock song; you can use a rap song, folk tune, nursery rhyme, or theme from a television show or commercial. Take the first lines from a few songs and try to make up lyrics of your own. Pick the tune that is the easiest to use.

Step Six—Write That Tune!

- ☆ Using your list of facts, begin writing your group's song. Your energy song must tell at least five facts about your energy source. When you're finished, ask your teacher to check your song.

Step Seven—Write the Group Introduction

- ⊕ Your next task is to write a short, three to four sentence introduction that the host will read to the audience before your grand entrance. Your introduction should present several important facts about your energy source. Ask your teacher to check your introduction.

Step Eight—Write a Four-Question/Answer Interview

- ⊕ Working as a group, write four questions and answers for the interview. Keep in mind that both the questions and answers should say something about your energy source. If you need help, look at the sample interview or your group's list of facts. Ask your teacher to check your interview.

Step Nine—Design Cover Art

- ⊕ Using the name of your group and your hit single, brainstorm and discuss five cover designs. Choose the best one and make a sketch on a piece of paper. Write a short explanation that will tell your teacher why you chose this design. Then ask your teacher to check your sketch and written explanation.

After you have your teacher's approval, assign one member of your group to bring the sketch to life. Use a poster for your final cover art. The other members of the group can go on to the next step.

Step Ten—Props, Costumes, and Scenery

Now it's time to create a look for your group. Props, costumes, and simple scenery will help get your point across to your audience. For example, members of a solar group could wear yellow clothing and sunglasses. Brainstorm ideas for props and costumes. Once you've settled on a plan, assign various jobs to group members.

Step Eleven—Rehearse Again and Again and...

Rehearse your performance as many times as possible. Things to consider:

- Is the group loud enough so everyone can hear and understand the song?
- Are the costumes and props appropriate? Do they make sense?
- Are you enthusiastic in your delivery?
- Can you add dance steps or arm movements?
- Does everyone know his or her part? Do not read the lyrics during your performance!

The Final Step—Your Performance

The big day is here! Your group's performance is next. When it's your turn to perform, the host will introduce you using the introduction that your group wrote. You should display your album cover, name your hit song, and perform your song. After your performance, the host will ask you the interview questions that your group wrote. Have a great time!



GEO THERMAL

GREAT ENERGY ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: It's my pleasure to introduce the next energy band. Today in the U.S. they perform in many locations, mostly in western states. Let's give a big welcome to Bruce "Hot" Spring Steam and The Geysers, singing their new hit single "Volcano Inferno" from their latest album, "Molten Rock."

(Bruce "Hot" Spring Steam and The Geysers perform their song to the tune of "Clementine.")

ORIGINAL

In a canyon, in a cavern
Excavating for a mine
Dwelt a miner, 49-er
And his daughter, Clementine

Oh my darlin', oh my darlin'
Oh my darlin', Clementine
You are lost and gone forever
Dreadful sorry, Clementine

PARODY

Way down under in the Earth's core
Comes a power source for free
Heat to warm the rocks and water
Geothermal energy

Geysers, hot springs, and volcanoes
Are some features you can see
Non-polluting, self-renewing
Geothermal energy

From Hawaii up to Iceland
Geothermal wells are drilled
They are tapping the steam power
For the power plants we build

A few feet under-neath the surface
Temperatures don't ever change
Warm your winter, cool your summer
Geothermal heat exchange

INTERVIEW

Pauly Power: Bruce, I know you are on a world tour right now. Where are you having those concerts?

Bruce: Well Pauly, most of our concert halls are located near earthquakes and volcanoes. The "Ring of Fire" that follows the Pacific rim is our favorite location; however, we also perform in Africa and Europe.

Pauly Power: Where do you get your inspiration and energy for your songs?

Magma: From the radioactive decay of elements in our studios in the earth's core. Once the songs are written, we send them up through the cracks in the earth's crust.

Pauly Power: Just how hot is your music?

Steamy: Our really hot tunes reach 300 to 700 degrees Fahrenheit. When we turn up the steam, we really can generate a lot of power at those concerts.

Pauly Power: Is all your music that hot?

Geysers: No, we have cool, earthy music that people all over the country can pump right out of the ground into their houses. This music stays about 50 degrees year round and it's only a few feet underground. Pump it in your house - it cools your brow in the summer and warms your heart in the winter.

Pauly Power: Sounds like you're everywhere. How long do you think your band will stay together?

Core: Well, our contract is renewable and people love our clean, earthy sound. I think we'll be around for a long, long time, just pumping out those tunes.



BIOMASS

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band has been around for a long time, doing lots of different kinds of music. Though you might not recognize them by their formal name, their work will sound familiar. Let's give a warm welcome to Bernie and the Biomasters, singing their new hit single from their "Waste Heat" album, "Biomessage."

(Bernie and the Biomasters perform their song to the tune of "When The Saints Go Marching In").

ORIGINAL

Oh, when the saints go marching in
Oh, when the saints go marching in
How I want to be in that number
When the saints go marching in

PARODY

Waste-to-energy – it can't be beat
For making lots of hot steam heat
That is used to make electric power
To light up your darkest hour.

Oh, let your corn grow big and tall
And make it into ethanol.
It burns clean and it's renewable
We use it as an auto fuel.

The leaves that fall, the grass you mow
The skins of apple and potato
Can be composted - it's not too hard
To enrich your garden and your yard.

INTERVIEW

Pauly Power: Where do the members of your band come from?

Bernie: We come from all over the country—forests, dumps, even cornfields.

Pauly Power: Who generates most of your music?

Cornie: The woodwind section of our band is definitely the biggest.

Pauly Power: How does your band travel from concert to concert?

Fill: We always travel in a converted garbage truck. We use the trash to make some electric tunes, man!

Pauly Power: And what do you use for fuel?

Bernie: We just drive into the nearest cornfield and distill our own fuel—ethanol—for the truck.

Pauly Power: Where does your band get its enormous energy?

Sol: From the sun—we have lots of photosynthesis sessions for the band.



COAL

GREAT ENERGY ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: It's my pleasure to introduce our next energy band. This is the group that fueled the nation's industrial revolution. A group that's been producing one-third of its songs in underground studios and two-thirds of them in surface studios. Let's give a big welcome to Coal and the Gang singing their new hit single, "I've Been Working on the Railroad" from their latest album, "Coal Train."

(Coal and the Gang perform their song to the tune of "I've Been Working on the Railroad.")

ORIGINAL

I've been working on the railroad
All the livelong day
I've been working on the railroad
Just to pass the time away

Can't you hear the whistle blowing
Rise up so early in the morn
Can't you hear the whistle blowing
Dinah, blow your horn

PARODY

I've been working on the railroad
Moving coal all day
From the mine site to the power plant
Where coal's burned everyday

Coal to light the nation's buildings
Transported by trains
Coal to make electric power
From ancient plant remains

INTERVIEW

Pauly Power: That was great, guys. Step right over here and let me ask you a few questions. First of all, Digger, I know that Coal and the Gang is the third most popular energy group in the nation right now, just after petroleum and natural gas. Can you tell me who buys most of your energy albums?

Digger: Well, Pauly, about 90 percent of our albums are bought by electric power plants. They think we generate some really powerful tunes. We're popular overseas, too. Two percent of our tours are outside the United States.

Pauly Power: How do you answer your critics who say your energy music is dirty and pollutes the airwaves?

Shaft: That used to be true, Pauly, but we've really cleaned up our act in the last 15 years. Now we try to remove all the sulfur from our songs, before, during, and after our concerts. We've recently developed some new technologies in our studio to become an even cleaner energy band. Now even our old critics admit we're pretty clean.

Pauly Power: I know you guys are an all-American band. Can you tell me what states the members of the band come from?

Scrubber: We are from Wyoming, West Virginia, Kentucky, Pennsylvania, and Montana.

Pauly Power: One last question. You guys have been around for a long time now. How long do you think your popularity will last, considering you're a nonrenewable energy band?

Digger: If people continue buying our energy albums at the rate they do today, we'll be around for another 270 years.



HYDROPOWER

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band works a hydro dam site harder than any other band. They provide the world with 25 percent of its electric music and five-ten percent of the electric music in the United States. Let's hear it for Madam and the Spillways singing "Pumped up Hydro" from their new "Hydro Hymn" album.

(Madam and the Spillways performs its song to the tune of "Old MacDonald Had a Farm")

ORIGINAL

Old MacDonald had a farm
E-I-E-I-O
And on this farm he had a pig
E-I-E-I-O
With an oink, oink here
And an oink, oink there
Here an oink, there an oink
Everywhere an oink, oink
Old MacDonald had a pig
E-I-E-I-O

PARODY

Old MacRiver had a dam
H-Y-D-R-O
To give us cheap electric power
H-Y-D-R-O
With a reservoir
And turbine power
Water in, water out
Water turn it all about
Old MacRiver had a dam
H-Y-D-R-O

INTERVIEW

Pauly Power: Through how much of the world has your band toured?

Madam: More than 25 percent of the world has seen us perform.

Pauly Power: Why are your live concerts so unpopular with some local audiences?

Phillup: For us to set up the site to perform, we sometimes have to move highways, railroads, and even whole towns.

Pauly Power: Your concerts are well known for the power you put out; currently, I hear it's up to 90,000 megawatts. Is that your maximum output?

Jenny Rader: No, there are plans to put an additional 30,000 megawatts into our system.

Pauly Power: Why are the tickets to your concerts so cheap?

Ken Etic: First of all, the water we use to power our concerts is free, so we can pass the savings along to our fans. Also, our operating costs are low, and we use our concert sites longer than other bands.



NATURAL GAS

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band produces its albums here in the U.S., about one-quarter in their offshore studios. Their last hit album, “I Get It through the Pipeline” went gold by selling millions of cubic feet-albums. Their new album, “Pipeline Underground” will surely go platinum. Ladies and gentleman, it’s my pleasure to introduce 10,000 Methanics, singing their hit single “Home on My Range.”

(10,000 Methanics performs its song to the tune of “Are You Sleeping?”)

ORIGINAL

Are you sleeping?
Are you sleeping?
Brother John
Brother John
Morning bells are ringing
Morning bells are ringing
Ding dong ding
Ding dong ding

PARODY

Warm your winter	Drill to find me
Cook your dinner	Then pipeline me
Natural gas	Natural gas
Natural gas	Natural gas
I’m non-renewable	I can warm your shower
The cleanest fossil fuel	Make electric power
Natural gas	Natural gas
Natural gas	Natural gas

INTERVIEW

Pauly Power: Who are your biggest fans?

Wells: Listeners at home buy almost a fourth of our albums, but industries and utilities buy most of our music.

Pauly Power: Your band has been popular for a long time. Where did you get your start?

Piper: In 1821, we were playing in a real pit in Fredonia, New York, and it was there that William Hart discovered our talents.

Pauly Power: Most bands’ music is now sold in MP3s. Have you also given up making CDs?

Therm: We’ve done one better. We use a special way of recording called CFs—we sell our albums by the cubic foot. And for really large albums, we use MCFs, thousands of cubic feet.

Pauly Power: How are your CFs distributed to your fans?

Valve: We use 300,000 miles of pipelines to carry our CFs from the production sites directly to home, business, and industry fans.



PETROLEUM

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Ladies and gentlemen, our next band is real slick. They just finished a road tour doing the famous musical “Grease.” Let’s welcome Ethyl and the Pumps singing their new hit “Black Gold” from their new “Petrock-n-Rolleum” album.

(Ethyl and the Pumps perform their song to the tune of “The Addams Family.”)

ORIGINAL

They’re creepy and they’re kooky
Mysterious and spooky
They’re altogether ooky
The Addams Family

Their house is a museum
When people come to see ‘em
They really are a scre-am
The Addams Family

Doodly dee doo—neat
Doodly dee do—sweet
Doodly dee do, doodle de doo
Doodle de do—petite

Doodly dee doo—neat
Doodly dee do—sweet
Doodly dee do, doodle de doo
Doodle de do—petite

PARODY

I am a fossil fu-el
I’m non-renewab-uh-le
In cars, I really ru-le
Petroleum energy

You have to drill to find me
And then you must refine me
Ship me and pipeline me
Petroleum energy

Turn me into—gasoline
Turn me into—Vaseline
Turn me into, turn me into
Turn me into—kerosene

Turn me into—plastic
Turn me into—elastic
Turn me into, turn me into
So many things—I’m fantastic

INTERVIEW

Pauly Power: Your albums are made in 31 U.S. states. Which state produces the most?

Ethyl: Texas leads Alaska, California, and Louisiana.

Pauly Power: Your music doesn’t sound like that of other American bands. Why?

Derrick: We don’t just use American sources. We import about two-thirds of our music from other countries.

Pauly Power: Where was your first concert?

Riggs: Edwin Drake was the first fan to really dig us. He set up our first performance in Titusville, Pennsylvania, in 1859.

Pauly Power: Where are your fans when they listen to your Petrock-n-Rolleum?

Earl: Our fans really like to be on the move, so we have some awesome car tunes. In fact, two out of every three American fans listen to us in some sort of vehicle.



PROPANE

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: This next band is a relative newcomer to the energy music scene, but they're in great demand down on the farm and in backyards around the country. Let's hear it for Propanic, singing their hit single "Tanks for the Memories" from their new album, "High Compression."

(Propanic performs its song to the tune of "Yankee Doodle.")

ORIGINAL

Yankee Doodle went to town
Riding on a pony
Stuck a feather in his cap
And called it macaroni

Yankee Doodle keep it up
Yankee Doodle dandy
Mind the music and the step
And with the girls be handy

PARODY

Drill for propane underground
With oil and natural ga-as
Colorless and odorless
It cooks your food real fast

Put a little pressure on
And tanks will keep it handy
For farms and homes and industries
Propane's a real dandy

INTERVIEW

Pauly Power: You're relatively new on the music scene, aren't you?

Squeeze: Yes, we are. We were discovered in 1912, and, as you know, most energy bands have been around for a lot longer than that—some for thousands of years.

Pauly Power: I've heard that you guys perform well under pressure. Is that right?

Piper: That's exactly right. When we're under pressure, we've got a cool liquid sound and when we turn the heat up, we're a real gas.

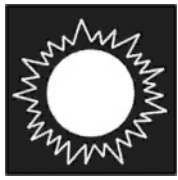
Pauly Power: Do you perform all over the country?

Farmer: Well, to tell the truth, we're really a country music band. Farmers like us. We do have a small but loyal following in town, too. We play a lot of small concerts in people's backyards, for barbecues and all.

Pauly Power: I hear parents really like you. Why is that?

Pro: Because we sing really clean lyrics, we don't pollute the airwaves very much.

Pauly Power: Tanks a lot, Propanic.



SOLAR

GREAT ENERGY ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band has provided the energy to help start the fossil fuel bands and most of the renewable bands. They traveled 93 million miles to be with us today. Let's hear a warm welcome for Fusion. They'll be singing their new hit single from their "Solar Collection" album, "Great Balls of Fire."

(Fusion performs its song to the tune of "Twinkle, Twinkle, Little Star.")

ORIGINAL

Twinkle, twinkle, little star
How I wonder what you are
Up above the world so high
Like a diamond in the sky
Twinkle, twinkle, little star
How I wonder what you are

PARODY

Sunshine, sunshine, shine on me
Give me your light energy
Heat my water, heat my home
Run my roadside telephone
Sunshine, shine on my PV
Make clean electricity.

INTERVIEW

Pauly Power: What makes your concerts so different from other bands'?

Sol: We are the only band that only plays during daylight. We do not work at night.

Pauly Power: Your fans are different from other fans. How is that?

Sunny: All our fans wear black when we play. They say it makes them absorb our message better.

Pauly Power: Since you only do daytime concerts, how do your fans who are night people get to enjoy your performances?

Ray Don: Our fans can store our hot tunes in sand, concrete, and water. That way they can enjoy our music at night.

Pauly Power: I know you guys do some concerts that are out in the wilderness. How do you power your electric amps and other equipment?

Ray Donna: We use photovoltaic cells to convert our energy directly into electricity.



URANIUM

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band has been very active on the radio lately. In fact you could call them radioactive. So before they split, let's welcome a band responsible for generating 20 percent of the nation's electric music. Ladies and gentlemen, Atom Ant and the U-235 singing the hit, "Split Goes the Atom" from their "Chain Reaction" album.

(Atom Ant and the U-235 perform their song to the tune of "Pop Goes the Weasel.")

ORIGINAL

All around the cobbler's bench
The monkey chased the weasel
The monkey thought t'was all in fun
Pop goes the weasel

I've no time to wait and sigh
No patience to wait til bye-n-bye
So kiss me quick, I'm off, good-bye
Pop goes the weasel

PARODY

Neutrons hit U-235
Inside a thick reactor
Heat to make electric power
Split goes the atom

The power plants make dangerous waste
It's so radioactive
It must be stored in a safe place
Split goes the atom

One hundred four nuclear power plants
Make power for the country
The power's cheap, the air is clean
Split goes the atom

INTERVIEW

Pauly Power: Where was your first concert?

Atom Ant: Our first gig was in Shippingport, Pennsylvania, in 1957.

Pauly Power: Your music videos don't stay long on the charts, but the "radio activity" for your songs keeps them hot for years. What about these old waste albums?

Rod: Well, all that "radio activity" makes them so hot that the only way to get our new stuff on the air is to isolate that old music and store it in a safe place.

Pauly Power: Why are your record albums so cheap?

Miller: First of all, we have the most concentrated music on our albums, and the fuel used to make them is very cheap, so we pass the savings on to our fans.

Pauly Power: Why is there so much opposition to your live local concerts?

Atom Ant: Well, there were some safety problems at one of our concerts in Pennsylvania. But since then we've really improved security at our concerts.

Rod: Many fans like us because we don't pollute the air waves.



WIND

GREAT ENERGY ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band just blew into town for this performance. Most of their electric concerts are performed in California during the summer when people need to hear their music the most. Let's hear a big Totally Energy Show welcome for Darrieus and the Wind Spinners, singing "Watts on the Wind" from their "Blade Power" album.

(Darrieus and the Wind Millers perform their song to the tune of "Oh! Susanna.")

ORIGINAL

Oh, I come from Alabama
With a banjo on my knee
I'm a-goin' to Louisiana
My true love for to see

Rained all night the day I left
The weather it was dry
Sun so hot I froze to death
Susanna, don't you cry

Oh! Susanna
Oh, don't you cry for me
For I come from Alabama
With my banjo on my knee

PARODY

The sun shines down to heat the lands
The oceans keep their cool
The hot air rises and expands
Let's use that wind as fuel

The wind blows down the mountain pass
And turns the turbine blades
No burning coal, or oil or gas
As electric power is made

Oh, wind power
You are the fuel for me
For three-fourths of every hour
You make electricity

INTERVIEW

Pauly Power: What gives your band the energy to perform day and night?

Darrieus: If it weren't for the sun heating the earth unevenly, we would not be turning out our music today.

Pauly Power: Where did the band get its first big break?

Milly: Our first big break came in Holland in the 17th century. We paid our dues, though. We really got put through the mill!

Pauly Power: I've heard your band isn't always reliable; that you don't always show up at performances. Tell me why.

Lolly: Well Pauly, that's true, we only perform about three-fourths of the time. And, even then, the energy we get from the wind isn't always strong enough so that we can be heard in the back row.

Pauly Power: I hear your concert halls take up a lot of space.

Gale: That's true. Just one of our wind turbines takes up an acre or two. And we usually have dozens of turbines on a wind farm. The good thing is you can plant crops around our wind turbines or graze cattle.



ELECTRICITY

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band is a blow-out. They follow a concert circuit that reaches almost every person in the country—in fact, they travel extensively worldwide. Let's hear a big welcome for Lightning and the Zappers, singing "Power to the People" from their "It's Electric!" album.

(Lightning and the Zappers perform their song to the tune of "Wheels on the Bus").

ORIGINAL

The wheels on the bus go
round and round
round and round
round and round
The wheels on the bus go
round and round
All through the town.

PARODY

The turbine blades spin round and round, round and round, round and round
A copper coil spins round and round inside a magnet.

Electrons in the coil flow round and round, round and round, round and round
Flow in a loop going round and round in a closed circuit.

Voltage in the wires steps up and down, up and down, up and down
Transformers step it up and down, from power plant to town.

The switches on the walls go up and down, up and down, up and down
Closed is up and open is down. The circuits in our town.

There's no power when the switch is down, switch is down, switch is down
Close the circuit and electrons go round, powering our town.

INTERVIEW

Pauly Power: What gives your band the energy to perform day and night all over the world?

Lightning: We go with the flow - the flow of electrons.

Pauly Power: How long has your band been on the concert circuit?

Jenny Rator: We've been around forever, but people really began to get turned on by us in the 1930s and 40s.

Pauly Power: I've heard your band is the most reliable on the circuit; you always show up at performances. Tell me why.

Reely Able: Well, Pauly, that's true, here in the U.S. we travel on a network that gets us to concerts over 99 percent of the time. In other countries, we have a harder time.

Pauly Power: Why do so many people like your concerts?

Lightning: Our songs have something for everybody. Our tickets are a bargain and our tunes have a powerful message.



CONSERVATION

GREAT ENERGY
ROCK PERFORMANCE

INTRODUCTION

(The scene is a band stage. The host of the show addresses the audience.)

Pauly Power: Our next band doesn't have a loud electric sound. They save energy by using only instruments that don't require electricity. Let's hear a big welcome for the Watt Watchers, singing "Wanton Wasters" from their "Radically Unplugged" album.

(The Watt Watchers perform their song to the tune of "Oh, dear! What Can the Matter Be?")

ORIGINAL

CHORUS:

Oh, dear! What can the matter be?
Oh, dear! What can the matter be?
Oh, dear! What can the matter be?
Johnny's so long at the fair.

VERSE:

He promised to bring me a basket of
posies
A garland of lilies, a wreath of red
rosies
A little straw hat to set off the blue
ribbons
That tie up my bonnie brown hair.

PARODY

CHORUS:

Oh, dear! What can the matter be? Six young kids got caught wasting energy.
They lost all their power from Monday to Friday and now they know why they should care!

VERSES:

The first young kid had a wasteful tradition of leaving his light in an upward position
His light burned out while he was fishin'. And now he knows why he should care.

The second kid was a real wasteful daughter who washed the dishes while runnin' the water
And later that night wished her bathtub was hotter. And now she knows why she should care.

The third young kid liked to walk with bare feet. Instead of warm socks, he turned up the heat.
The bill was so high, he had nothing to eat. And now he knows why he should care.

The fourth young kid was late as a rule. Quite often would miss the last bus for school.
Her mom had to drive her and ran out of fuel. And now she knows why she should care.

The fifth young kid wanted a snack. He opened the fridge—looked in front and in back.
He stood there so long, the food all turned black. And now he knows why he should care.

The sixth young kid often ran out to play, leaving her Play Station running all day.
Her dad finally took the whole system away. And now she knows why she should care.

INTERVIEW

Pauly Power: I hear you have a pretty quiet sound. Why is that?

Effy Censy: We're totally unplugged to save energy.

Pauly Power: It's said that all ages dig your sound. How do you explain that?

Connie Servation: Everyone can get into saving energy by listening to our tunes. Turn off all those power-eating machines and sing along with us.

Pauly Power: You recently changed labels, didn't you?

Effy Censy: We sure did. Now we're on the EnergyGuide label - our records will show you exactly how much energy you'll use.

Pauly Power: All your concerts are outside. Do your fans mind?

Connie Servation: Not a bit. If it's chilly, we pass out warm blankets. If it's hot, we pass out fans. No wasting energy on heating and cooling - you know heating and cooling use more energy than any other household task.

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