



# G.D. Goenka Public School, Patna

R.K. Puram, Khagaul road, Saguna More, Patna



## SUMMER VACATIONS ARE HERE!

Dear Children,

You must be excited at being promoted a class higher, after the sweat and toil of the exams and the prospect of the long awaited summer break!

Summer break! It's the time to enjoy and learn while you have fun! To add to your fun, we have put together an exciting assignment that will ensure that your creative self is motivated and happily occupied.



This summer, our theme is Innovation. Keep your creative juices flowing. Class 5 will learn about Renewable Energy - solar, hydro, wind, water waves, geothermal energy sources - which are the future.

While working on this holiday assignment do keep a few points in mind:

1. We do not want anything fancy or outsourced. We would love to see ' your' work and appreciate your efforts. Of course! You can take the assistance of an adult, but it's your original work that will fetch you kudos from your teachers.
2. Try to use waste material to do your assignment as we want to see' best out of waste'.
3. Use the unused side of used sheets or use leftover pages from your old note books.
4. Make a folder/ file using old newspapers/ shopping bags / waste paper.
5. Decorate your folder with pictures/colour / decorate/ paint to beautify your project. Make it attractive, but use only waste materials.
6. Divide your folder in sections, subject-wise.
7. Neat handwriting is an asset so practice writing a page in neat handwriting every day.

# ENGLISH

Children, solar energy is one of the cleanest, cheapest and a renewable source of energy. Let's learn more about this alternate source of energy on the websites given below :-

1. <http://www.kids.esdb.bg/solar.html>
2. <http://www.alliantenergykids.com/EnergyandTheEnvironment/RenewableEnergy/022400>

## SOLAR ENERGY

1. Compose a jingle from all the information that you have gathered about solar energy. Three of the best submissions will be selected and these students will get to perform these jingles on stage during the school assembly.

2. Write down the features of an electric car that runs on solar panels as well.

3. Circle the abstract noun in each sentence below.

1. I respected the honesty my friend showed.
2. Can you believe that woman's brilliance?
3. To my delight, everyone arrived on time.
4. She was in great despair when she lost her phone.
5. We have a lot of hope for the future.

4. Write a paragraph on any three topics given below. The word limit should not exceed more than 150 words.

1. I'd like to invent a machine that . . .
2. What my dreams feel like
3. What if I were the teacher?
4. Why I like/dislike playing team sports
5. Staying at a friend's house
6. A game that meant a lot to my childhood

**5.** Create a graphic vocabulary journal or a pictictionary with thirty new words from your English textbook (Raindrops). Prepare the journal using A4 coloured sheets. Then, write each new word in it and draw or paste a picture of it. Also write one synonym and antonym (if any) against it. You can take the help of thesaurus for this

**6.** Now that you have collected so much of information about solar energy, make a crossword with minimum 8 hints ( four across and four down)

# MATHS

SAVE THE POLAR, GO SOLAR



Dear Kids, it's Holiday Time .H U R R R A H H H !!

But Oops! Its Summer time also – Hot and Dry in Delhi! So you may be sitting, or playing or sleeping, with the AC on, or the fans, or the cooler, or all of them. Your rooms may be well-lit, with many lights working. Do you know that all these electrical gadgets consume a lot of energy and your parents have to pay a monthly bill. Do you know how much they pay?

So come let's try and understand.

Q 1) Make a pictorial representation of data using the following information :

- a) Electrical gadget
- b) 12 months
- c) No of units consumed in each month.

Key:  $\text{☞} = 100$  units

After making a pictograph answer the following questions.

- i. Total no of units consumed in the months of April, May, June( Summer season)
- ii. Total no of units consumed in the months of November, December and January(Winter)
- iii. Calculate the difference in the units consumed in the Summer and Winter season.
- iv. Find the total amount of money spent in a year on the electricity bills. Write its number name also.
- v. Total units consumed in a year. Rearrange the digits of this answer and make -
  - a) Greatest number
  - b) Smallest number



Q2. So dear children you must have realized that your parents are spending so much money on electricity. But do you know we all can reduce the bills greatly by using solar energy to run these gadgets. Undertake a survey and do the following:-

- a) List three electrical gadgets that can be run using solar energy.
- b) Mention the amount of units you can save (for each gadget) if it is replaced by solar energy.
- c) Now make a pictograph (approximate when using energy)
  - i. 12 months
  - ii. No of units for each month
- d) Key : ☞ = 100 units.
- e) What is the approximate amount of money you can save in :-
  - i. Summer season(April, May, June)
  - ii. Winter season(November, December, January)

Q 3. Write the table of 15 in ROMAN NUMERALS.

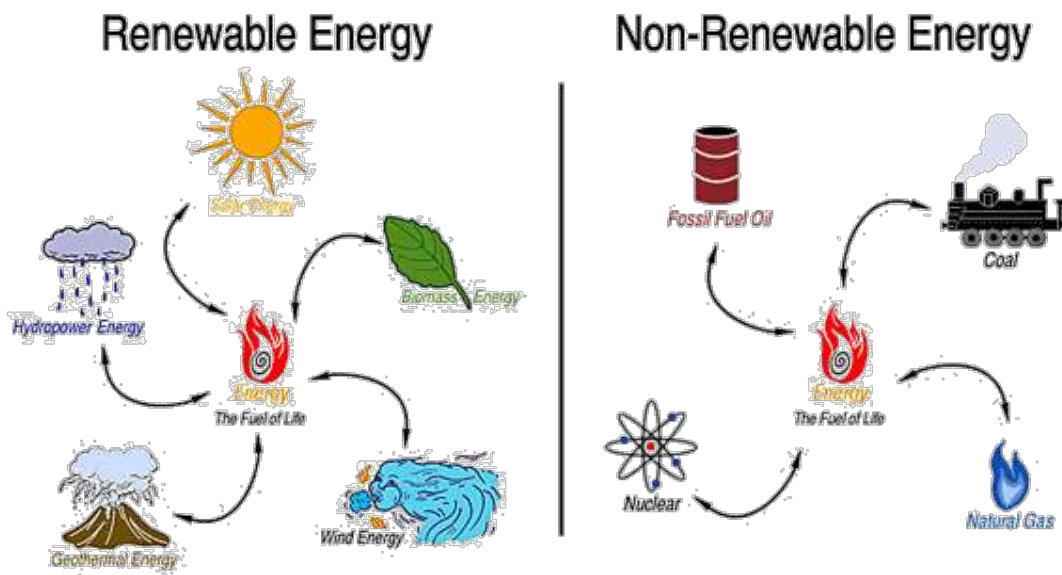




# EV3

## Innovations in Renewable Energy

- 1 Energy is defined as 'the ability to do work.'
- 1 Life on earth exists primarily due to Energy - Solar energy.
- 1 There are two types of energy - non-renewable and renewable.
  - a) Non renewable energy gets depleted, is not freely available, and causes pollution and global warming. (e.g. coal, petrol, diesel)
  - b) Renewable energy is a clean source of energy, is abundant and does not cause pollution.



- 1 Man has been innovating ways and means to better his life by harnessing energy from renewable sources - sunlight, wind, water, rain, tides, waves and geothermal heat.

Let us first learn about renewable energy by visiting some of these websites to gather information:-



य <http://www.eai.in/360/news/category/innovations> - 13 year old Indian boy designs a solar powered bike.

य [www.youtube.com](http://www.youtube.com) -

- 1) Renewable energy explained in 2  $\frac{1}{2}$  minutes - Dan Bliss Design
- 2) Safety Smart @ Science with Bill Nye
- 3) How to make a small Solar panel. - American Hacker.
- 4) A Model of Renewable Energy Science Projects - brainstorm ABC for kids.

Found it interesting? I'm sure you did.

Now do any **TWO** of these projects -

- 1) Write, in detail, about any 2 innovations you found interesting. Support your information with illustrations or pictures.

Tell us why these innovations fascinated you.



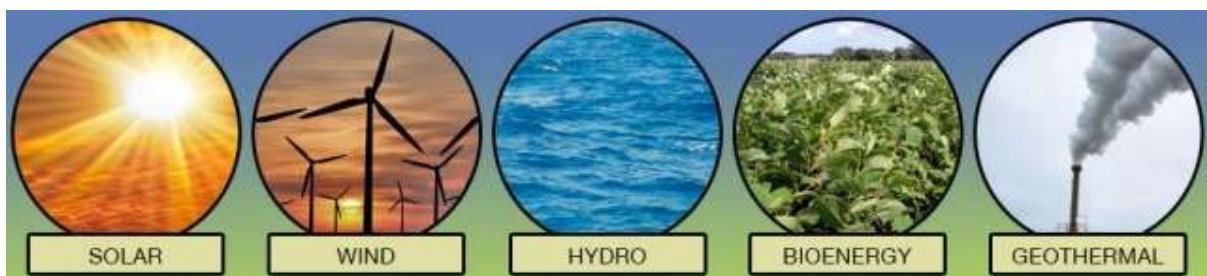
2) Make a simple (non working) model of one renewable energy source like -  
Solar cooker, solar lantern, Windmill, etc.

Support your project with a brief write up.

(Take help of an adult but please do not outsource it.)

3) Write about innovations that depict the efficient use of **Solar Energy** or  
**Wind energy** or **Water energy** anywhere in the world.

Support your information with pictures and a short writeup.



4) Make a PowerPoint presentation of not more than 8 slides, on 'Renewable sources of Energy' bringing out their importance and uses in today's world.





# HINDI

इस बढ़ती हुई दुनिया में, जहां ऊर्जा के पारंपरिक रूप तेजी से विलुप्त होने की ओर बढ़ रहे हैं, वैकल्पिक या अपरंपरागत ऊर्जा स्रोतों को नया बनाने की आवश्यकता अस्तित्व के लिए महत्वपूर्ण हो गई है ।

सौर ऊर्जा ,सूरज की रोशनी का बिजली रूपांतरण है।हमें अब सीधे या परोक्ष रूप से सौर ऊर्जा का उपयोग करना है ।

1 भारत में एक ऐसा गाँव है जहाँ सालों से बिजली नहीं थी, जिसने सौर ऊर्जा को पूर्ण रूप से अपनाया और अब खुशहाल बन चुका है ।

उस गाँव पर अपने शब्दों में एक रिपोर्ट तैयार करें ।

(रिपोर्ट 80-100 शब्दों, लगभग एक पृष्ठ की हो ।)

1 अपने घर में सौर ऊर्जा का प्रयोग कहाँ कहाँ किया जा सकता है ?कोई 5 प्रयोग ? बताते हुए एक सूची बनाएँ।

