

## **Third-Grade Winners**

**Krithi Sundar**

**Bullis Charter School**

What will happen if we don't have enough uranium to convert to nuclear energy? Aren't we already running out of coal and gas? What if we don't have enough water for hydroelectric energy any more? What will we do to run our electric cars, computers, TVs and X-ray machines?

What if there was a way to convert our kinetic energy into electricity? Kinetic energy is energy of motion or movement. My Kinadapters are little sensors placed in your homes, along the walls, under the floors in every room. The Kinadapter senses any physical motion like walking, running and also clapping. The kinetic energy is then captured, stored and converted into electricity, which we can use to power up our homes.

These sensors could also be placed outdoors, like on sidewalks and roads. This way, we can capture and store energy from people doing outdoor activities. We can use this energy to power traffic lights and street lamps.

Imagine it is Super Bowl Sunday. The risers are completely full. Not an empty seat in sight. Think about how much energy all the people moving about, cheering and clapping will generate with Kinadapters in the risers. There will also be Kinadapters in the arena where the football players are running and tackling. These will make enough electricity to power up the entire football stadium. The floodlights, the scoreboard, the giant TV monitors, the machines in the food stalls – they will all be powered with the Kinadapter.

When we are using Kinadapters, we are not wasting natural resources. We are

helping our planet if we are using the Kinadapter.

**Emily May Jones**

**Almond School**

Imagine one day opening the door to receive a parcel. When you open the box, instead of plastic bubble-wrap you find your fragile package has arrived safe and sound nestled in “Enviropaper.”

My idea is to invent a system for using leaves to make a paper-like material that I call “Enviropaper.” In my system, each house would have a bin for collecting leaves only. A truck would empty these bins every other week and take them to a center where they would be tipped into several huge plastic containers. Sprinklers would wash the leaves. The next step would be for them to be tipped into another container, where huge hammers would pound them into a mush. Water would be added to make a leaf pulp.

The pulp mixture would be passed through giant rollers to squeeze out the liquid. The sheets of leaf mix would be spread out to dry, eventually becoming sheets of paper. The “Enviropaper” would not be white but could be used in many ways, for example, as packaging material. Currently lots of plastic is used in mail-order parcels, and my new material could be used instead.

I will start a trial in a small place like Los Altos and if it works, I will expand to more cities and persuade a major company like Amazon to use my product.

I think “Enviropaper” is good for the environment for two reasons: First, because it reduces the amount of plastic we use. Plastic goes in the landfill or, worse, the sea. Another reason is because I think we should not destroy so many trees. This would help improve the quality of air that we breathe by providing more oxygen, because trees create oxygen by photosynthesis.

## **Sophia Nadine Jakel**

### **Almond School**

Have you ever heard of a bush house? I have invented a very eco-friendly play area. Trees do not need to be cut down to make bush houses. They entertain children and contain no chemicals to hurt their bodies or the environment. My design will provide a better and safe place for children to have fun in.

My invention uses pieces of broken fence, rocks, sticks, rope, flower petals, seashells, and other things found in the environment, also things in the garage that your parents do not need like old chairs, wood and old towels. Right now our world is cutting down trees and animals are losing their habitats and homes. By building bush houses, we can save many animals' homes and habitats.

Bush houses would entertain children by allowing them to play games like "Family," "Hideout," "Vampires" and other fun activities. They can use big rocks as seats. For something soft to sit on, the children can gather leaves and flower petals, which are already in their yards. The children do not need to spend any money to find leaves and flower petals. This is how we use recycling in our yards. Another idea for hand washing in our bush house is to rinse soap bottles, for example. Everybody has an empty hand-soap container at home. After filling it with water, children can put it into the bush house and rinse their hands clean – this prevents all the germs from spreading around in the bush house.

My invention was used on Feb. 2, 2014. Bush houses will make a positive difference for our neighborhood because it will be a fun activity for children who might be on their computer games. This will make them go outside in the fresh air so they don't ruin their eyes from the computer games. Bush houses are environmentally friendly and save people money, so children can have fun outside.