

Springboard^{into} Comprehension 4

Main Idea	Green All Around Religions
Sequencing	Leading the Field in Green Camp Cavendish
Compare and Contrast	Crying Wolf Sun Tales
Fact and Opinion	This Ad's for You What Really Happened?
Cause and Effect	Water and Food Programs around the World Inventions and Discoveries That Changed the World
Bias and Prejudice	Graffiti Diamonds Forever

RA 9.5–10.5



Green All Around



Written by Andrew Einspruch

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Contents

Going Green	2
Green Buildings	4
Energy Efficiency	6
Green Food	10
Organic Farming	14
Green Consuming	18
E-Waste	20
Green Business	22
Glossary and Index	24

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Going Green

These days, many people are “going green.” People are becoming aware of the impact they have on planet Earth. The more people there are, and the more they do, the more of Earth’s resources they consume. As a result, people are in a position to overwhelm the planet. Global warming and pollution are two examples of this.

However, people are not just the problem, they are also the solution. They can help the planet by making better choices. This is what “going green” is all about. “Green” covers a wide range of activities and ideas. At the heart of all of them, though, is planet Earth. Something is green if it helps the planet, or at least does not hurt it.

Earth gives people all the resources they need. People use Earth’s water, plants, and animals. They use wood for building and for keeping warm. They make plastic from oil, and glass from quartz sand. However, the way people use these resources can be wasteful or harmful to the planet.

Pollution and logging are harmful to the planet.

Nevertheless, people can also use resources in a less wasteful way. They can use natural resources for a long time with little effect on the planet. Green practices like this are sustainable because they do not use up resources. However, some resources are limited. People cannot make or replace them. That is why they are called **non-renewable resources**.

Some resources can be replenished by nature or people. These are called **renewable resources**. Earth is not likely to run out of sun or wind anytime soon. Light and heat from the sun, or **solar energy**, is a sustainable energy source. Wind power is another sustainable source.

Going green requires making decisions about what you do and how you do it. So, think about all the things you do. Then, make sustainable choices. If you do that, the future of the planet will look a lot brighter.

Tree-planting and wind-farming are ways in which people can help the planet.



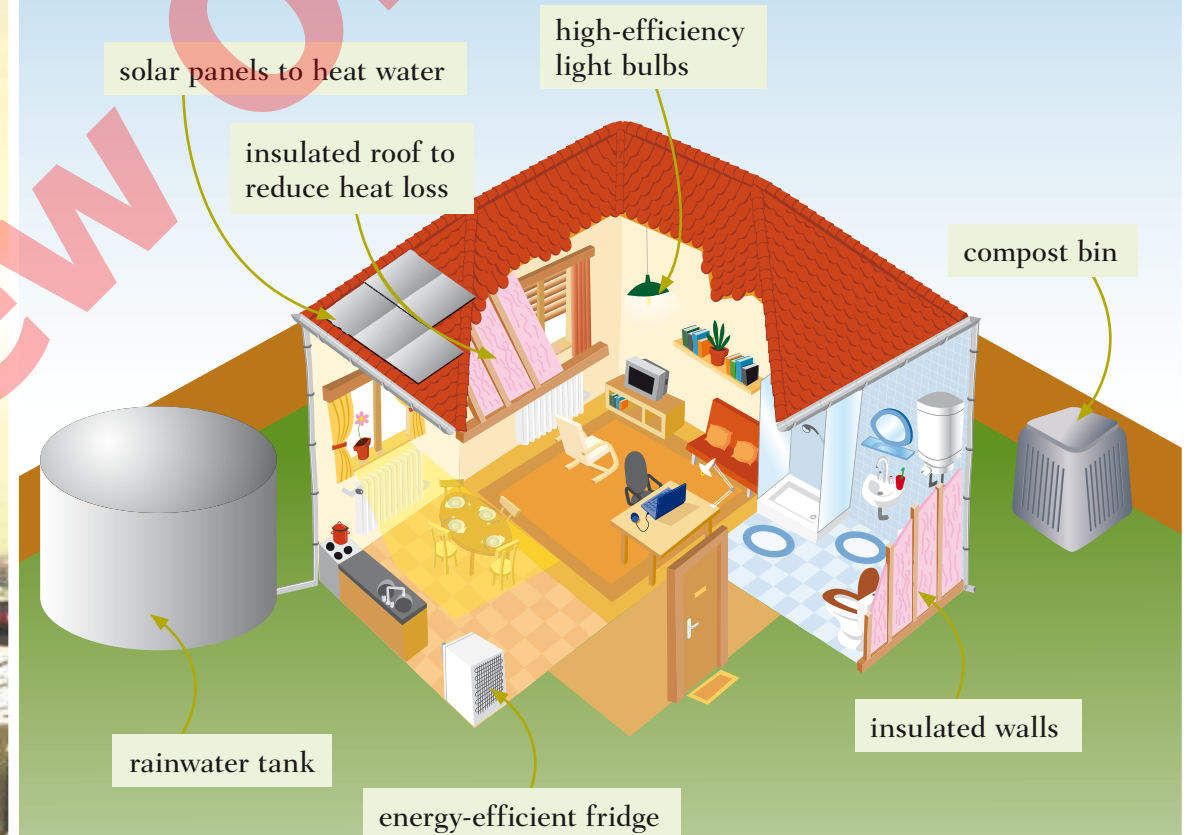
Green Buildings

Green buildings are important for the future. Look at any sprawling city. You can see people need more and more buildings. Unfortunately, buildings need a huge amount of resources. So, it is important that buildings are healthy for the planet and for the people who use them. Green buildings are made of sustainable materials. They also use energy efficiently. People build and furnish them to avoid pollution and wasted water and energy.

There are many things to consider in making green buildings. To make buildings environmentally friendly, people have to think about the climate, the surroundings, and the people who will use the building. Is it mainly a hot or cold climate? Which side of the building will face the sun? Will people use the building for work or for living in? Depending on the climate, some materials are better than others. They absorb more moisture or lose less heat.

Osaka, Japan is an example of a modern, sprawling city in which millions of people work and live.

A Green House



Energy Efficiency

Buildings need to be more energy efficient. They use up about 40 per cent of the energy people use. They cause about 40 per cent of carbon dioxide emissions, too. To reduce this, people have to design buildings that use less power.

In energy-efficient buildings, even the colour of the walls is important. Light colours reflect light and heat. This keeps buildings cooler. Dark colours absorb light and heat. That is why buildings should be darker in cooler climates. Painting the inside of the building a light colour means it needs less artificial light. Using natural light keeps the power bill down. New research also shows that natural light makes people happier and helps them work better.

Light colours are better for warm climates.



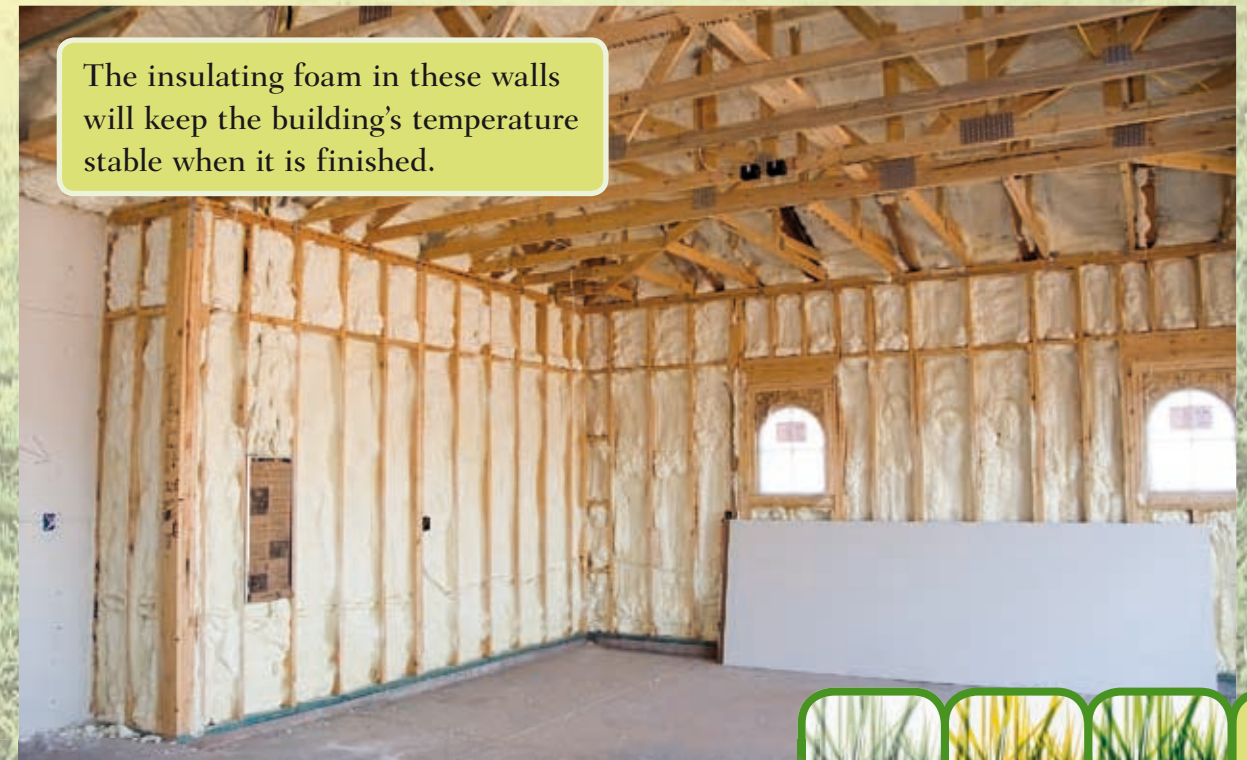
Dark colours are better for cool climates.



Much of the energy in a building goes to heating or cooling it. Air conditioners and heaters use a lot of energy to change the temperature inside the building. However, many buildings leak air badly, so a lot of energy is wasted when the heat or cold leaks out.

Insulation can stop the leaks. Insulating the walls and roof is like putting a wrapper around the building. Double-glazed windows and good frames can also reduce heat loss. Proper insulation means the building uses much less energy.

The insulating foam in these walls will keep the building's temperature stable when it is finished.



This building in Singapore needs many inefficient air conditioners to keep it cool inside.

