LEED-ing the Way

Location: RiverWalk Eco-Lab
Program Levels: Cadette, Senior, Ambassador

Objective: Girls will be introduced to the concepts behind sustainable or "green" building, and investigate the sustainable components of the Eco-Lab.

Activity Steps

1. Introduce the concept of sustainable or "green" building. Explain that green building practices aim to reduce the environmental impact of buildings. Have girls brainstorm ways this could be done. As needed, refocus the discussion using the suggested discussion questions. Pass around the included sustainable building materials for girls to look at.

2. Ask if anyone knows what LEED® stands for or if girls have heard of buildings being LEED® certified. If needed, explain that LEED stands for Leadership in Energy and Environmental Design. It was created to provide a set of universal standards that green buildings can be rated on. The opportunity to become LEED® certified is an incentive to encourage adoption of sustainable green building practices by creating a set of universal standards.

3. Now look around – you are in a sustainable building! Encourage girls to identify each sustainable component of the RiverWalk Eco-Lab. How does each component contribute to the building being "green"?

Materials Provided

- ☐ *"Green" Components of the Eco-Lab*
- ☐ Bamboo flooring samples
- ☐ Solar powered LED lamp
- ☐ Faucet aerator
- ☐ Cork panel

Extensions

On the Trail

Brainstorm ways to make sustainable changes at girls' homes, school(s), and/or your meeting place.

Beyond the Trail

Find out the requirements for LEED® certification by exploring the US Green Building Council's website at http://www.usgbc.org.

Are there any LEED® certified buildings in your area? If so, try to arrange to take a tour.

Discussion Questions

- **How does the choice of materials affect the sustainability of a building?**
    - Most building materials take a lot of energy to create, and once they are used, they are not easily replaced. One way to 'green' your building is to use recycled and/or salvaged materials and rapidly renewable products such as bamboo, cork, and straw.

- **Reducing energy use is important part of sustainable building. How might this be accomplished?**
    - One easy way to reduce energy use is to reduce the electricity used to light a building by maximizing natural lighting and using compact fluorescent light bulbs (CFLs) or LED lights (light emitting diodes) instead of traditional incandescent bulbs. CFLs use about 75% less energy than incandescent bulbs and last 10 times as long. LEDs use over 90% less energy than incandescent bulbs and last 100 times as long.
    - Another way to decrease energy use is by increasing a building's insulation to reduce heating and cooling costs. Have you ever noticed that a basement is cool in the summer and warm in the winter? That is because the surrounding earth naturally insulates it.

- **Sustainable building also focuses on reducing waste– what practices can help reduce waste?**
    - Most buildings waste a lot of water. Some sustainable buildings use rain barrels to recycle that water for irrigation or other uses. Rain gardens and green roofs can also reduce water waste and help stop flooding by absorbing storm runoff.
    - Remember that all toilets are not created equal! Some appliances are designed to use less water than others. You can find low water consumption toilets, washing machines, dishwashers, and more.
    - Sustainable building practices include decreasing waste during construction as well.

- **Can an existing building "go green" without expensive remodeling?**
    - Of course! Every little change helps to make a building more sustainable. Replacing incandescent bulbs with CFLs is one change that is easy to make and relatively inexpensive. You also can go green over a longer period of time. For example, chances are good that you may need a new washing machine or dishwasher in the next 5-10 years. When you pick it out, get one that uses less water than your old one.