

### **Create Plant-Based Solutions**

The community needs your help! Consider each issue, then suggest plant-based solutions. Explain your choices on a separate sheet.



Choose one or more plant-based solutions

a) URBAN GARDENING Grow fresh and nutritious fruits and vegetables locally in urban centers using sustainable practices.

**b) NEW PLANTING** Plant a variety of diverse trees, shrubs, and flowers to break up sprawling lawns, provide windbreaks, and increase biodiversity.

**c) MEDIAN PLANTING** Add shrubs, grasses, small trees, and flowers to medians on the roadways to diminish traffic sounds as well as pollution.

d) GREENHOUSE GARDENING Extend the growing season for fruits and vegetables by

growing in greenhouses and other climatecontrolled environments (such as hydroponics).

e) RAIN GARDEN PLANTING Plant shrubs, trees, and grasses to absorb rain and slow down soil runoff. Rain gardens are great for reducing flooding and erosion.

**f) TREE PLANTING** Plant trees. Their canopies block wind, slow heavy rain, provide habitat and shelter for wildlife, and offer shade. Their roots protect against erosion. Trees improve air quality and reduce noise pollution.

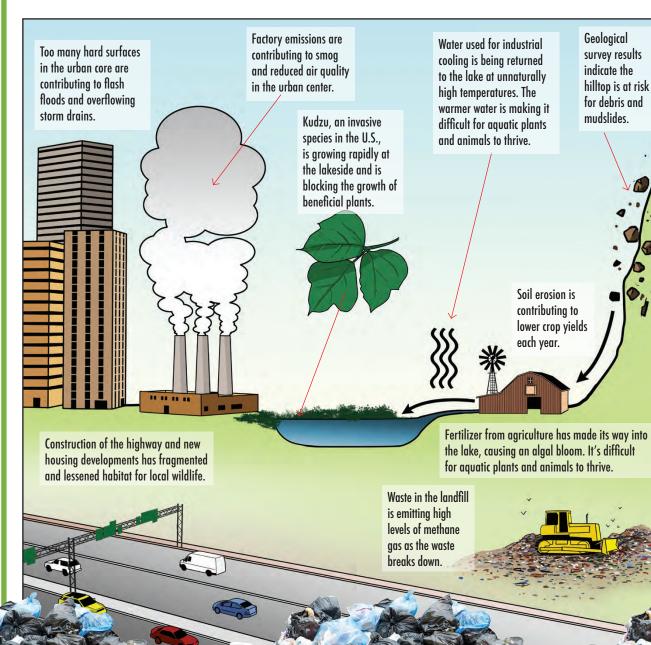
**RESEARCH YOUR REGION!** Choose a plant that grows well in your region and find out which climate and growing conditions it prefers. How could your plant create a solution in your community, school, or home?

# **Identify the Challenge**

Research the amazing power of plants to see how they can help address one of the community concerns below.

**Get Ready** Read about environmental risks below. Which do you feel are most concerning? Least concerning? Why?

**Get Set** Conduct research to see which of the below environmental risks is happening in your state. **Go!** On a separate sheet of paper, write one or two paragraphs about how people are addressing this risk. Which "green collar" plant professionals are developing solutions?



## **Planting Your Solution**

Uh-oh! You have identified an eco-challenge in your community. Draw a plant-based solution to address the challenge. Then explain how your solution will help. You can create a solution for one of the challenges below or identify a new challenge.

TOXIC DUMP		EROSION	AIR POLLUTION
Name the environmen	SINGLE CROP	escribe how your pla	ant-based solution

#### Name

# **Map Your Community's Challenges**

You've been selected to develop a plant-based solution for a space in your community. Start by identifying the eco-challenges in your neighborhood.

**Get Ready** Review the community considerations below. Which challenges exist in your community? What other environmental challenges does your community face? **Get Set** Sketch an overhead view of your community's environmental challenges. Label each challenge. **Go!** Write a few short paragraphs describing the impacts that the environmental challenges you've identified have on your community. Which "green collar" plant professionals would you enlist to help address these challenges?

Community Considerations	Draw Your Environmental Challenges
Are there places for people to grow fruits and vegetables?	
Are there areas where the soil is eroding?	
Is there enough shade for people and small animals?	
Is the water clean and healthy for wildlife?	
Are there patchy spots of grass in yards and parks?	
Are there plants that help clean pollution from the air?	
Are there spaces that attract pollinators, birds, and wildlife?	~
en Halle Augustation Salex Nexa Halle Aug	101.444 Salars DIS Halle AURICALESSANTAN 1044 A.16