

Lesson 1

Watering Plants Wisely

Learning Objectives

By the end of this lesson, students will be able to:

1. Understand the importance of using clean water for watering edible plants.
2. Identify appropriate sources of water for different types of plants.
3. Recognize the potential risks associated with using untreated water on plants we plan to eat like fruits and vegetables.
4. Demonstrate knowledge of safe gardening practices related to water use.

Materials Needed

- Visual aids (posters or slides) showing different water sources (tap water, rainwater, greywater)
- Samples or images of edible and non-edible plants
- Clear containers with labels: "Clean Water," "Rainwater," "Greywater"
- "Watering Plants Wisely" Student Worksheet
- Access to a garden or potted plants for demonstration (optional)

Lesson Activities

1. Introduction (10 minutes)

- **Discussion Starter:** Imagine you're a tiny seed in the soil. What kind of water would you want to drink to grow big and strong? Where might that water come from?
- **Visual Aid:** Show images of different water sources.(e.g. Rain, watering can, garden hose, etc.)
- **Key Point:** Emphasize that not all water is the same, and the type of water used can affect plant health and people's safety.



Lesson 1

Watering Plants Wisely

2. Understanding Water Sources (15 minutes)

- **Clean Water:** Explain that clean, safe water is free from harmful germs and chemicals. It's essential for watering plants we eat like fruits and vegetables which we sometimes call “edible plants”
- **Rainwater:** Discuss how rainwater can be collected and used for watering plants we don't eat like flowers and grass which we sometimes call “non-edible plants”. Stress that rainwater shouldn't be used for edible plants unless properly treated.
- **Greywater:** Define greywater as water that has already been used, such as leftover water from sinks and showers. It's generally not safe for edible plants because it may contain contaminants which are tiny bits of dirt, or germs that can make people sick if they get on food.

3. Activity: Matching Game (10 minutes)

- **Instructions:** Provide students with images or names of different plants and water sources. Have them match edible plants with clean water and non-edible plants with rainwater or greywater.
- **Discussion:** Review the matches as a class, discussing why certain water sources are appropriate or not for specific plants.

4. Demonstration (Optional, 10 minutes)

- **Setup:** If available, demonstrate watering or spraying a potted plant with clean water and one with water mixed with a small amount of safe, visible powder (like beetroot) to represent rain or greywater.
- **Observation:** Show how the “dirty” water leaves behind little spots on the plant. Explain that this shows how germs can stick to fruits and veggies. Talk about why using clean water helps keep the food safe to eat.



Lesson 1

Watering Plants Wisely

5. Conclusion and Review (5 minutes)

- **Recap:** Summarize the key points learned about water sources and plant types.
- **Q&A:** Allow students to ask questions and clarify any doubts.

Assessment

- **Worksheet:** Students complete a worksheet where they identify appropriate water sources for various plants.
- **Discussion Participation:** Evaluate students based on their engagement and understanding during discussions.

Lesson References & Resources

- [USDA Water Quality Information](#)



Lesson 1

Watering Plants Wisely

Lesson Modifications for Different Ages and Abilities

Younger Students

- **Simplify language:** Use pictures/icons with minimal text.
- **Use songs or chants** about “Clean Water for Food” to aid memory.
- **Hands-on sorting:** Give them physical cards to match plants and water sources.

Older Students

- Add **science vocabulary:** irrigation, contamination, water cycle, potable.
- Include **mini-lab activities** like water filtration or testing pH.
- Have them **research or present** local water safety issues in agriculture.

Students with Learning Differences

- Provide **visual supports** (charts, color-coded icons).
- Offer **sentence starters** or multiple-choice instead of open-ended writing.
- Use **peer pairing** or small group discussions for support.
- Incorporate **movement**, e.g., “Water Match Relay” using plant and water signs around the room.



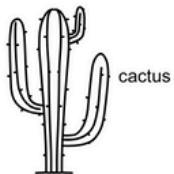
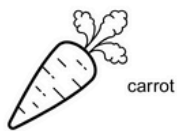
Watering Plants Wisely – Student Worksheet

Name: _____ Date: _____

Match the Plant to the Water

Draw a line from each plant to the kind of water it should get. Some plants have more than one water source that matches.

Plants:



Water Sources:



Circle the Correct Answer

We should always use clean water when watering vegetables and fruits.

A. True B. False

It's safe to use rainwater that hasn't been treated on plants we eat.

A. Yes B. No

Greywater is safe for watering all plants.

A. True B. False

Think and Draw!

Draw a picture of an edible plant (like a fruit or vegetable) and show what kind of water you would use to help it grow safely.

Bonus: Fill in the Blanks

Using clean water for edible plants keeps people _____.

We can reuse _____ water on flowers or trees.

Newsletter: "Watering Plants Wisely"

Dear Families,

This week in the garden, our students explored how the type of water we use affects both plant health and food safety. Students learned that edible plants like fruits and vegetables must be watered with clean, safe water to avoid contamination that can make people sick.

What We Learned:

Safe vs. Unsafe Water: Only clean, safe, water should be used for edible plants.

Why It Matters: Dirty or untreated water can carry harmful germs that contaminate food.

Try This at Home:

Water Check: Talk to your child about where your garden or yard water comes from. Is it safe for edible plants?

Sort It: Try sorting plants together. Which ones are edible? Which ones aren't?

Mini Science Experiment: Use clean water on one plant and collected rainwater on another (non-edible plant), then compare growth over time.

Career Spotlight:

Environmental Health Specialist

These professionals monitor things like water safety and quality in farms, cities, and schools. They help ensure crops are grown using safe practices and keep our food and environment safe.

Learn more at **USDA Career Profiles:**
www.fsis.usda.gov/careers/career-profiles

Learn More:

CDC Collecting Rainwater and Your Health:

www.cdc.gov/drinking-water/about/collecting-rainwater-and-your-health-an-overview.html

Safe Use of Rain Barrel Water:

www.uaex.uada.edu/yard-garden/vegetables/rain-barrel-watering-edible-plants.aspx

Thank you for reinforcing these important lessons at home!