



Rain Garden Siting and Design

How do you determine the best location to build a rain garden? What characteristics and features of a rain garden design are necessary to consider prior to building?

This module empowers students to think like environmental designers by choosing the right place to build a rain garden and constructing a plan that supports function, aesthetics, and sustainability. Students will use observation, soil testing, and design principles to create paper-based or on-site rain garden layouts using native plants.

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Science State Standards:

Activity 1:

- 3.1, 3.2, 3.5, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 6.2, 7.1, 7.2, 8.1, 8.2

Activity 2:

- 3.1, 3.2, 4.1, 4.2, 5.1, 5.2, 6.3, 6.5, 7.1, 7.2, 8.1, 8.2

Activity 3:

- 3.1, 3.5, 4.1, 4.2, 4.5, 5.1, 5.2, 5.5, 7.1, 7.2, 7.5, 8.2, PS. 5&6, ES.1

Teacher's Guide

Objective:

The goal of this module is to:

- Identify ideal locations for rain gardens
- Understanding how soil types influence a gardens shape, size, and plant selection
- Match plant needs to soil and water conditions
- Design a rain garden using native plants for specific zones
- Recognize visual, functional, and environmental factors affecting a rain garden
- Explain the causes and consequences of water pollution in urban areas, and distinguish point vs. non-point pollution through demos
- Introduce the concepts of watersheds, systems, and overflow risks
- Connect local geography (Fort Wayne) to national policies like the Clean Water Act
- Foster critical thinking about environmental responsibility

Page	Activity	Grade
8 - 9	Activity A - Map the Water	K - 12
10 - 12	Activity B - Soil Exploration	K - 12
13 - 14	Activity C - Designing your Rain Garden	K - 12

Vocabulary List

Rain Garden - A shallow, landscaped depression designed to capture and soak up stormwater runoff.

Runoff - Rainwater or melted snow that flows over hard surfaces like roofs and pavement instead of soaking into the ground.

Infiltration - The process of water soaking into the ground.

Erosion - The wearing away of soil by wind, water, or other natural forces.

Drainage - The natural or engineered movement of water across or through the soil.

Downspout - A pipe attached to a gutter that directs roof water to the ground.

Slope - An area of ground that is higher on one end than the other; used to guide water flow.

Low-lying area - A place on the landscape that sits lower than the surrounding area and collects water.

Bare Soil - Exposed soil without plants or mulch to protect it.

Native Plant - A plant that occurs naturally in a region, prior to development, and is well-adapted to its climate, soil, and wildlife.

Compacted Soil - Soil that is pressed together tightly, making it hard for water to soak in.

Organic Matter - Decomposed plant and animal material in soil that helps retain moisture and nutrients.

Soil Texture - The feel of soil, determined by the mix of sand, silt, and clay particles.

Sandy Soil - Soil made of large, gritty particles that drains quickly.

Clay Soil - Soil with very small particles that holds water and drains slowly.

Silty Soil - Soft, flour-like soil with medium drainage and smooth texture.

Percolation - The rate at which water drains through soil.

Soil Amendment - Materials like compost or sand added to improve soil structure and drainage.

Site Assessment - A process of observing and evaluating a specific area for its suitability for a rain garden.

Zone (Rain Garden) - Sections of a rain garden based on moisture level: center (wettest), middle (moist), and edge or berm (driest).

Berm - A raised border around part of the rain garden, often used to help contain and direct water.

Drainage Area - The total surface that contributes runoff to a specific point or location.

Aesthetics - The visual appeal or design style of a space.

Habitat - A place where animals or plants naturally live and grow.

Naturalized - A non-native plant that has established itself in a new environment and can reproduce and spread without human intervention

Invasive - A non-native plant that has been introduced to a new ecosystem, where it thrives and spreads aggressively, often to the detriment of native plants and overall ecosystem health.

Basin - A shallow depression or ring built around a plant's base to hold water and allow it to soak into the soil.

Introduction

Rain Garden Location

Designing a rain garden with native plants is a valuable process that improves water quality, prevents erosion, and enhances habitat for local wildlife. A well-placed rain garden also becomes a functional learning space—where students, teachers, and the community can observe nature and its connection to water.



Rain gardens are typically located in areas that receive runoff from hard surfaces like rooftops, downspouts, sidewalks, and parking lots. The goal is to keep rainwater close to where it falls, preventing it from picking up pollutants and carrying them into local rivers and streams. Unlike conventional landscaping, a rain garden captures stormwater and allows it to soak slowly into the ground, reducing flooding and protecting soil and water.

The best location for a rain garden is a low-lying area where water naturally drains or pools during a storm. Bare or eroded soil areas are often ideal, because planting a rain garden in these spots can help stabilize the soil and prevent further loss. Sloped ground also helps guide water toward the garden, allowing it to stay in the basin long enough to soak in. Many rain gardens are located near roof downspouts, where water can be redirected into the garden. This can be done using simple changes to gutters and drainage pipes. To avoid damage to buildings, a rain garden should be placed at least 10 feet away from structures or foundations.



Other practical considerations include avoiding high-traffic areas where people might walk through or damage the plants. Rain gardens should not block entrances or pathways and should not be installed near large trees, as their extensive root systems can interfere with water infiltration. The shape and size of a rain garden should blend naturally with the surrounding landscape. It should look intentional and fit the space both functionally and aesthetically.

Straight Down to the Soil

While location is important, soil type is one of the most important factors in determining how well a rain garden will function. The ability of soil to absorb and drain water affects both the garden's design and the kinds of plants that will grow successfully.

Sandy soils, or soils high in organic matter, are ideal because they drain quickly and absorb large amounts of water. These types of soil are well-suited for deeper, more compact rain gardens, as they allow rainwater to filter quickly through the layers of soil and root systems.



However, many areas of Northeastern Indiana are dominated by clay soils. Clay contains tiny particles that are easily compacted and tend to drain very slowly, which can cause water to pool for too long. When clay soils are present, rain gardens may need to be wider and shallower to provide enough surface area for the water to soak in. In some cases, the soil may need to be amended (improved) with compost or sand to increase drainage. If the soil remains compacted or poorly draining, a different location may be more appropriate.

Soil texture can be determined using simple field techniques that don't require expensive equipment. For example, the feel test helps identify the relative amounts of sand, silt, and clay in a soil sample. Sandy soil feels gritty and doesn't stick together when squeezed. Silt feels soft and flour-like, sticks together weakly, and breaks apart easily. Clay feels smooth when dry and sticky or satiny when wet, holding its shape well when compressed.

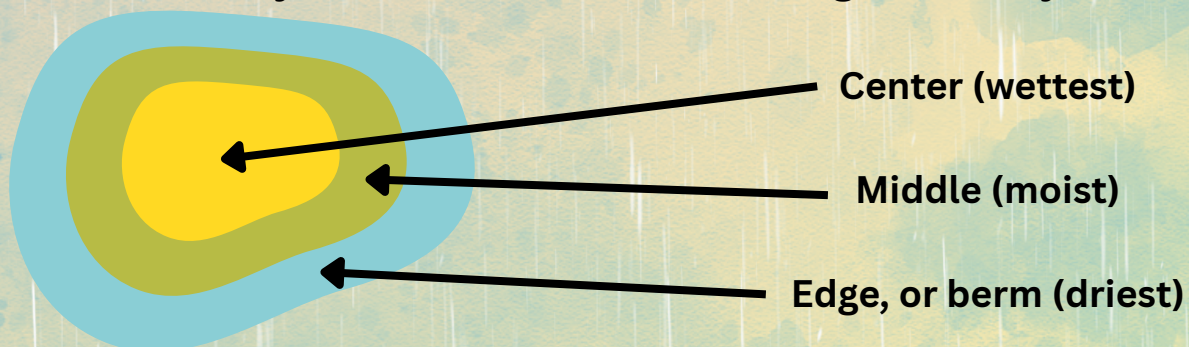


Understanding the soil's composition helps determine how fast water will soak in and which plants will thrive in each part of the rain garden. Choosing plants that match the soil and moisture conditions in different zones of the garden is key to creating a functional, healthy, and beautiful rain garden that lasts.

Designing the Garden

Rain gardens are thoughtfully designed for both function and beauty, not just random plants! One key feature in their construction is the use of a **berm**, which is a small raised barrier built on the downhill side of the garden. This helps contain stormwater runoff long enough for it to soak into the soil, instead of flowing quickly across the surface. A shallow basin is created by digging out the center of the garden so that water naturally flows toward it, while the berm holds the water in place.

The placement of plants is strategic. The center, where water collects most, is ideal for species that can tolerate excess water, such as marsh milkweed or cardinal flower. The edges, which drain faster, are better suited to plants that prefer drier conditions like little bluestem or aromatic aster. This ensures all plants thrive in their zones, and allows the rain garden to handle a variety of water conditions throughout the year.



Designing a rain garden also involves selecting a mix of grasses and flowering plants to promote biodiversity and ecological balance. Grasses like fox sedge stabilize soil and provide habitat, while colorful flowers like purple coneflower or Firewheel attract pollinators and add aesthetic appeal.

Model Site for Future Rain Garden



Activity A - Map the Water

Map the Water is designed to be completed using a schoolyard walk or by analyzing photos or a map of a real-world site. The purpose of this activity is to help students observe how rainwater moves across surfaces and identify where it collects. By tracing runoff paths and spotting low-lying areas, students learn how to determine the most effective and environmentally appropriate location for a rain garden.

Activity Time:

45 Minutes

Grade Level

K - 8

Objectives:

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

- Identify how water flows across a surface (photo or real space)
- Recognize low points where water collects
- Propose a rain garden location based on runoff patterns

Materials Needed:

- Printed photos or maps of schoolyard /nearby area
- Dry-erase markers (if laminated) or pencils
- Worksheets
- Clear overlay sheets (if re-usable surface is desired)
- Clipboards (for outdoor walk option)

Setup & Prep:





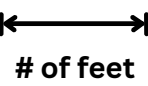
- Take or print overhead/site photos of school or practice location
- Label photos with compass rose, slope direction, and obvious features (e.g., buildings, sidewalks, drains)
- Print or laminate for re-use (optional)

Instructions:

- Begin with a class discussion: "Where does water go when it rains?"
- Have students observe the area in person or analyze a photo.
- On their worksheet or laminated copy, draw:
- Arrows to show where water flows
- Circles to mark where water collects (low spots)
- An "X" over areas that wouldn't work (like paved or steep zones)
- Ask: "Where would you put a rain garden and why?"
- Share observations as a group.

Activity A - Water Maps Worksheet

On the images below, draw using symbols in the key here where you see:

	<p>= Sloping Area or Low Spot: Draw lines with arrows that indicate which direction the area observed is sloping down</p>
	<p>= Downspout: Place letters on the map where a downspout is located</p>
	<p>= Water flow: Draw dashed lines with arrows that indicate which direction water is flowing away from downspouts, off of sidewalks, or down cement areas</p>
	<p>= Border of Garden: Draw the border of the proposed garden locations where space is available. Label each location with a letter if there is more than one.</p>
	<p>= Distance from Structure: Record the distance measured in feet and inches from the garden border to the unmovable object. If more than 10 feet, place "+10 feet"</p>

Example:



Activity A - Water Maps Worksheet



Activity A - Water Maps Worksheet



Activity A - Water Maps Worksheet



Activity A - Water Maps Worksheet



Activity A - Water Maps Worksheet



Activity A - Map the Water Reflection

1. What signs in the picture helped you figure out where the water would flow? (like slope, pavement, downspouts)

2. Where did you draw the arrows showing water movement? What made you think water would flow that way?

3. Did you notice any spots with signs of erosion, bare soil, or puddling? What might be causing that?

4. Which features in the photo (like sidewalks, buildings, or slopes) helped you understand where the water might go?

5. Why is it important to place a rain garden downhill or near a downspout?

Activity B - Soil Exploration

Soil Check + Plant Match is a hands-on investigation designed for small groups or class rotations. Its purpose is to introduce students to different soil textures, their ability to absorb water, and how these properties influence what kinds of plants can grow in a rain garden. Using simple testing methods, students determine if the soil drains slowly (like clay) or quickly (like sand), and then select plant types that match the soil conditions.

Activity Time:

45 Minutes

Grade Level

K - 12

Objectives:

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

- Perform basic soil tests to identify type (sand, clay, loam)
- Connect soil traits to plant needs
- Select appropriate plants based on soil drainage and structure

Materials Needed:

- Soil samples from outdoors (can be collected ahead of time)
 - Types to sample/purchase:
 - Clay
 - Sandy
 - Loamy
- Water in squeeze bottles or cups
- Clear jars or plastic cups/containers
- Spoons/scoops
- Paper towels
- “Soil Test Recording Sheet”
- Plant trait reference sheet (or small cutouts from your plant pages)

Setup & Prep:

- Label the 3 test station areas:
 - Percolation test
 - Texture test
 - Squeeze test
- If possible, collect different soil types from around the building. These may vary. Label the 3 soil types, and place a sample at each station
- Pre-fill water bottles
- Print worksheets

Instructions:

1. Introduce students to the three types of soil tests:

- Percolation test
 - Pour water into soil in a container and time how fast it drains
- Texture test
 - Rub between fingers or shake in a jar with water to see sand/silt/clay layers
- Squeeze test
 - Rub between fingers and see if it crumbles, forms into a ball, or stays sticky

2. Next, introduce the different types of soil (these may vary depending on availability).

- Clay (slow drainage)
- Sandy (fast drainage)
- Loamy (ideal drainage)

Students complete tests and fill out their sheets to identify soil type.

- Using their results, students choose 2–3 plants that would work in that type of soil.
- As a class or group, discuss:
- Which plants are “tough” enough for clay?
- Which roots are best for sandy soil?

Activity B - Plant Match Worksheet

Match the plant and its characteristics to the appropriate soil type. Some may have multiple types of soil it likes!

Firewheel



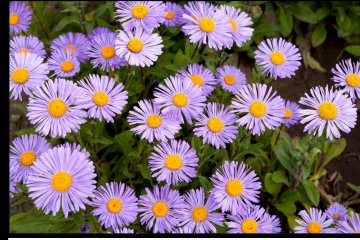
Drought tolerant

Little Bluestem



Slope stabilizer

Aromatic Aster



Fall bloomer

Fox Sedge



Tough roots

Sandy



Loamy



Clay



Spicebush



Shade tolerant

Marsh Milkweed



Pollinator magnet

Purple Coneflower



Deep taproot

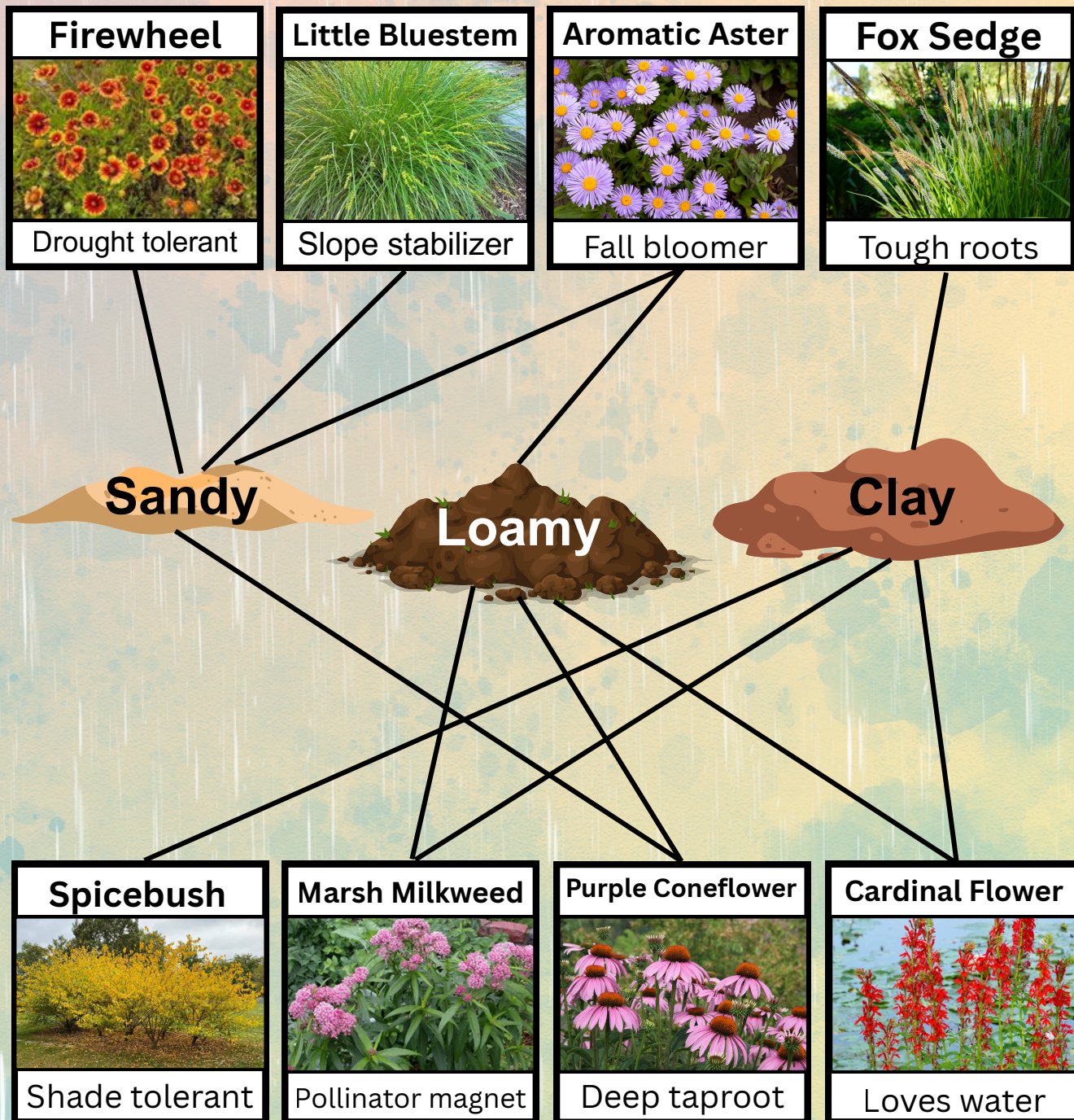
Cardinal Flower



Loves water

Answer Key - Plant Match

Match the plant and its characteristics to the appropriate soil type. Some may have multiple types of soil it likes!



Activity B - Soil Exploration Reflection

For each test, describe the soil and its characteristics.

1. **Percolation Test** - (Does it crumble, form a ball, or feel sticky?)

- Clay _____
- Sandy _____
- Loamy _____

2. **Texture Test** - (Gritty (sand), silky (silt), or smooth/sticky (clay)?)

- Clay _____
- Sandy _____
- Loamy _____

3. **Squeeze Test** - (How fast did water drain into the soil?)

- Clay _____
- Sandy _____
- Loamy _____



Activity C - Designing your Rain Garden

Design Your Rain Garden brings together everything students have learned about water flow, soil type, and plant characteristics. Students use plant cutouts to build their own rain garden layouts on paper or through sketches of real spaces. The activity is adaptable for all grade levels and can be done pictorially or with written labels. The purpose is to give students creative ownership while reinforcing the importance of thoughtful placement, native plant selection, and garden function.

Activity Time:

45 Minutes

Grade Level

K - 12

Objectives:

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

- Use water flow and soil knowledge to design a rain garden
- Select plants for different moisture zones
- Create a visual plan for a functional rain garden

Materials Needed:

- If using plant pictures:
 - Large print of schoolyard
 - Large printout of blueprint
- Plant cutouts
- Glue sticks OR tape
- Colored pencils/markers
- Optional: real location photo or map for on-site version
- Optional writing prompt sheet

Setup & Prep:

- For pictorial version: prep tables with layout paper and plant cutouts
- For site-based version: clipboards, site photo or map, pencils

Instructions:

- Review findings from Activities 2A and 2B (location + soil).
- Students begin designing:
- Place water-loving plants in center
- Place dry-loving plants on the berm or edges
- Leave space between for growth
- Add optional features: pollinators, garden signs, mulch layer
- K-3 can glue and decorate; older students can label zones, add reasoning.
- Wrap up: “Why did you choose those plants? How does your garden help water soak in?”

Blueprint of Schoolyard Walk Area



= Downspout



= Direction of sloping area



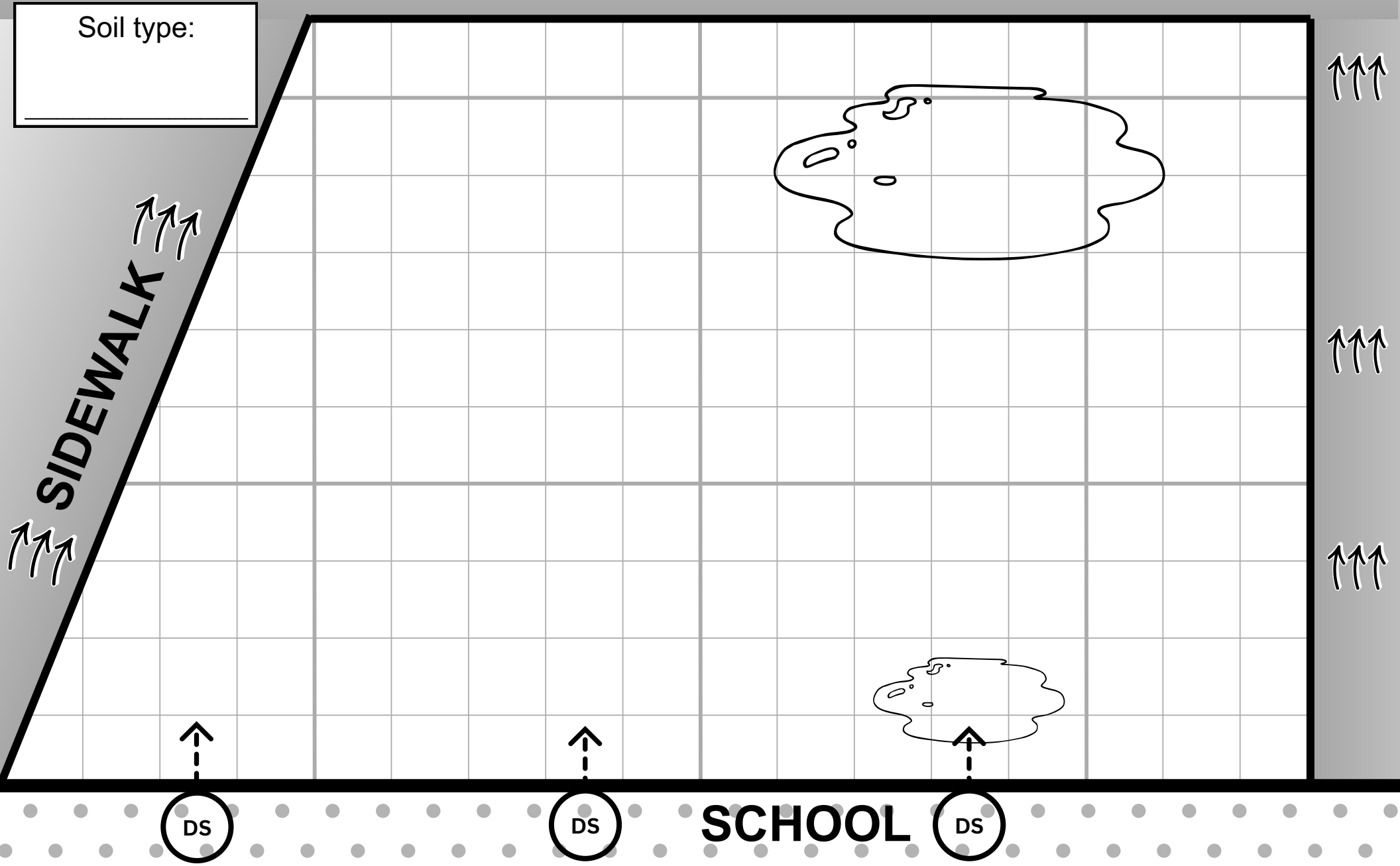
= Direction of water flow



= Runoff zone

1 square = 2 ft

Soil type:



SIDEWALK

SCHOOL

DS

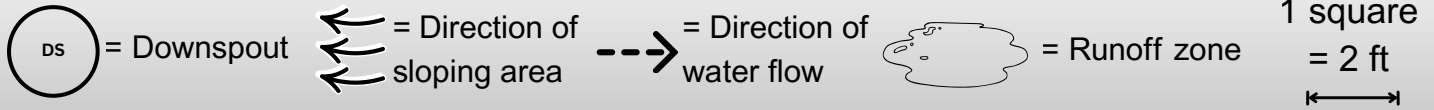
DS

DS

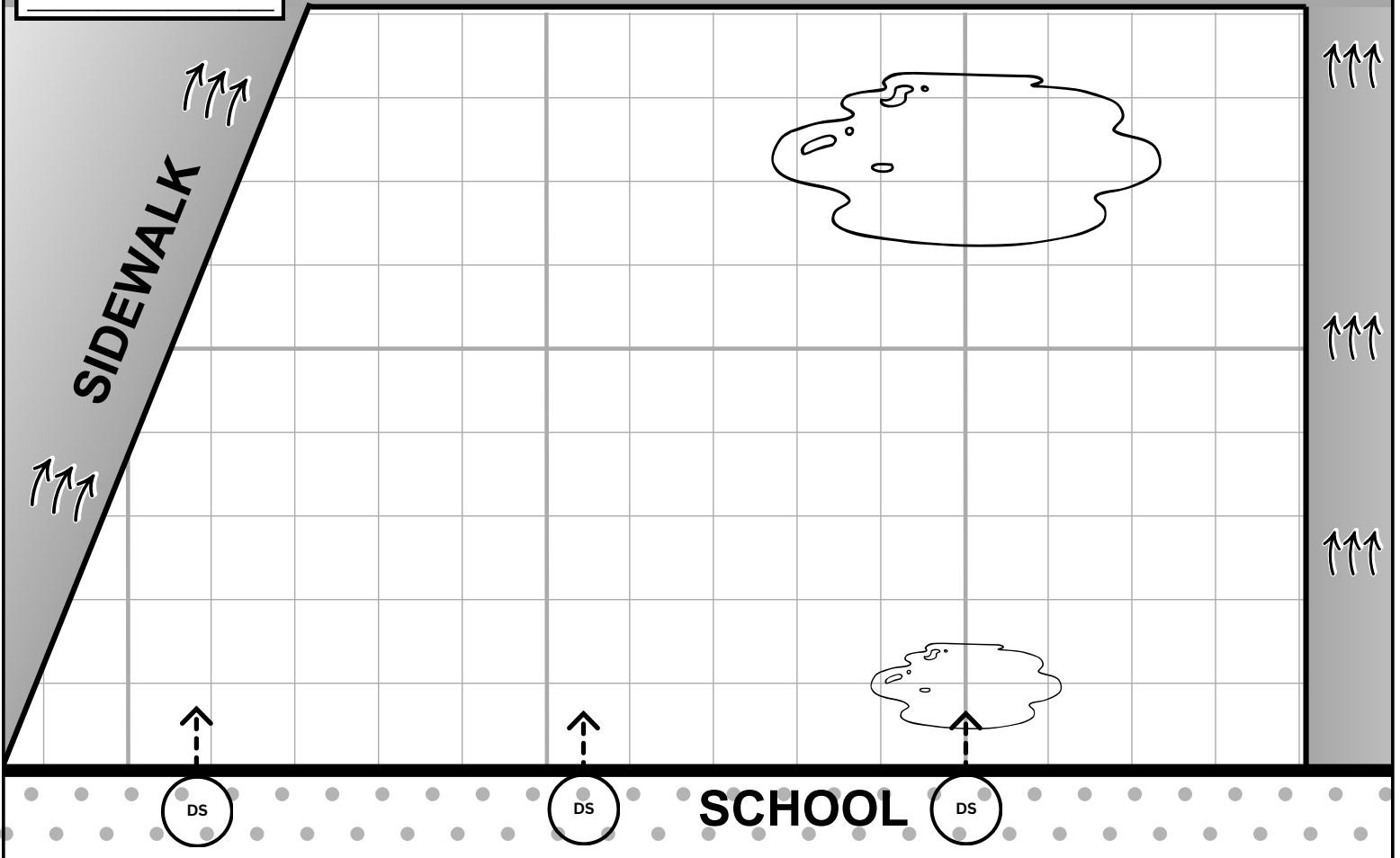
Rain Garden Design Worksheet

Site Sketch

- Identify permanent fixtures such as your house, garage, sheds, decks, patios, driveway, sidewalks, fences, utilities, easements, existing landscape beds and large trees.
- Identify downspout locations on your home and garage.
- Use arrows to indicate the general direction stormwater flows across the yard. Identify low-lying areas and locations where water pools during rain storms.
- Indicate which direction is north. Consider sun exposure in different parts of the yard.
- Identify potential rain garden locations. Consider where the rainfall runoff would come from and how it would get to the rain garden.



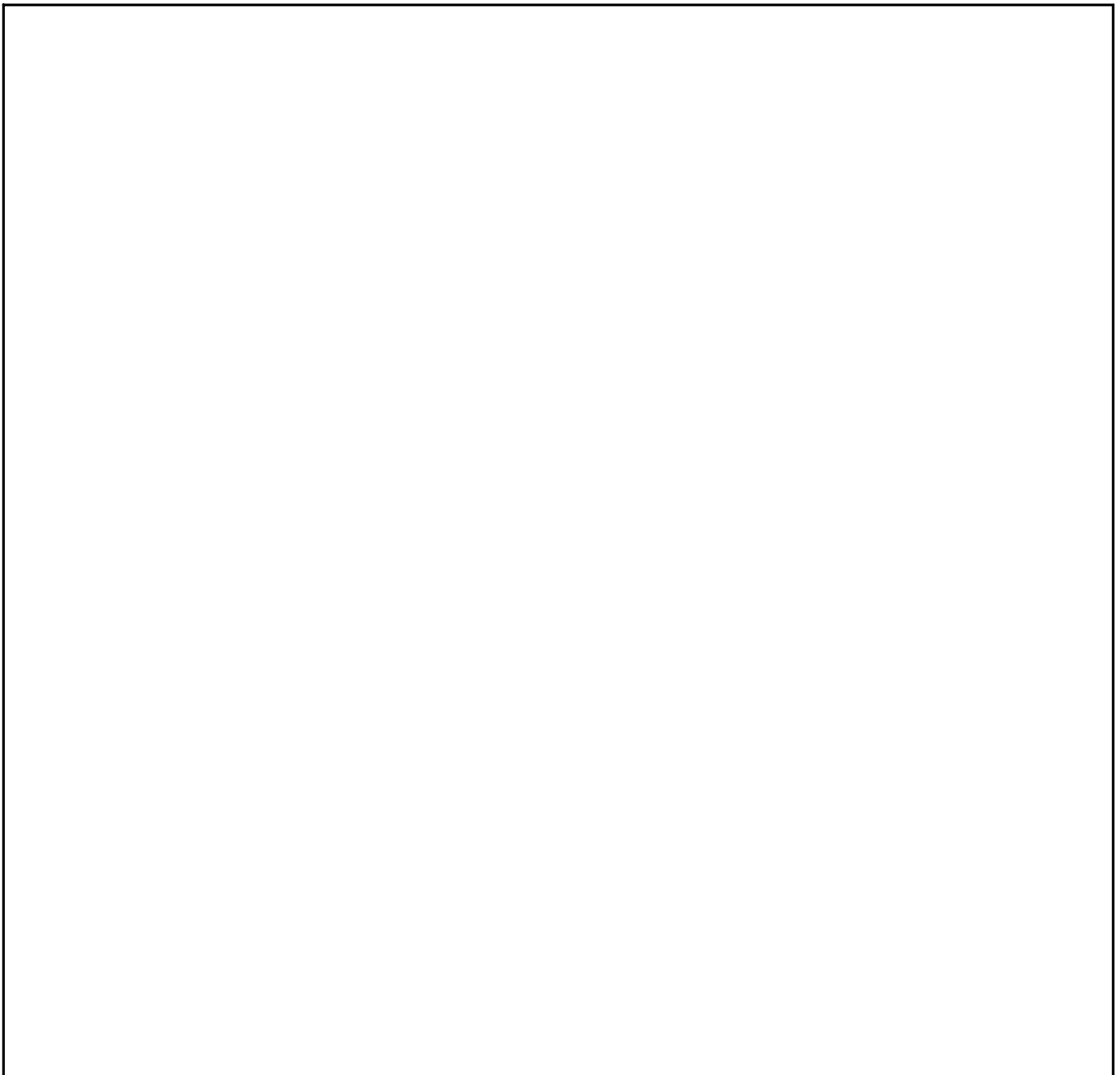
Soil type:



Rain Garden Design Worksheet

Site Sketch

- Identify permanent fixtures such as your house, garage, sheds, decks, patios, driveway, sidewalks, fences, utilities, easements, existing landscape beds and large trees.
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- Identify potential rain garden locations. Consider where the rainfall runoff would come from and how it would get to the rain garden.



Rain Garden Design Worksheet

The following steps 1 through 5 will help determine the total drainage area for the rain garden, including rainwater runoff from the roof and other hard surfaces.

STEP 1	<p>Calculate the roof drainage area of the house, garage or other buildings that will drain to the rain garden:</p> <p style="text-align: center;"> Length of House x Width of House = Total Roof Drainage Area _____ ft x _____ ft = <input style="width: 100px;" type="text"/> sq ft </p>
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STEP 2	<p>Calculate the roof drainage area for each downspout:</p> <p style="text-align: center;"> Total Roof Drainage Area (Step1) ÷ Number of Roof Downspouts = Roof Drainage Area per Downspout _____ sq ft ÷ _____ downspouts = <input style="width: 100px;" type="text"/> sq ft </p>
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STEP 3	<p>Determine how many downspouts will be directed to the rain garden and then calculate the total roof drainage area to the rain garden:</p> <p style="text-align: center;"> Number of Roof Downspouts Directed to Rain Garden x Drainage Area per Downspout (Step2) = Roof Drainage Area to Rain Garden _____ downspouts x _____ sqft = <input style="width: 100px;" type="text"/> sq ft </p>
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STEP 4	<p>Identify other sources of runoff (driveway, sidewalk, patio, compacted lawn, etc.) that will flow to the rain garden and calculate the approximate drainage area:</p> <p style="text-align: center;"> Length of Additional Drainage Area x Width of Additional Drainage Area = Additional Drainage Area to Rain Garden _____ ft x _____ ft = <input style="width: 100px;" type="text"/> sq ft </p>
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STEP 5	<p>Calculate the total drainage area for the rain garden:</p> <p style="text-align: center;"> Roof Drainage Area (Step 3) + Additional Drainage Area (Step 4) = Total Drainage Area to Rain Garden _____ sq ft + _____ sq ft = <input style="width: 100px;" type="text"/> sq ft </p>
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Rain Garden Design Worksheet

Steps 6 through 9 will help determine the optimal size and depth of the rain garden based on the anticipated amount of rain water it will collect. The approximate number of plants needed to fill your garden will be determined in step 10.

STEP 6	Determine the infiltration rate of the soil in the rain garden (see manual) in inches per day.
	If _____ inches of water infiltrated in _____ hours,
	Then _____ inches of water should infiltrate in 24 hours.
Soil Infiltration Rate = <input type="text"/> inches/day	Note: Soil infiltration rates between 0.5 and 3.0 inches per hour are preferred.

STEP 7	Determine the optimal rain garden depth to infiltrate within oneday:
	Soil Infiltration Rate (Step 6) = Rain Garden Depth
	_____ inches/day = <input type="text"/> inches
	Note: Rain gardens are typically 4" to 6" deep and should be no deeper than 12".

STEP 8	Calculate the optimal rain garden size to capture a 1" rain event:
	Total Drainage Area to Rain Garden (Step 5) ÷ Rain Garden Depth (Step 7) = Rain Garden Size
	_____ sq ft ÷ _____ inches = <input type="text"/> sq ft

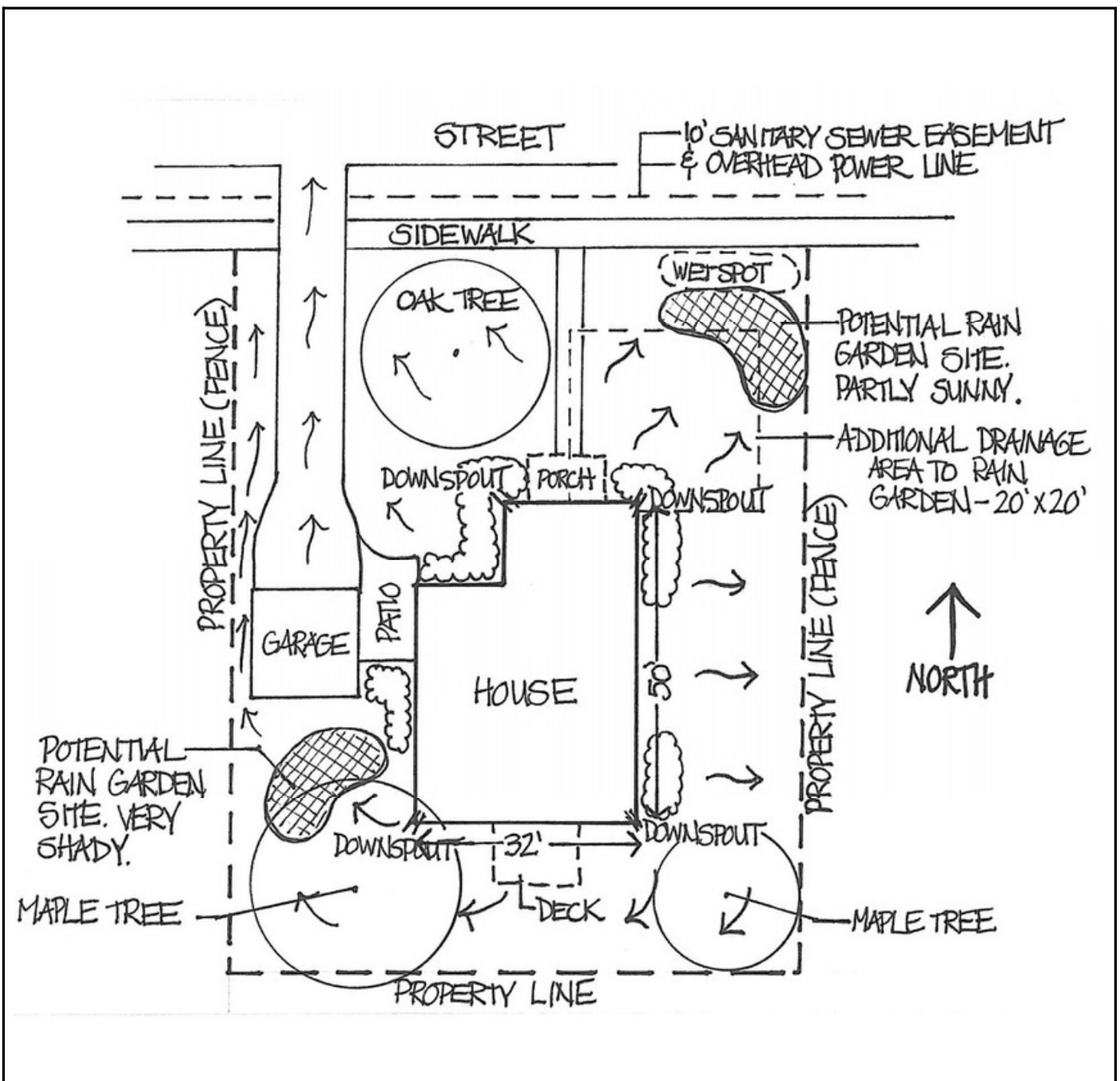
STEP 9	Select a rain garden shape that fits your landscape and determine the approximate dimensions of this shape:
	Rain Garden Size (Step 8) = Approximate Length of Rain Garden x Approximate Width of Rain Garden
	_____ sq ft = _____ ft x _____ ft

STEP 10	Determine the optimal number of plants for the rain garden, assuming an average plant spacing of 2 feet (0.25 plants/sq ft):
	Rain Garden Size (Step 8) x 0.25 plants/sq ft = Total number of plants
	_____ sq ft x 0.25 plants/sq ft = <input type="text"/> plants

Example - Rain Garden Design

Site Sketch

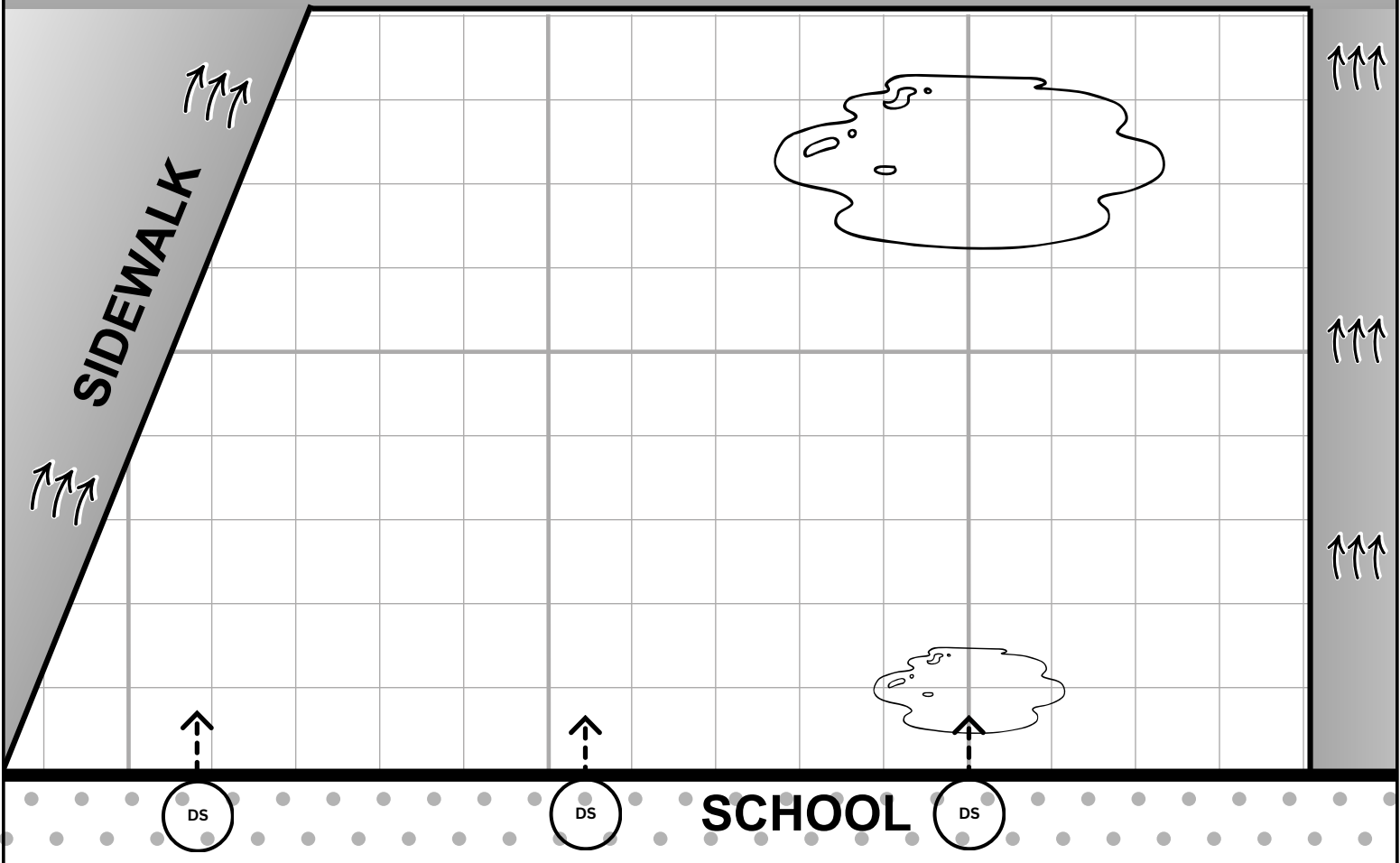
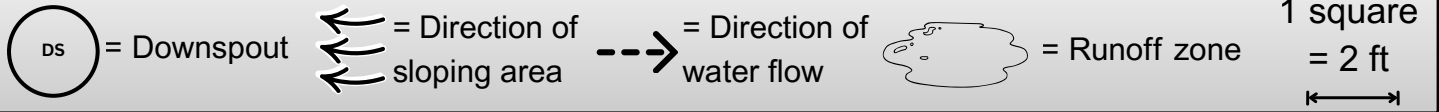
- Identify permanent fixtures such as your house, garage, sheds, decks, patios, driveway, sidewalks, fences, utilities, easements, existing landscape beds and large trees.
- Identify downspout locations on your home and garage.
- Use arrows to indicate the general direction stormwater flows across the yard. Identify low-lying areas and locations where water pools during rain storms.
- Indicate which direction is north. Consider sun exposure in different parts of the yard.
- Identify potential rain garden locations. Consider where the rainfall runoff would come from and how it would get to the rain garden.



Example - Rain Garden Design

Site Sketch

- Identify permanent fixtures such as your house, garage, sheds, decks, patios, driveway, sidewalks, fences, utilities, easements, existing landscape beds and large trees.
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Example - Rain Garden Design

The following steps 1 through 5 will help determine the total drainage area for the rain garden, including rain water runoff from the roof and other hard surfaces.

STEP 1	Calculate the roof drainage area of the house, garage or other buildings that will drain to the rain garden:
	$\begin{array}{rccccccc} \text{Length of House} & \times & \text{Width of House} & = & \text{Total Roof Drainage Area} \\ \hline 50 \text{ ft} & \times & 32 \text{ ft} & = & \boxed{1600} \text{ sq ft} \end{array}$

STEP 2	Calculate the roof drainage area for each downspout:
	$\begin{array}{rccccccc} \text{Total Roof Drainage} & \div & \text{Number of Roof} & = & \text{Roof Drainage Area} \\ \text{Area (Step1)} & & \text{Downspouts} & & \text{per Downspout} \\ \hline 1600 \text{ sq ft} & \div & 4 \text{ downspouts} & = & \boxed{400} \text{ sq ft} \end{array}$

STEP 3	Determine how many downspouts will be directed to the rain garden and then calculate the total roof drainage area to the rain garden:
	$\begin{array}{rccccccc} \text{Number of Roof Downspouts} & \times & \text{Drainage Area per} & = & \text{Roof Drainage Area} \\ \text{Directed to Rain Garden} & & \text{Downspout (Step2)} & & \text{to Rain Garden} \\ \hline 1 \text{ downspout} & \times & 400 \text{ sqft} & = & \boxed{400} \text{ sq ft} \end{array}$

STEP 4	Identify other sources of runoff (driveway, sidewalk, patio, compacted lawn, etc.) that will flow to the rain garden and calculate the approximate drainage area:
	$\begin{array}{rccccccc} \text{Length of Additional} & \times & \text{Width of Additional} & = & \text{Additional Drainage} \\ \text{Drainage Area} & & \text{Drainage Area} & & \text{Area to Rain Garden} \\ \hline 20 \text{ ft} & \times & 20 \text{ ft} & = & \boxed{400} \text{ sq ft} \end{array}$

STEP 5	Calculate the total drainage area for the rain garden:
	$\begin{array}{rccccccc} \text{Roof Drainage} & + & \text{Additional Drainage} & = & \text{Total Drainage Area} \\ \text{Area (Step 3)} & & \text{Area (Step 4)} & & \text{to Rain Garden} \\ \hline 400 \text{ sq ft} & + & 400 \text{ sq ft} & = & \boxed{800} \text{ sq ft} \end{array}$

Example - Rain Garden Design

Steps 6 through 9 will help determine the optimal size and depth of the rain garden based on the anticipated amount of rain water it will collect. The approximate number of plants needed to fill your garden will be determined in step 10.

STEP 6	Determine the infiltration rate of the soil in the rain garden (see manual) in inches per day.
	If <u> 1 </u> inches of water infiltrated in <u> 6 </u> hours,
	Then <u> 4 </u> inches of water should infiltrate in 24 hours.
	Soil Infiltration Rate = <input type="text" value="4"/> inches/day
	Note: If your soil infiltration rate is less than 3 inches/day, call 427-1381 for design assistance.

STEP 7	Determine the optimal rain garden depth to infiltrate within oneday:
	Soil Infiltration Rate (Step 6) = Rain Garden Depth
	<u> 4 </u> inches/day = <input type="text" value="4"/> inches
	Note: Rain gardens are typically 4" to 6" deep and should be no deeper than 12".

STEP 8	Calculate the optimal rain garden size to capture a 1" rain event:
	Total Drainage Area to Rain Garden (Step 5) ÷ Rain Garden Depth (Step 7) = Rain Garden Size
	<u> 800 </u> sq ft ÷ <u> 4 </u> inches = <input type="text" value="200"/> sq ft

STEP 9	Select a rain garden shape that fits your landscape and determine the approximate dimensions of this shape:
	Rain Garden Size (Step 8) = Approximate Length of Rain Garden x Approximate Width of Rain Garden
	<u> 200 </u> sq ft = <u> 20 </u> ft x <u> 10 </u> ft

STEP 10	Determine the optimal number of plants for the rain garden, assuming an average plant spacing of 2 feet (0.25 plants/sq ft):
	Rain Garden Size (Step 8) x 0.25 plants/sq ft = Total number of plants
	<u> 200 </u> sq ft x 0.25 plants/sq ft = <input type="text" value="50"/> plants



**American
Beauty Berry**



**American
Beauty Berry**



**American
Beauty Berry**



**American
Beauty Berry**



**American
Beauty Berry**



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Beauty Berry**



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Beauty Berry**



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Beauty Berry**



**American
Beauty Berry**





Bald Cypress



Bald Cypress



Bald Cypress



Bald Cypress



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Black-Eyed Susan



Bluestem



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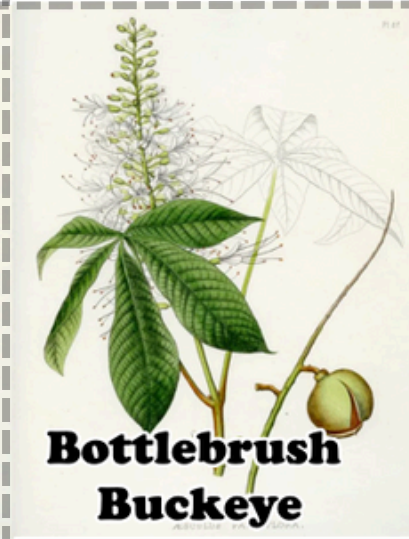
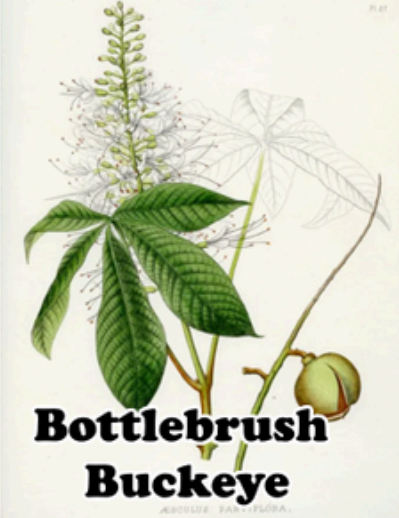
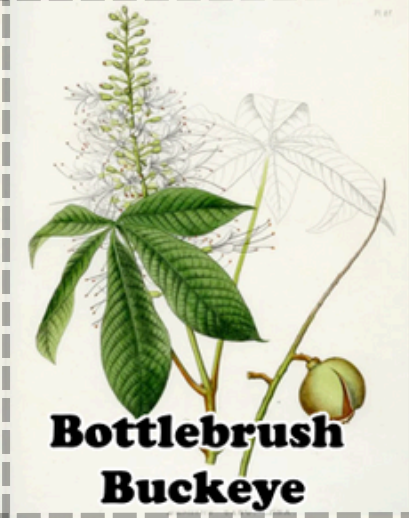
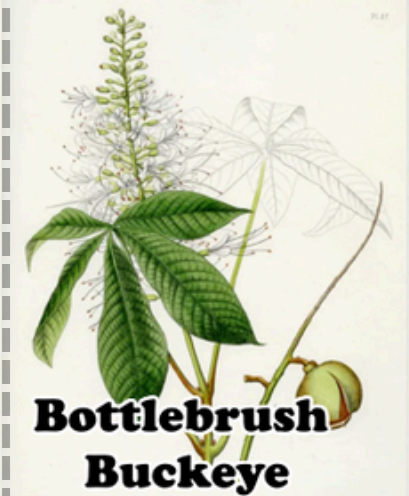
Bluestem



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Buttonbush



Buttonbush



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**False
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Fringetree



Fringetree



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**Giant
Ironweed**



**Giant
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Goldenrod



Goldenrod



Goldenrod



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Goldenrod



Great Blue Lobelia



Great Blue Lobelia



Great Blue Lobelia



Great Blue Lobelia



Great Blue Lobelia



Great Blue Lobelia



Great Blue Lobelia



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**Little
Bluestem**



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**Little
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**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



**Oak Leaf
Hydrangea**



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



Red Maple Tree



River Birch



River Birch



River Birch



River Birch



River Birch



River Birch



River Birch



River Birch



River Birch



**Summersweet
Clethra**



**Summersweet
Clethra**



**Summersweet
Clethra**



**Summersweet
Clethra**



**Summersweet
Clethra**



**Summersweet
Clethra**



**Summersweet
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**Summersweet
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**Summersweet
Clethra**



**Swamp
Milkweed**



**Swamp
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Sweetspire



Sweetspire



Sweetspire



Sweetspire



Sweetspire



Sweetspire



Sweetspire



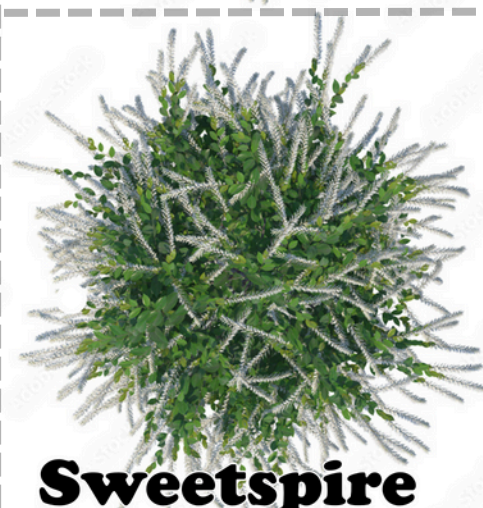
Sweetspire



Sweetspire



Sweetspire



Sweetspire



Sweetspire



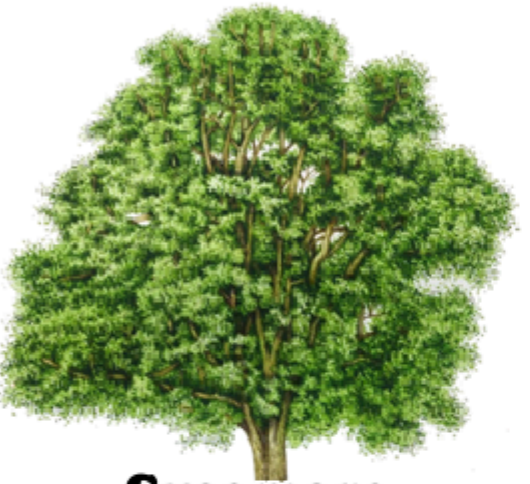
Sycamore



Sycamore



Sycamore



Sycamore



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