

## Match Terms with Concepts

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**Directions:** Match the terms with the correct concepts. Choose the best answer.

### Term

1. Stormwater detention
2. Evapotranspiration
3. Impervious
4. Infiltration
5. Precipitation
6. Stormwater retention
7. Permeable

### Concepts

- a. The process by which stormwater gradually passes into soil or other porous media
- b. Having pores or openings that permit stormwater to pass through and infiltrate into the ground below
- c. The act of holding back stormwater for a period of time before it is released into the sewer system
- d. Continued holding of stormwater without releasing into the sewer system
- e. Loss of water from the soil both by evaporation from the soil surface and by transpiration from the leaves of the plants growing on it
- f. Not capable of being penetrated by stormwater
- g. Water that is released from the atmosphere, such as rain, sleet, or snow, and hits impervious surfaces

# Fill in the Blanks

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**Directions:** Fill in the blanks with the term that best matches the description in the sentence.

1. A \_\_\_\_\_ is a type of drain structure located next to the curb that collects all stormwater that falls on the street. This is designed to prevent street flooding.
2. Practices that are designed and constructed to manage stormwater runoff when it rains are called \_\_\_\_\_.
3. An \_\_\_\_\_ is part of a bioswale that directs stormwater runoff into the vegetated area that includes a tree and plants.
4. \_\_\_\_\_ are designed with an engineered soil layer that promotes infiltration of stormwater runoff into the underlying soil.
5. \_\_\_\_\_ is a mix of excess stormwater and untreated sanitary flow that discharge directly into NYC's waterways at certain outfalls.
6. \_\_\_\_\_ are specially designed sandy soils that promote the infiltration of stormwater.
7. Consisting of a range of paving materials and techniques, a \_\_\_\_\_ allows stormwater to seep into spaces between the paving materials and be absorbed into the ground.
8. Rooftops designed without vegetation for the main purpose of impeding stormwater by creating temporary ponding is called a \_\_\_\_\_.
9. A \_\_\_\_\_ collects both sanitary flow and stormwater runoff from properties and streets.
10. \_\_\_\_\_ is wastewater that comes from our buildings and is carried by the sewer system to wastewater treatment plants.

## Word Bank

Sanitary Flow  
 Permeable Pavement  
 Combined Sewer Overflow  
 Blue Roof  
 Green Infrastructure

Rain Gardens  
 Inlet  
 Catch Basin  
 Combined Sewer System  
 Engineered Soils

# Comprehensive Exercise

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1. Stormwater runoff results from the following except:
  - a. sleet
  - b. snow
  - c. sunlight
  - d. rain
  
2. How does green infrastructure help control stormwater?
  
3. True or False: *A combined sewer system collects both wastewater and stormwater runoff.*
  
4. What happens during combined sewer overflows?
  
5. True or False: *Bioswales are typically installed downstream of existing catch basins.*
  
6. What is the difference between a bioswale and a rain garden?
  
7. \_\_\_\_\_ roofs are thick, heavy and can support a wide variety of plants while \_\_\_\_\_ roofs support a light layer of vegetation.
  
8. Rain barrels and cisterns catch rainwater off of \_\_\_\_\_.
  
9. Permeable pavement allow for the movement of \_\_\_\_\_ and \_\_\_\_\_ around the paving material.
  
10. What are the benefits of green infrastructure?
  - a. Reduces the Urban Heat Island Effect
  - b. Improves water quality
  - c. Is cost effective
  - d. All of the above

# Answer Key: Match Terms with Concepts

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## Terms

1. Stormwater Detention **C**
2. Evapotranspiration **E**
3. Impervious **F**
4. Infiltration **A**
5. Precipitation **G**
6. Stormwater retention **D**
7. Permeable **B**

## Concepts

- a. The process by which stormwater gradually passes into soil or other porous media
- b. Having pores or openings that permit stormwater to pass through and infiltrate into the ground below
- c. The act of holding back stormwater for a period of time before it is released into the sewer system
- d. Continued holding of stormwater without releasing into the sewer system
- e. Loss of water from the soil both by evaporation from the soil surface and by transpiration from the leaves of the plants growing on it
- f. Not capable of being penetrated by stormwater
- g. Water that is released from the atmosphere, such as rain, sleet, or snow, and hits impervious surfaces

## Answer Key: Fill in the Blanks

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1. A **Catch Basin** is a type of drain structure located next to the curb that collects all stormwater that falls on the street. This is designed to prevent street flooding.
2. Practices that are designed and constructed to manage stormwater runoff when it rains are called **Green Infrastructure**.
3. An **Inlet** is part of a bioswale that directs stormwater runoff into the vegetated area that includes a tree and plants.
4. **Rain Gardens** are designed with an engineered soil layer that promotes infiltration of stormwater runoff into the underlying soil.
5. **Combined Sewer Overflow (CSO)** is a mix of excess stormwater and untreated sanitary flow that discharge directly into NYC's waterways at certain outfalls.
6. **Engineered Soils** are specially designed sandy soils that promote the infiltration of stormwater.
7. Consisting of a range of paving materials and techniques, a **Permeable Pavement** allows stormwater to seep into spaces between the paving materials and be absorbed into the ground.
8. Rooftops designed without vegetation for the main purpose of impeding stormwater by creating temporary ponding is called a **Blue Roof**.
9. A **Combined Sewer System** collects both sanitary flow and stormwater runoff from properties and streets.
10. **Sanitary Flow** is wastewater that comes from our buildings and is carried by the sewer system to wastewater treatment plants.

1. Stormwater runoff results from the following except:
  - a. sleet
  - b. snow
  - c. sunlight**
  - d. rain
  
2. How does green infrastructure help control stormwater?  
**Green infrastructure helps control stormwater by slowing down or absorbing rainfall before it can enter the sewer system.**
  
3. **True** or False: *A combined sewer system collects both wastewater and stormwater runoff.*
  
4. What happens during combined sewer overflows?  
**Untreated wastewater is discharged into waterways.**
  
5. True or **False**: *Bioswales are typically installed downstream of existing catch basins.*  
**Bioswales are typically installed upstream so any overflow is directed out of the bioswale through a curb-cut outlet and flows down to the catch basin.**
  
6. What is the difference between a bioswale and a rain garden?  
**The major difference between a bioswale and a rain garden is that bioswales are designed to move water from one area to another and often end in a rain garden.**
  
7. **Intensive** roofs are thick, heavy and can support a wide variety of plants while **Extensive** roofs support a light layer of vegetation.
  
8. Rain barrels and cisterns catch rainwater off of **houses or other buildings**.
  
9. Permeable pavement allow for the movement of **water** and **air** around the paving material.
  
10. What are the benefits of green infrastructure?
  - a. Reduces the Urban Heat Island Effect
  - b. Improves water quality
  - c. Is cost effective
  - d. All of the above**