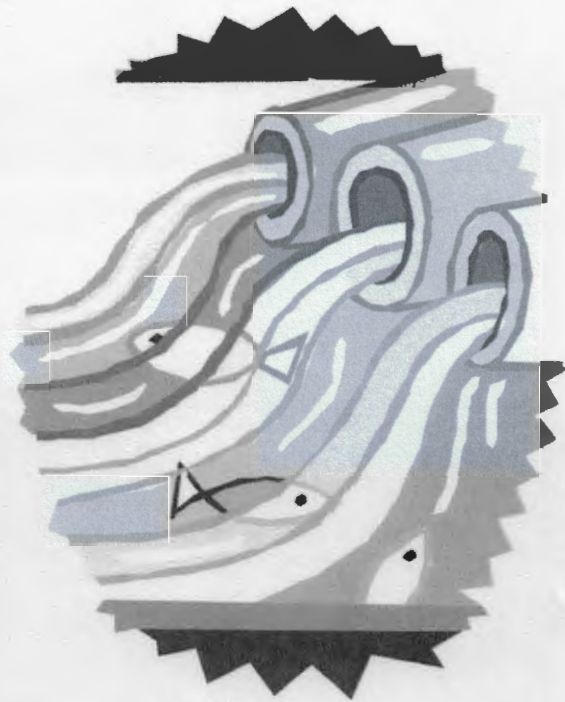


This booklet belongs to: \_\_\_\_\_

# The Stormwater Activity Book



An activity booklet designed to teach children about water resources  
and stormwater pollution

## What is Stormwater?

When rain falls or snow melts, where does the water go? Some is soaked into the ground, some sits in puddles, and some disappears. Water that flows over the land surface, downhill to the nearest stream or ditch; we call stormwater runoff.



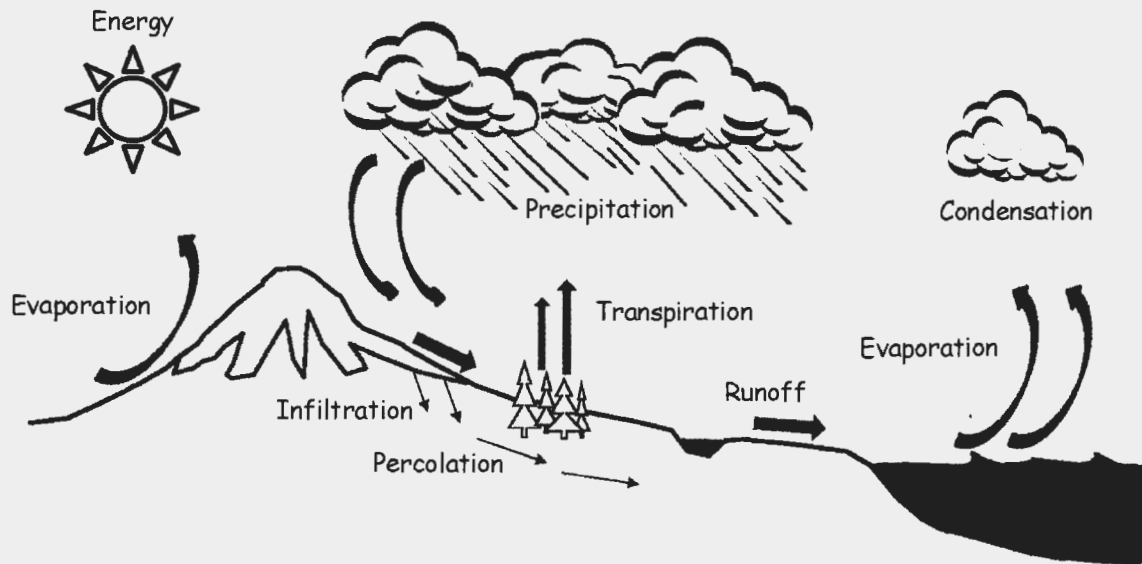
When storm drains are free of debris, water can easily drain from roadways. When storm drains are clogged, this causes the potential of flooding on roadway surfaces, which can also cause contamination. Never put anything down a storm drain.

Solve the hidden message. Use the clues below.

A = B = C = D = E = F = G =   
 H = I = J = K = L = M = N =   
 O = P = Q = R = S = T = U =   
 V = W = X = Y = Z =

**Activity Challenge:** What secret messages can you make using the above code letters or your own symbols?

# The Water Cycle



**Evaporation:** When water is heated by the sun, it causes the water to turn into vapor and rise into the air.

**Transpiration:** Water that plants give off as vapor.

**Condensation:** When water vapor cools, it turns into tiny drops of water. These combine to make clouds.

**Precipitation:** The water in the clouds falls to the earth as rain or snow.

**Runoff:** The water falling to the ground through precipitation runs back into the lakes, rivers and oceans over the surface of the ground.

**Infiltration:** When water enters the soil surface.

**Percolation:** What water's called after it's infiltrated into the ground and then moves through the soils.

**Hydrology:** The study of how water moves through the environment.

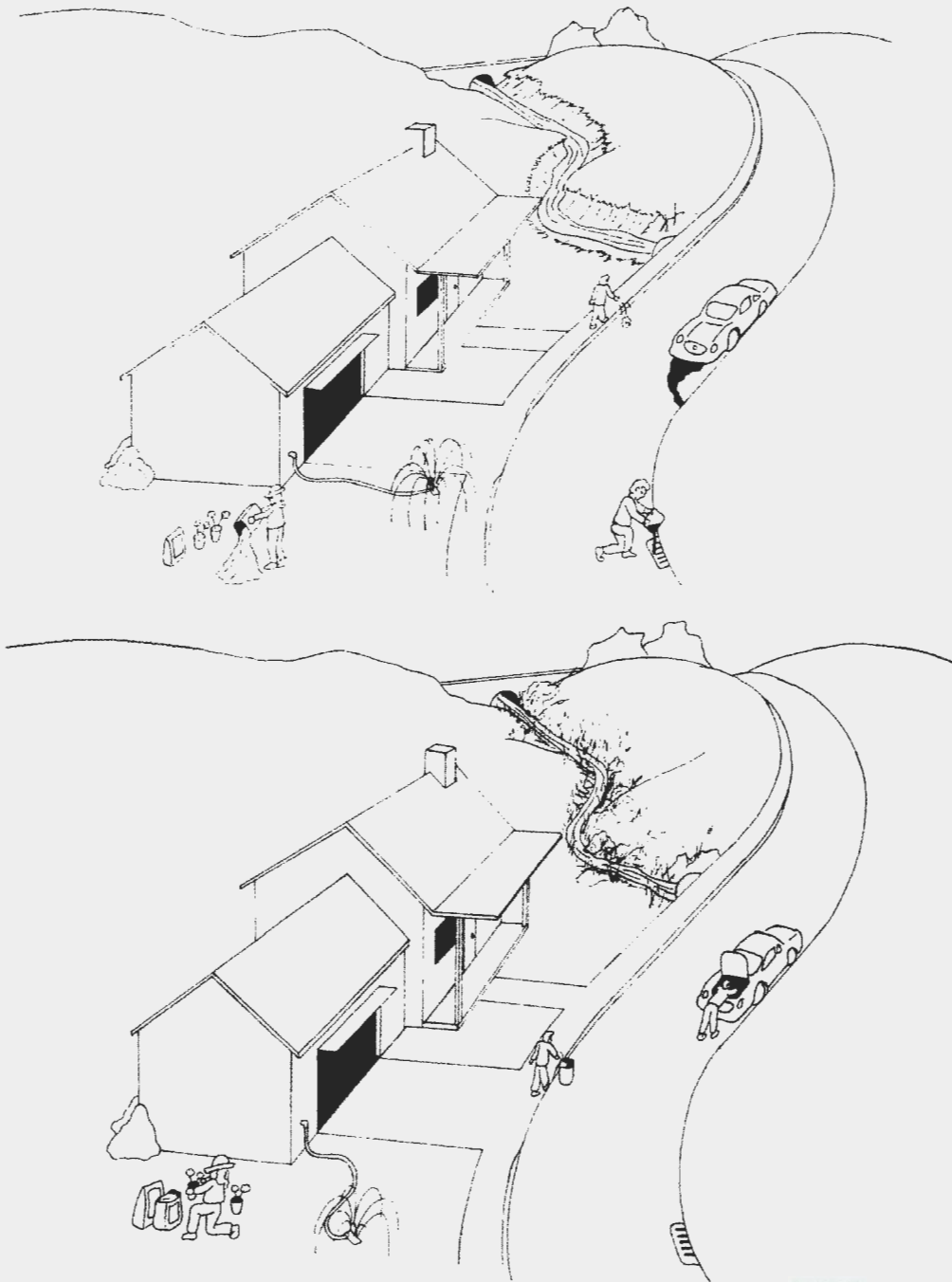
**Karst:** A landscape term in a carbonate watershed where sinkholes, closed depressions and blind valleys (valley with an abrupt ending) have developed over geologic time. Water that enters sinkholes can move rapidly and potentially contaminate groundwater.

**Impervious Surfaces:** Are mainly artificial surfaces like roofs, roads, sidewalks, and parking lots that are impenetrable to water, which makes water runoff.

Did you know that the water you drink is as old as the earth itself? Dinosaurs may have swum in the water from your kitchen sink. The earth's water supply is about the same as it was millions of years ago. That's because every molecule of water is recycled over and over through the water cycle. More than 99% of the earth's water is salt water in the ocean or trapped in the ice caps or deep underground. That leaves only 1% of the earth's water available for us to use. Let's make sure we protect that water and keep it clean.

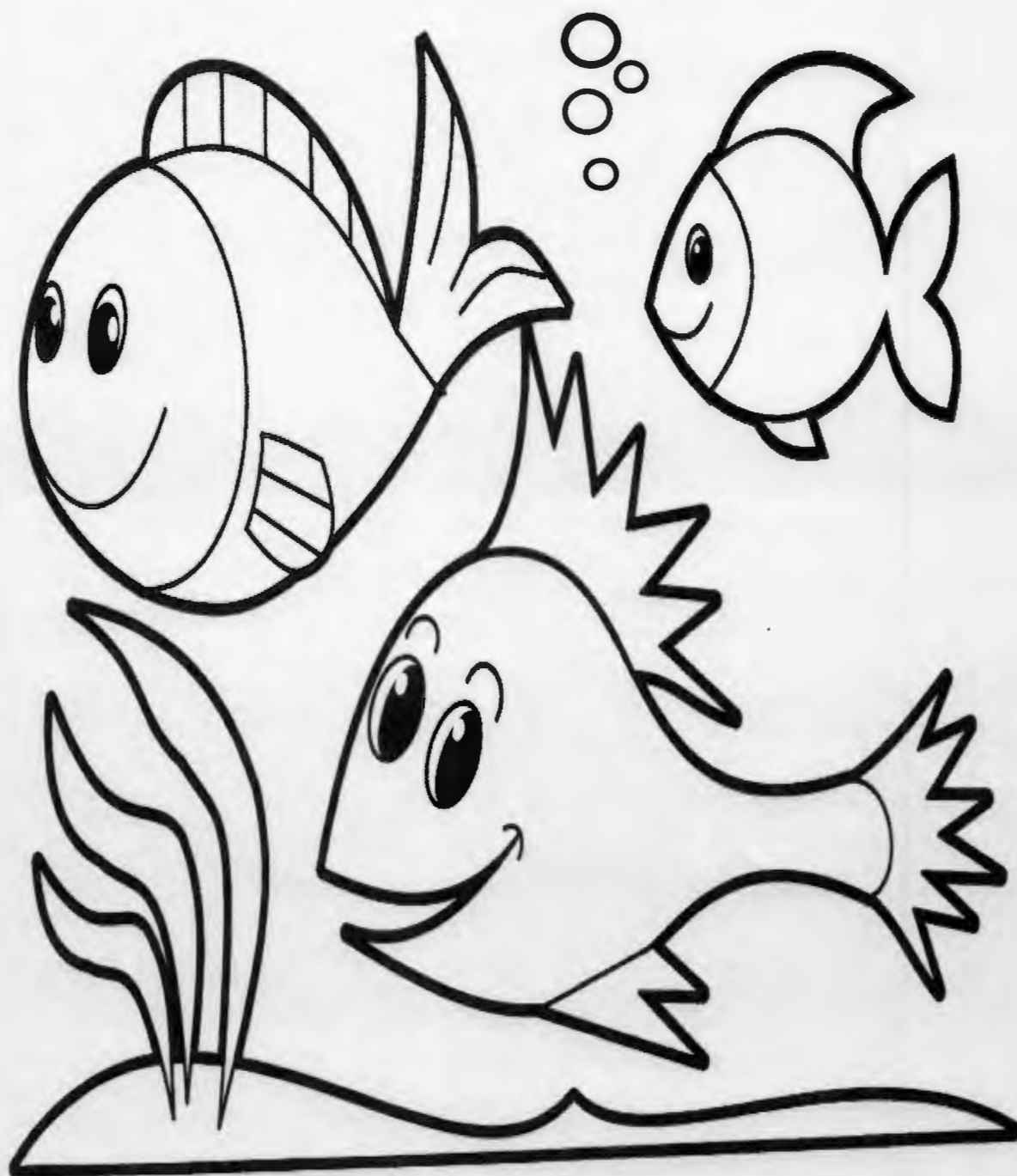
## Stormwater Pollution Picture Search

Cities and towns have more stormwater runoff than areas in the country because they have more concrete so the water can't soak into the ground. Impervious surfaces like roads and parking lots can contribute lots of pollutants to our streams. Compare the two pictures below. Circle all the differences between them that you can find that could result in polluted runoff. You should find 6 things.



**Activity Challenge:** What do these differences have to do with protecting our water from stormwater runoff?

Color the Fish



Activity Challenge: Draw your own picture of what you think is needed for a healthy watershed.

## Word Search

Pollution in our streams and groundwater can come from many sources (including nonpoint) and not just from big spills. See if you can find the pollutants listed below.



**Agriculture**

**Animals**

**Cars**

**Chromium**

**Copper**

**Dirt**

**Driveway**

**Fertilizer**

**Garbage**

**Gasoline**

**Grass Clippings**

**Grease**

**Lead**

**Motor Oil**

**Mud**

**Nitrate**

**Pesticides**

**Phosphorous**

**Salt**

**Sediment**

**Sewage**

**Tar**

**Trash**

**Wastewater**

**Wildlife**

Polluted water that goes down the drains in your house goes to a wastewater plant or septic system for treatment.

**Activity Challenge:** Make your own word search with words you think are important.

## Final Stream Facts

Perennial Stream - Are streams that flow year round.

Intermittent Streams - Are streams that flow part of the year or seasonally.

Ephemeral Stream - Are streams that only flow in direct response to precipitation.

Help protect our streams no matter what size they are!



## **STORMY**

The raincloud  
doesn't like  
getting blamed  
for polluted  
runoff, do your  
part to keep  
stormy happy.