## Clevelarnd Water $H_{2}$ OKIDS * Beginner

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\begin{aligned}
& \text { Waite } \\
& \text { MRINKING? }
\end{aligned}
$$

HYDRO
clevelandubater.com

## Why isn't water free?

Cleveland Water is A-Mazing and it takes a lot of steps to make it that way. Work your way through the maze and learn what it takes to make sure Hydro gets to your home.


## Water Treatment Plants

Cleveland Water treats millions of gallons of water every day for over 1.4 million people.

Would you like to see how water is cleaned? We offer FREE plant tours for interested groups of eight or more Monday thru Friday from 9:00 a.m. to 3:00 p.m. Ask an adult to contact PlantTour@clevelandwater.com or 216.664.2444 extension 75641.


NOTTINGHAM
WATER TREATMENT PLANT


MORGAN
WATER TREATMENT PLANT


CROWN
WATER TREATMENT PLANT


BALDWIN
WATER TREATMENT PLANT


## Water Match

Place the correct letter next to the phrase that best describes each picture.

___ Washing hands
Drink water


B


Taking a bath
Taking a shower


## Saving Water

It is important that we only use water we need. We do not want to waste water.

Select the answer that shows good water choices.


# When I brush my teeth <br> A: $\square$ I turn the tap off <br> B: $\square$ Let the tap run 

When I take a bath, I fill the tub
A: $\square 1 / 4$ full
B: $\quad 1 / 2$ full
C: $\square$ full


When I see a leak, I should<br>A: $\square$ Let it drip B: $\square$ tell an adult (mom/dad)

It is hot outside. I play in the water from the hose. When I am done, I should
A: $\square$ Let it run
B: Turn it off

## Protect your watershed

Did you know 80\% of the trash in Lake Erie comes from the land and $93 \%$ of trash on Lake Erie beaches is plastic? Help clean the area before the garbage ends up in the waterway. Circle each item that can be recycled. Then draw a line from it to the recycle bin.


Another way to reduce trash is by using your refillable water bottle from Cleveland Water instead of drinking bottled water!

## Crack the Code

Use the secret code chart to solve the importance of what we can do to protect the water cycle.


(1) Take shorter $\square \frac{\square}{\because} \bar{\pi} \bar{\ll} \square$
(2) Turn off the

while you brush your $\bar{\star}-\bar{\star} \bar{\pi}$.
(3) If you see a

(4) Don't
 ! It is bad for our water.

Put $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ where it belongs.

## Drink more water

## Did you know?

## The Brain is $\mathbf{7 3 \%}$ water

Drinking water increases alertness and improves your memory.

## Skin is 64\% water

Drinking water hydrates your skin cells and flushes out toxins, helping skin look healthier.


## Lungs are 83\% water

Staying hydrated keeps the mucous membrane lining your lungs thin, helping you breathe easier.

The Heart is $\mathbf{7 3} \%$ water
Dehydration makes your heart work harder to pump blood and get oxygen to cells.

(1) Which organ has the most water?


Muscles are 79\% water
Drinking water helps muscles grow stronger and faster and prevents muscle cramps.

(2) Which organ works harder when you're dehydrated?

Bones are 31\% water
Water brings calcium and other nutrients to your bones, keeping them strong.



## Staying Hydrated

When our body needs water, we feel thirsty. If you lose too much water or don't drink and eat enough, you can get dehydrated. Make it easy - Use reusable water bottles to fill up with tap water throughout the day to easily keep track.

Look at the chart. Find your age. How much water should you drink each day?

Water in Cups per Day Total for 7 Days
4
5 35
$5 \quad 5 \quad 35$

| 6 | 5 | 35 |
| :--- | :--- | :--- |
| 7 | 5 | 35 |

$8 \quad 5 \quad 35$

I need to drink $\qquad$ glasses of water each day.
Circle the number of cups per day you need to drink.
1
2
3
4
5 6
78

## Our Customers

Cleveland Water services 80 communities.
Do you live in our service area?
Color in your city.



## Count Your Cups

For a week, count how many times you drink water or other drinks. Put a tally mark in the table below for each day. Did you drink enough water each day?

| Day of <br> the Week | Water | Milk | Juice or Pop |
| :--- | :--- | :--- | :--- |
| Monday |  |  |  |
| Tuesday |  |  |  |
| Wednesday |  |  |  |
| Thursday |  |  |  |
| Friday |  |  |  |
| Saturday |  |  |  |
| Sunday |  |  |  |
| WEEK TOTAL |  |  |  |

Did you drink the same amount of water each day? Check one: $\square$ YES $\square$ NO

Color the day (or days if there is a tie) of the week that you drank the most water blue.

Color the day of the week that you drank the least amount of water orange.

Put a smiley face next to each day of the week that you drank as much water or more as you are supposed to drink for your age.

Bring Water with You
Connect the dots to see what you should take to the beach and then color the picture.

10. . 9
.8

Water is a clear, odorless, and tasteless liquid. The below drawing illustrates the three states of matter: solid (ice), gas (steam), and liquid (water). That water keeps going around and around and around and around and (well, you get the idea) in what we call the "Water Cycle".

IDENTIFY THE CYCLE BELOW WITH THESE WORDS: precipitation, collection, evaporation, condensation


Vapor in the air turns into water


Rain, sleet, and snow from rain clouds

Sun heats up the water and dries it up


Water running from land into Lake Erie

## 准


$\cdots$

## Evaporation

Evaporation is when the sun heats up water in rivers or lakes or the ocean and turns it into vapor or steam. The water vapor floats into the air.

## Condensation

Water vapor in the air gets cold and changes back into liquid, forming clouds. This is called condensation.

## Precipitation

Precipitation occurs when the clouds get too heavy and water falls back to the earth in the form of rain, hail, sleet or snow.

## Collection

When water falls back to earth as precipitation, it may fall back in the oceans, lakes or rivers or it may end up on land. When it ends up on land, it will either soak into the earth becoming part of the "ground water" that plants use to drink or it may run over the soil and collect in the rivers, lakes or oceans where the cycle starts all over again.

## Make it rain

One of the ways water moves through the Water Cycle is through rain. Water falls from the sky into rivers, streams, and even Cleveland Water's own water source, Lake Erie. You see rain all the time outside but did you know you can make it rain indoors?

What you need:

- Ice cubes
- Wide glass jar
- Plate
- Very hot tap water (with adult supervision)


## How to:

1 Put the ice cubes on the plate.
2. Fill jar about half way full with very hot water.

3 Cover the jar with the plate and ice cubes.
4. Watch what happens.

What did you notice when you put your plate over the jar?


3


This is an example of what part of the Water Cycle?

## What's happening?



As hot air hits the bottom of the cold plate, water vapor in the air condenses. The water vapor forms water droplets on the bottom of the plate. The water droplets drip down like rain.

The same thing happens in the atmosphere. Warm, moist air rises. The rising warm air meets colder air high in the atmosphere. The water vapor in the warm air condenses and forms water droplets. The water droplets fall to Earth as rain.

## True or False Questions

1 You should only drink water once a week. $\square$ True $\square$ False

(2) Evaporation is a part of the water cycle. $\square$ True $\square$ False

(3) You can drink water from Lake Erie without having it cleaned first. $\square$ True $\square$ False

4 Cleveland Water operates 7 days a week, 365 days a year. $\square$ True $\square$ False

5 Cleveland Water only provides water to people that live in Cleveland. $\square$ True $\square$ False

6 The heart is $73 \%$ water. $\square$ True $\square$ False

7 It is free to tour the water treatment plant. $\square$ True $\square$ False

## Color the numbers

In our home and school, water comes from a faucet. But where does the water in the faucet come from? Help color the surfing panda bear.
1 = Blue 3 = Black 5 = Green


How much water is in Lake Erie?
There are 127 trillion gallons of water in Lake Erie, which is enough to cover the entire state of Ohio!

## Uses of Water


 W X TV K I J J O X A IA D A $\begin{array}{lllllllllllllll}Y & H & L & A & U & N & D & R & Y & K & M & Q & I & R & L\end{array}$
 N LV G K E E Y I I G N S N L $\begin{array}{rlllllllllllll}R & S & R & V & Q & L & X & W & G & F & X & X & G & K\end{array}$ H $\quad$ Q $\quad$ A $\quad \mathbf{I}$ J E Y B A B T L I H C P O S S

 M Q A DC S B M B Z C E TB Q C K Z M H D I C L T J N Y I U
 Z N A J D X H K M M U D W H X

## BATHE

## BEACH

## CLEANING

COOKING

## DRINK

HAIR

## LAUNDRY

## LAWN

SWIMMING

## Looking for a speaker or plant tour?

Children in grades K-8 enjoy interactive, educational experiments and activities led by our team of speakers. This would be ideal for clubs, scouts, youth organizations and schools.

Our speakers also present at high schools, colleges, universities, chambers, rotaries, senior groups and other community organizations.

> For more information, please visit us online at: www.clevelandwater.com/EducationAndOutreach or call 216.664 .3173 .

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