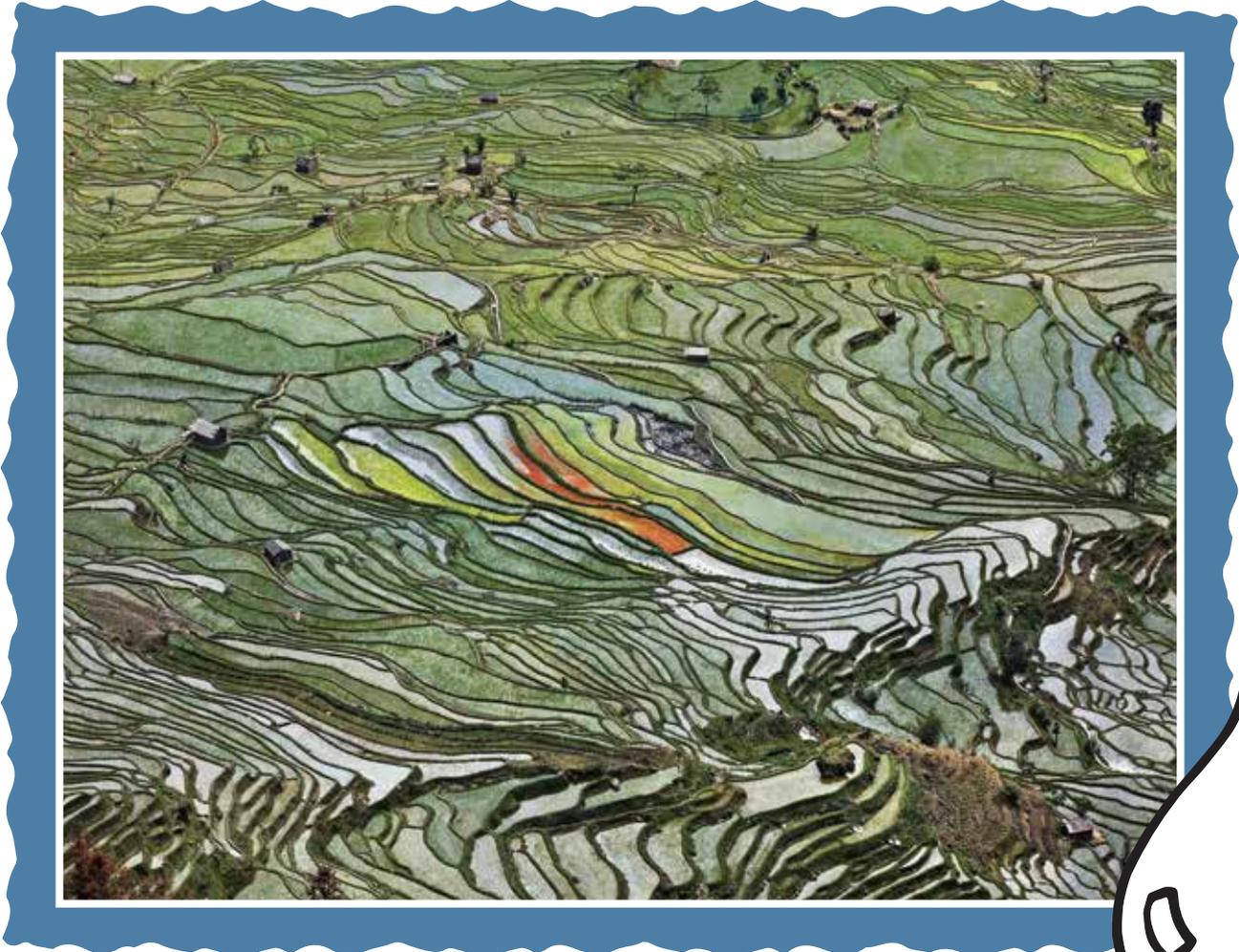


# WHY WATER?



Edward Burtynsky makes large photographs of landscapes and waterways around the world. Use this guide to learn more about Earth's most valuable resource, why we need it, and how we change it.



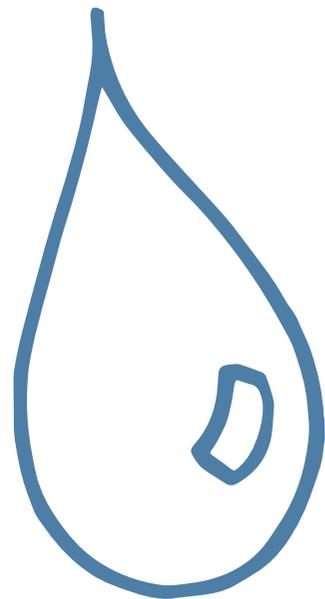
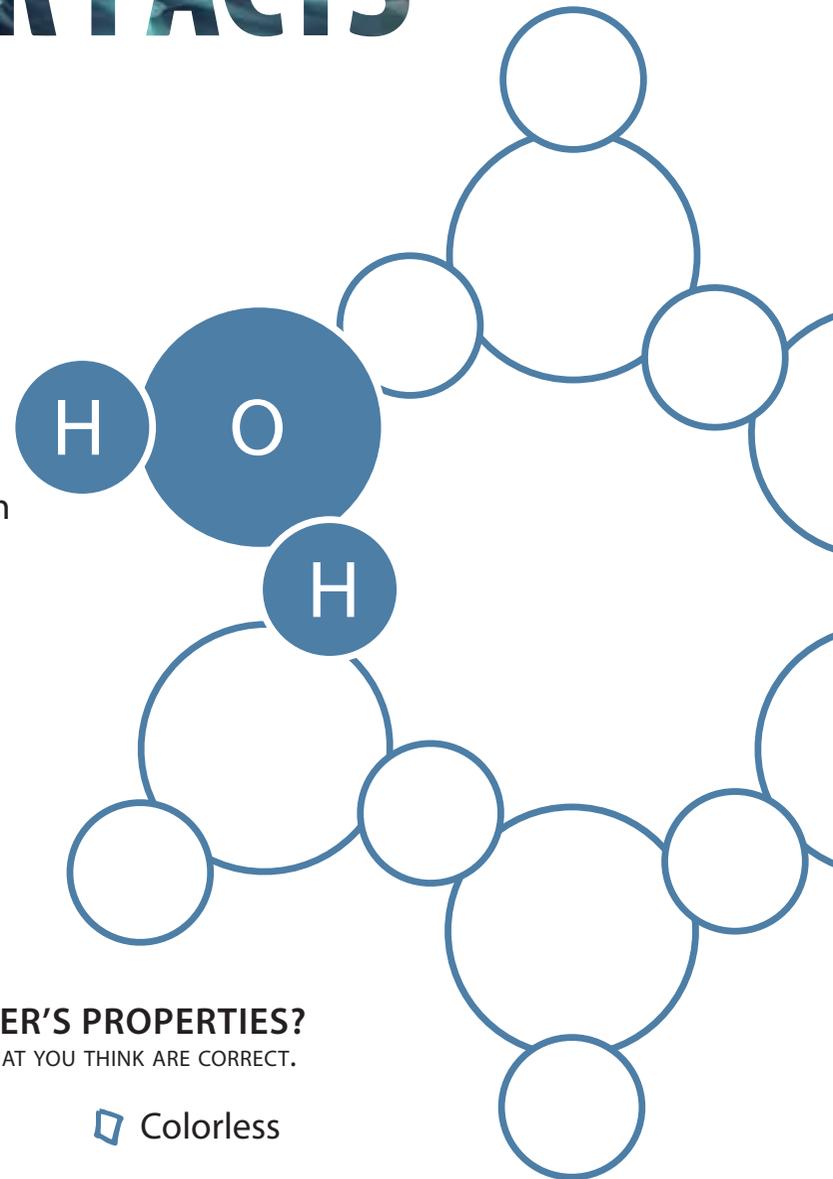
Edward Burtynsky (Canadian, b. 1955) | COVER: *Rice Terraces #2*, Western Yunnan Province, China, 2012 | PAGE 2: *Kumbh Mela #1*, Haridwar, India, 2010 | PAGE 3: *Pivot Irrigation / Suburb*, South of Yuma, Arizona, USA, 2011 | PAGE 5: *Xiaolangdi Dam #1*, Yellow River, Henan Province, China, 2011 | BACK: *Navajo Reservation / Suburb*, Phoenix, Arizona, USA, 2011 | HEADLINES: *Ölfusá River #1*, Iceland, 2012 | Digital chromogenic prints, sizes variable  
All images © Edward Burtynsky, courtesy of the artist

# WATER FACTS

## WHAT IS WATER?

CIRCLE THE CORRECT ANSWER:

- a. Two parts Hydrogen to one part Oxygen
- b. An endless resource for humans to use
- c. A liquid that flows freely in all countries



## WHAT ARE WATER'S PROPERTIES?

CHECK ALL THE BOXES THAT YOU THINK ARE CORRECT.

- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> Solid  | <input type="checkbox"/> Colorless |
| <input type="checkbox"/> Liquid | <input type="checkbox"/> Tasteless |
| <input type="checkbox"/> Gas    | <input type="checkbox"/> Odorless  |

# WHAT ARE LEVEES?

Like dams, levees have a simple but important job: they hold back water. People build levees to keep rivers or lakes from flooding low-lying land during storms

Draw an imaginary city that is threatened by water. How would you defend your city from the threat?



## WHEN YOU GET HOME

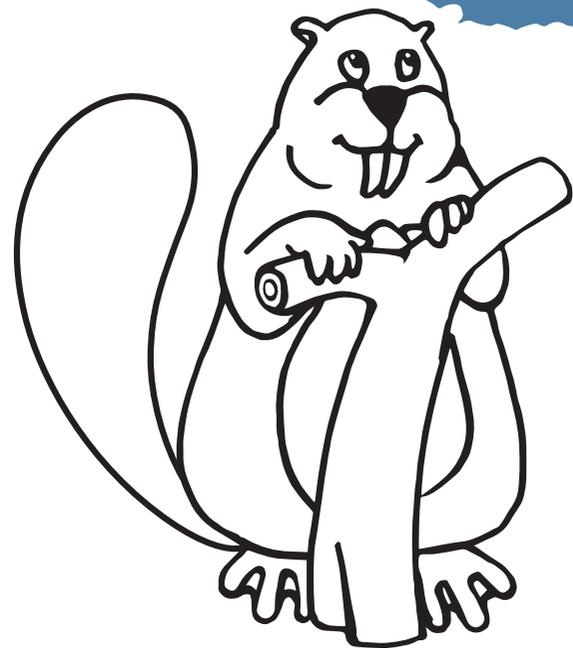
Look up other cities that are threatened by water. How are they protecting themselves against the threat?



In the Netherlands, people have built their villages close to the water for many centuries. Rotterdam is surrounded by water on all sides and is 80 to 90 percent below sea level.

# WHAT IS A DAM?

People from the beginning of time have constructed dams, or barriers, across waterways to supply water for farming and drinking. The ancient Egyptians built earth dams that raised the river level and diverted water into canals to irrigate fields above the river.



COLOR ME IN WHEN YOU GET HOME.



## DID YOU KNOW?

A hydroelectric power dam stores energy as water passes through a device called a turbine. Turbines contain metal coils surrounded by magnets. When the magnets spin over the metal coils, they produce electricity. When water falls from a dam, it spins the magnets and creates energy. What are some consequences of dams? Lists the pros and cons below:

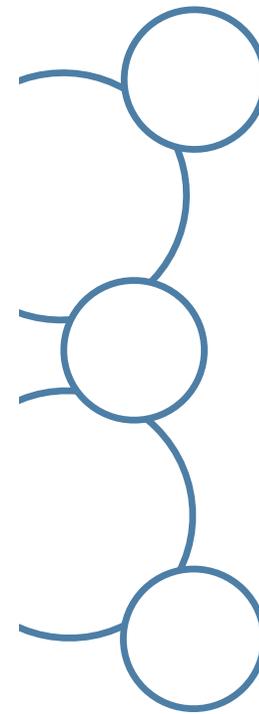
PROS

CONS

.....  
.....  
.....

# SACRED WATER

The Kumbh Mela is an annual festival in India where communal bathing celebrates the triumph of good over evil.



## DID YOU KNOW?

The Kumbh Mela festival can be seen from space. It is the largest gathering of people in human history. How many people attended the 2013 festival?

- a. 1 million    b. 500,000    c. 2 million    d. 100 million

## WHAT OTHER RITUALS USE WATER?

.....  
.....  
.....  
.....

# AGRICULTURE

n. the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products.



LOOK

## TAKE A CLOSER LOOK!

In the Yuma desert, Arizona farmers are growing crops without one of the 3 elements listed to the right. Which element is missing?

## WHAT 3 ELEMENTS DO PLANTS NEED TO GROW?

UNSCRAMBLE THE WORDS BELOW TO FIND THE ANSWER.

E T A W R

R A T E H

L G T U H N S I



Imagine you are a farmer in the desert. Draw the machine you would use to water your land.

Humans have figured out how to bring water to the desert. Where in the image to the left do you see the presence of water?

.....  
.....

LOOK

## TAKE A CLOSER LOOK!

What clues tell you this?

.....

## WHEN YOU GET HOME

On a computer look up Yuma, Arizona. Where do you think its water comes from? What body of water is closest to it?

