What is NEWEA?

New England Water Environment Association

NEWEA

WORKING FOR WATER QUALITY

PAGE 1: INTRODUCTION

Introduce yourself

I am in the water or wastewater field (or whatever field you are in)

Begin each presentation with: What is NEWEA?

Use the NEWEA letter package and tips below

K & GR. 1:

- I belong to an organization called the New England Water Environment Association.
- I realize this is kind of long and hard to say and I am here to talk about it a lot, so…to make things a little easier, let's take the first letter of every word.
- "New" begins with what letter? When a student answers correctly, ask them to come up and hold the letter for the other students to see.
- Continue with each letter. When you have NEWEA spelled out, stand behind the student holding the "N" and ask him/her to hold the letter up for everyone to see, and remind everyone what letter "New" begins with. Continue for each letter. Then hold up the sheet that says "New England Water Environment Association."

GR. 2-5:

- I belong to an organization called NEWEA.
- Has anyone has ever heard of NEWEA?
- Go through the letters one at a time to get the students to figure out what the letters stand for. You may need to provide a few hints. Hold up the "N"- some hints: the "N" and the "E" go together, ask the students what state they live in and if they know what the area is called for the group of states that their state is a part of…if they still don't get it,…the Pilgrims came over from where? They settled in an area that wasn't old but…?
- Hold up the "W"…what am I here to talk with you about? Something you can't live without.
- Continue each letter until NEWEA is spelled out. Stand behind the student holding the "N" and ask him/her to hold up the letter and in a nice loud voice remind the class what "N" stands for…continue with all the letters and then hold up the sheet that says "New England Water Environment Association."

Materials with the NEWEA website listed are included in the giveaway bag. Encourage students to visit the website with their parents to find out more about the organization.

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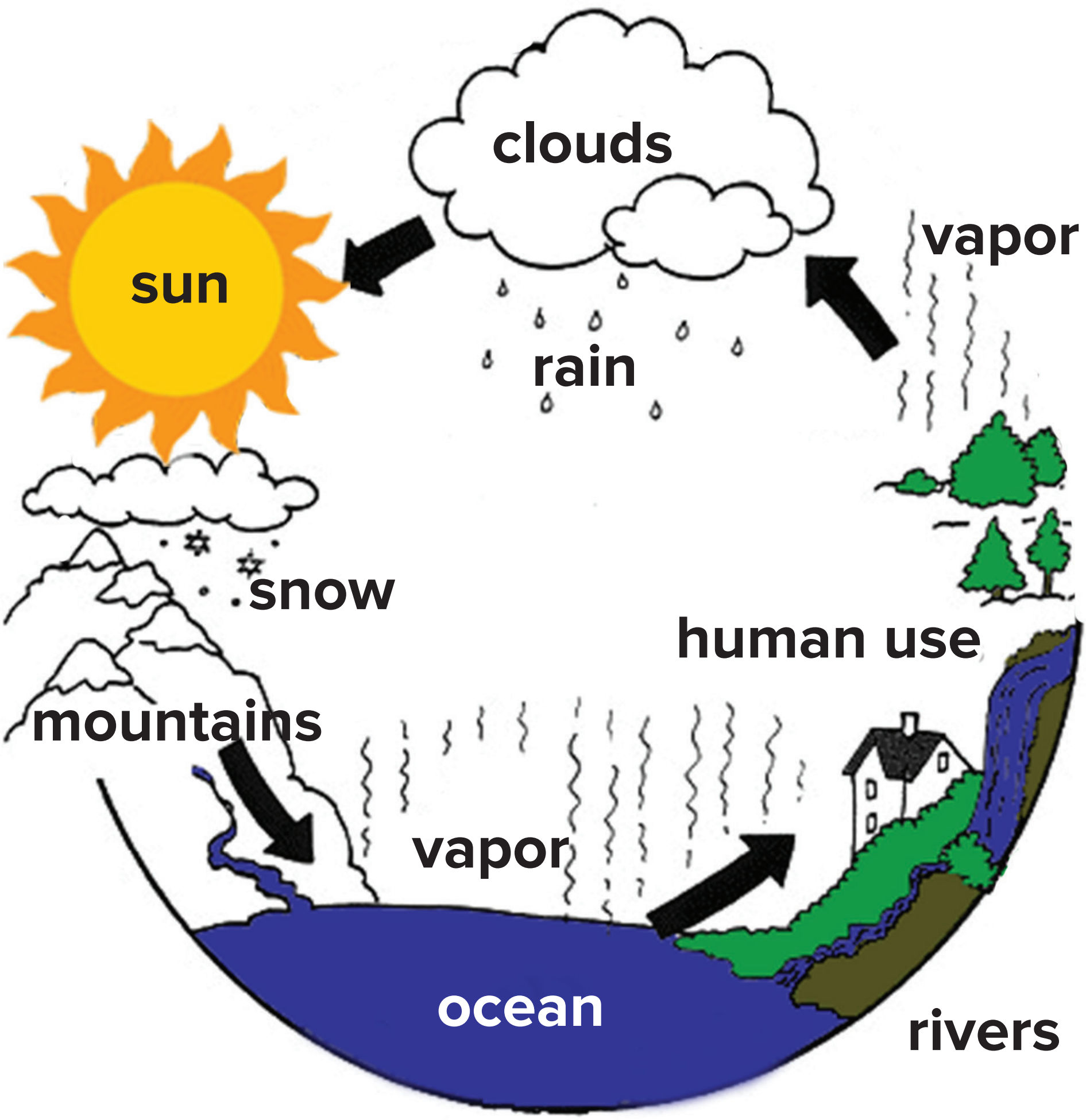
Water Cycle



NEW ENGLAND WATER ENVIRONMENT ASSOCIATION
NEWEA
EDUCATION OUTREACH

PAGE 2: FIRST TIME

- Introduce Water Cycle picture
- There is not a factory where someone is making water for us to use.
  We use water from the environment, then we clean it and return it back to the environment. Water is the ultimate in recycling! That is why it is so important to keep our water clean.
- The water you used this morning to brush your teeth could have been a dinosaur's bath water- that is how long our water has been around. Some day your great grand children will be drinking the same water you used today.

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PAGE 2: SECOND TIME—CONCLUSION

CONCLUSION (following entire presentation)
You can always go straight to the conclusion from any slide if you run out of time.

CLOSING:

- Hold up the water cycle picture
- It is important to protect water because water is continuously recycled and reused. So we need to protect it and keep it clean.

Q&A

(As time permits)
Use the flushing toilet and ask the students questions. For every correct answer, the student gets to flush the toilet. Try to allow everyone in the class a chance to flush.

SAMPLE QUESTIONS:

- What does the "N" in NEWEA stand for?
- Name one way that you use water.
- Where does the water go after it goes down the drain?
- What is the pipe called that the wastewater travels through?
- Where does the cleaned wastewater go?

END

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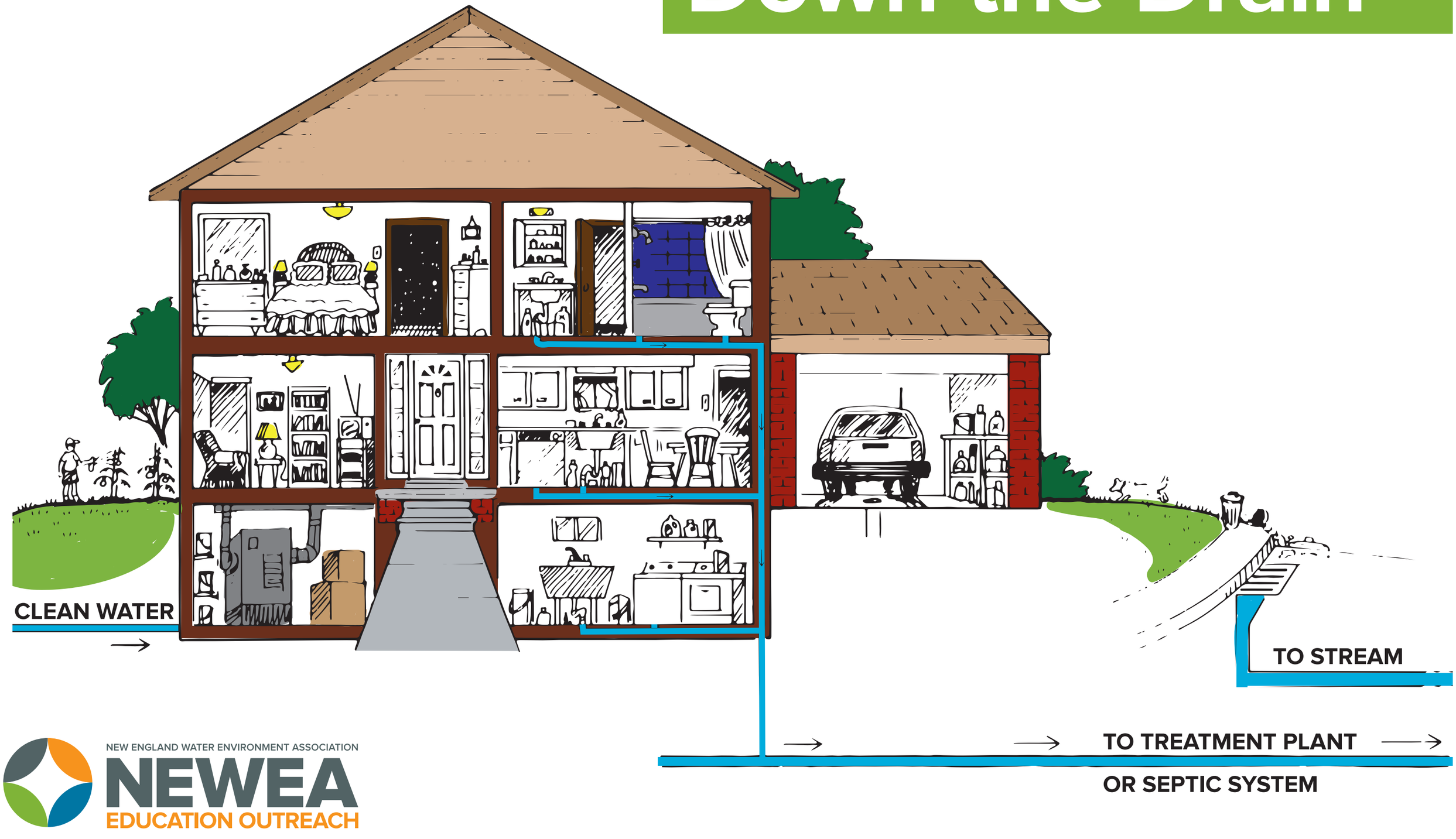
Down the Drain



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PAGE 3

- Ask “Who used water today?” (Almost every hand will go up)
- What did you use water to do?
- Hold up the picture of the cutout house.
- Ask the kids for ideas on how they use water in the house.
- As they answer, go room by room and repeat the ways the students use water.
- Start with the kitchen; we use water to wash dishes, either in the sink or a dish washer, we use the garbage disposal, we rinse off fruits and vegetables, we dump out liquids and ice cubes still in a cup, etc.
- Make the point that it’s not just water going down the drain, it is water plus…bits of food, soap, etc.
- Next, talk about doing laundry; point to the washing machine, ask students if they have ever had anything in their pockets when it went into the washing machine, but it was gone when it came out.
- Save the bathroom for last…talk about brushing teeth, taking baths and showers, and finally the toilet.
- Pull out the toy toilet and give it a flush!
- Raise your hands if you flushed a toilet already today.
- Remind students that we all flush toilets every day; we have to because, as humans, we have to go the bathroom, we have to brush our teeth, we have to take baths and showers—these things keep us healthy.
- Explain that when we use water this way and it goes down the drain, we call that wastewater.

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Oceans & Rivers

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PAGE 4: FIRST TIME

- Where does the wastewater go? (Some students may begin by saying the “ocean” or “rivers.” Tell them they are right and hold up the picture of the receiving water.
- It doesn’t go straight from the house to the ocean.
- Ask how the wastewater gets from the house to the ocean or rivers.
- Through a sewer. (While some treatment plants discharge to groundwater, this concept is a little advanced for K-2, but may be appropriate to mention for 3rd to 5th graders, especially if it is applicable to your town.)

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PAGE 4: SECOND TIME

Hold up the oceans and rivers picture while the students talk about uses of receiving waters.

RETURN TO PAGE 2

Sewers

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PAGE 5

- Hold up the picture of the sewer.
- A sewer is a pipe underground that wastewater or sewage travels through.
- Wastewater doesn’t stay in the sewers, it travels through the sewers.
- Where does it go from there?

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Septic System

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PAGE 6

- Not all buildings are connected to a sewer; others are connected to a septic system system.
- Hold up the picture of a septic system.
- Ask students who has a septic in their yard.
- Explain that a septic system is a tank that collects wastewater, and where solids settle to the bottom and need to be pumped out by a truck.

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Treatment Plant

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PAGE 7

- If you do not have a septic system in your yard, then the wastewater will go through a sewer.
- Wastewater doesn't travel directly from homes to the ocean or rivers; something happens to it in between…it gets cleaned at a wastewater treatment plant.
- Hold up the picture of the Wastewater Treatment Plant.
- A wastewater treatment plant is different from a water treatment plant. A water treatment plant cleans the water before we use it, and a wastewater treatment plant cleans the water after we use it, before it goes back into the environment.

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Sludge

Influent

Effluent

PAGE 8

- Hold up the picture of the influent/effluent
- When the water comes into the treatment, plant it's dirty (remind them it's our dishwater, shower water, toilet water).
- The job of the wastewater treatment plant is to clean the water before putting back into the environment.
- Why do you think it is important that water be cleaned before going into the environment?
- What are some uses of oceans and river waters?

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