



THE VIRGINIA ADULT LEARNING RESOURCE CENTER

Virginia Commonwealth University

Plumbing Lesson One: Help! Call the Plumber

Facilitator Guide

Building Basics was paid for under an EL Civics grant from the U. S. Department of Education administered by the Virginia Department of Education. It was paid for under the Adult Education and Family Literacy Act of 1998; however, the opinions expressed herein do not necessarily represent the position or policy of the U. S. Department of Education, and no official endorsement by the U. S. Department of Education should be inferred. This document was designed and created by the Virginia Adult Learning Resource Center at Virginia Commonwealth University, 817 West Franklin Street, Suite 221, P.O. Box 842037, Richmond, VA 23284-2020. It may be reproduced for nonprofit, educational purposes only.

Plumbing Help! Call the Plumber



Building Plan / Blue Prints / Specs (Getting Ready to Teach)

- Lifeskill Objective:** Learners will be able to identify common home appliances and fixtures related to plumbing and describe common home plumbing problems.
- EFF Skills:** Speak So Others Can Understand, Work Together, Cooperate With Others, Convey Ideas in Writing, Listen Actively, Observe Critically, Solve Problems and Make Decisions, Take Responsibility for Learning
- SCANS Skills:**
- Resources (allocate facility and material resources)
 - Interpersonal (participate as member of a team; teach others; work with individuals from a variety of ethnic, social or educational backgrounds; work and communicate with co-workers; provide basic leadership and negotiation skills)
 - Information (acquire and evaluate information related to common home plumbing problems; this information is then interpreted and communicated through a variety of methods)
 - Systems (provides basic understanding of systems)
- Lesson Length:** 2-3 hours



Tools

- Activity #1:** Home Plumbing Repairs Cartoon—overhead
Home Plumbing Repairs Cartoon--cut into four pieces for puzzle activity;
multiple sets for small group activity
- Activity #2:** Apartment Appliances and Fixtures--overhead
Apartment Appliances and Fixtures Handout
Can You Do This?—overhead
Can You Do This? Handout
- Activity #3:** House Nightmare--overhead
Home Plumbing Problem Pictures--overheads or large versions
Home Plumbing Problem Vocabulary Handout A
Home Plumbing Problem Vocabulary Handout B

Activity #4: Apartment Appliances and Fixtures Handout
Blue Colored Pencils--1 for every 2 learners
Apartment Manager Call Scripts Handout A--cut in half for pair activity
Apartment Manager Call Scripts Handout B--cut in half for pair activity
Apartment Manager Call Scripts Handout C--cut in half for pair activity

Finishing

Work: Plumbing Problem Checklist Handout

Optional additional resources:

Basic Plumbing. Sunset Books: 1995.

Hedden, Jay. Modern Plumbing for Old and New Houses. Creative Homeowner Press: 1979.

National Center for Construction Education and Research. Plumbing NCCER Trainee Guide Level 1.
Prentice Hall: 2000.

Target Vocabulary

Nouns:

appliance	bathtub	block	clog	commode
crack	dishwasher	drain	drip	fixture
food disposer	hot water heater	lavatory	leak	
low water pressure	pipe	running toilet	shower	sink
toilet	washer	water hammer		

Verbs:

block	clog	drain	drip	fix
install	leak	repair		

Adjective:

worn out

Laying the Foundation Warm-Up / Presentation



Actions	Materials
<p>Activity # 1: Plumbing Cartoon Puzzle</p> <p>1. Before class begins, the instructor places one piece of the Home Plumbing Repairs Cartoon at each learner's place.</p>	<p>Home Repairs Cartoon– Cut Up for Puzzle Activity</p>
<p>2. Ask learners to walk around the room and find the people with the missing parts of their puzzle. When the four people with the matching pieces of the cartoon puzzle have found each other, ask them to sit down together as a group.</p>	
<p>3. Place the Home Plumbing Repairs Cartoon on the OHP. In their small groups, have learners discuss the cartoon. On the board, write the following questions:</p> <p>Y Where is this couple? Y What is happening in this picture? Y What is the husband trying to do? Y What is the wife saying? Y What will they do next?</p>	<p>Home Repairs Cartoon– Overhead</p>
<p>4. After a few minutes, have the groups report their ideas to the whole group. Write plumbing problem vocabulary elicited from the group discussion on the board.</p> <p>Some possible words to elicit are: <i>basement, pipes, wrench, leak, fix or repair, flood, plumber.</i></p>	
<p>5. Ask the group this transition question:</p> <p>Y Who fixes things in your home?</p>	

Actions	Materials
<p>Activity #2: Can You Do This?</p> <p>1. After learners from the group have responded to the transition question, place Apartment Appliances and Fixtures on the OHP. Give each learner a copy of the Apartment Appliances and Fixtures Handout.</p>	<p>Apartment Appliances and Fixtures—Overhead</p> <p>Apartment Appliances and Fixtures Handout</p>
<p>2. Ask learners for examples of the word <i>appliance</i> in the apartment building. Then ask for examples of the word <i>fixture</i> in the picture. If possible, ask a higher level student to explain the difference between these words. For example: An appliance is always a machine, makes our work easier and faster; not all people have them in their homes. A fixture is usually part of the house when it is built, a basic thing every home should have, not a machine.</p>	<p>Apartment Appliances and Fixtures—Overhead</p> <p>Apartment Appliances and Fixtures Handout</p>
<p>3. Model each of the words for appliances and fixtures in the apartment building and have learners repeat.</p>	
<p>4. Give each learner the Can You Do This? Handout. Place the Can You Do This? transparency on the OHP and tell the group that they will be asking each other if they can fix, install, or repair the appliances and fixtures pictured in the apartment building. Ask a volunteer to tell the group the meanings of the words: <i>fix/repair</i> and <i>install</i>. Discuss briefly with the group to ensure that all learners understand the meanings of these verbs. You may want to refer to the cartoon to remind learners of the meaning of <i>fix</i> or <i>repair</i>.</p>	<p>Can You Do This?—Overhead</p> <p>Can You Do This?—Handout</p>
<p>5. Write the question “Can you fix a faucet?” on the board. Then, under it write both the long and the short forms of the positive and negative answers to this question.</p> <p>Example: Can you fix a faucet?</p> <p>Short Answer Long Answer Yes, I can. Yes, I can fix a faucet. No, I can’t. No, I can’t fix a faucet.</p>	
<p>6. Ask the learners which answer they normally hear people use in conversation. Confirm that we usually use the short answer in conversation.</p>	

Actions	Materials
<p>7. Perform the model on the Can You Do This? Overhead with a learner with strong speaking skills. Then practice using these short answers by asking individual learners an example question (about a faucet or a dishwasher).</p>	<p>Can You Do This?–Overhead</p> <p>Can You Do This? Handout</p>
<p>8. After practicing the questions and short answers with several learners, ask the group, "Who can fix a dishwasher?" As learners respond, write the name of one of the learners who responded yes to your question on the first line on the transparency. Then tell the learners that you will write the long answer to the question on the line. Ask each learner to write this sentence or an original answer on the first line on their Handouts. Have learners check each others' sentences to ensure that all learners wrote the long answer form.</p> <p style="text-align: center;">Example: "Tina can fix a dishwasher."</p>	<p>Can You Do This?–Overhead</p> <p>Can You Do This? Handout</p>
<p>9. Invite learners to stand up and walk around the room, asking the questions on the Can You Do This? Handout to different classmates. If a classmate answers, No, I can't, the learner should move on and ask another person. Tell learners that when they find a classmate who answers yes to a question, they should write a sentence about that person under You Report on their handouts. Assist beginning learners by accompanying them as they ask their classmates the first few questions.</p>	<p>Can You Do This? Handout</p>
<p>10. After learners have filled out their surveys, ask the group to sit down. Ask them "Who can...?" for each of the questions and have learners volunteer their answers. Practice both the short and long answers to the questions.</p>	

Building on the Foundation Practicing the New Language



Actions	Materials
<p>Activity #3: <i>What's the Plumbing Problem?</i></p> <p>Place the House Nightmare Overhead on the OHP. Ask the learners about what is happening in this house. Then ask them, "Have you ever had these problems in your home?" Tell learners that in this activity they will be learning the names for the common home plumbing problems they see in the picture on the OHP.</p> <p>Using the Home Plumbing Problem Pictures, hold up the first picture in the set and say the word or phrase. Have learners repeat it.</p> <p>Pointing to the House Nightmare Overhead on the OHP, ask the questions:</p> <p style="padding-left: 40px;">Y Where is there a _____ in this house? Y What is happening in this room? Y Are there any other problems in this room?</p> <p>Rephrase, if necessary, and repeat the sentences that learners contribute, using the new vocabulary words.</p> <p style="padding-left: 40px;">Example: <i>"Right. There is a clog in the sink in the kitchen. The man is trying to fix the kitchen sink."</i></p> <p>Repeat this process for each of the 10 Home Plumbing Problem Pictures.</p> <p>Give each learner a Home Plumbing Problem Vocabulary Handout based on their level. Beginners receive Handout A. Mid- and higher level learners receive Handout B. They will need this as a reference for the last activity.</p>	<p>House Nightmare–Overhead</p> <p>Home Plumbing Problem Pictures</p> <p>Home Plumbing Problem Vocabulary Handout A</p> <p>Home Plumbing Problem Vocabulary Handout B</p>

Actions	Materials
<p>Activity # 4: <i>Help! Call The Plumber (A Role Play)</i></p> <p>Ask each learner to take out the Apartment Appliances and Fixtures Handout, used earlier in <i>Activity #1</i>. Pair learners by language level and ask them to sit down together. Give each pair a blue colored pencil.</p> <p>Give each partner a section (Script #1 or Script #2) of one of the Apartment Manager Call Scripts Handouts. Beginner pairs get Handout A, mid-level pairs get Handout B, and higher level pairs get Handout C.</p> <p>In this role play, the partners will take turns playing an apartment manager and a plumber. The partner playing the manager will call the plumber and tell him or her what problems the different apartments are having. The other partner plays the apartment plumber and needs to draw the problems on their own Apartment Appliances and Fixtures Handout.</p> <p>Then, the plumber repeats all of the problems back to the apartment manager to be sure that he or she understood everything that needs to be fixed. As the partner playing the plumber repeats the problems back to the manager, he points to his Handout, showing what he drew. The apartment manager checks that all of the problems were correctly drawn on the apartment building picture.</p> <p>Partners switch roles and the new apartment manager reads Script #2. The partners follow the same steps as they did in the first role play.</p> <p>Model this role play in front of the group with a learner with strong speaking skills before the pairs do this on their own. Explain what you are doing at each step.</p> <p>Invite pairs to do the role plays. Circulate among the groups to assist each pair, as necessary.</p> <p>If time permits, have several pairs perform the role play for the whole group.</p>	<p>Apartment Appliances and Fixtures Handout</p> <p>Apartment Manager Call Scripts Handout A</p> <p>Apartment Manager Call Scripts Handout B</p> <p>Apartment Manager Call Scripts Handout C</p> <p>Blue Colored Pencils</p>

Finishing Work
Extension or Out-of-Class Practice



Actions	Materials
1. Have learners take the Plumbing Problem Checklist Handout home. They can check these appliances and fixtures and make a list of any plumbing problems they have in their homes.	<i>Plumbing Problem Checklist Handout</i>



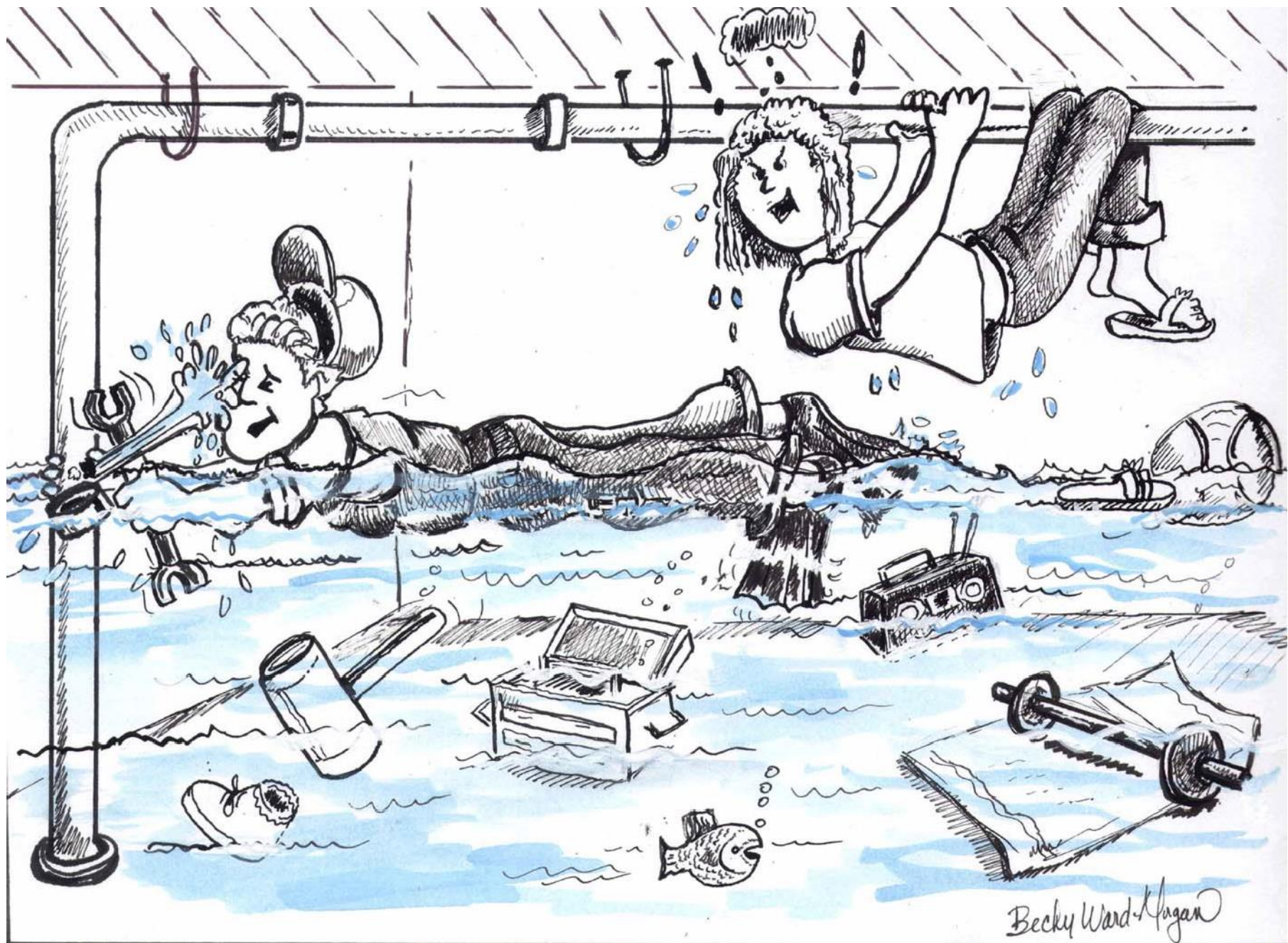
THE VIRGINIA
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Plumbing
Lesson One: Help! Call the Plumbers

Facilitator Materials

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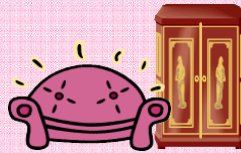
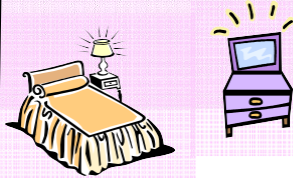


lavatory sink



commode

tub



ice maker



dishwasher

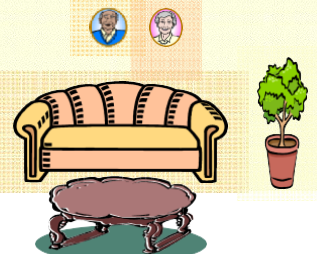


refrigerator

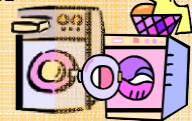


shower

toilet



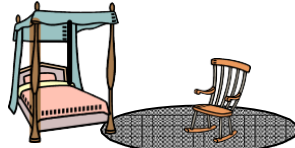
washing machine
washer



dryer



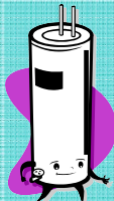
drain pipes



furnace

hot water heater

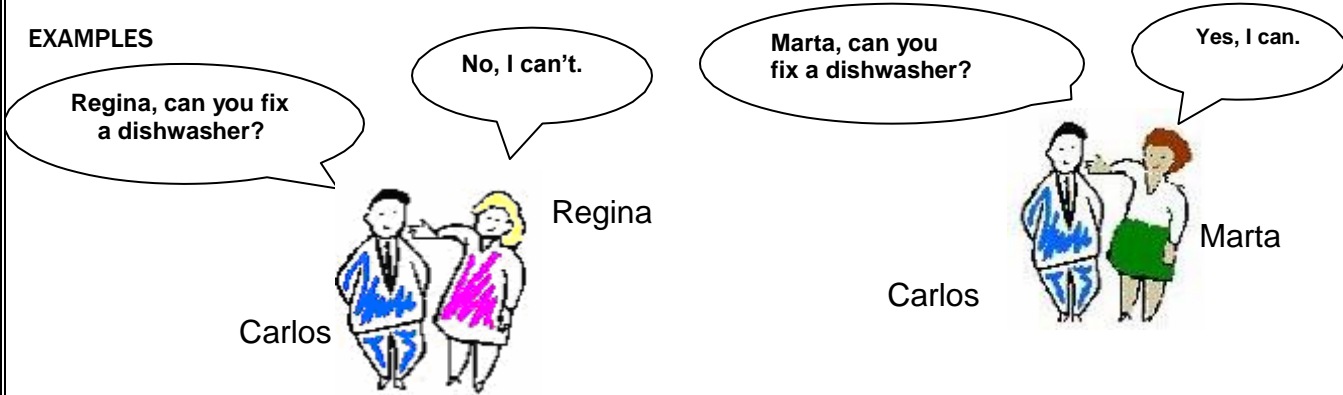
floor drain



Activity #2
CAN YOU DO THIS?
CLASS SURVEY

Walk around the room and ask your classmates to answer the questions about these house appliances and fixtures. Keep asking different classmates the question until you find a person who answers, "Yes, I can." Listen first to the examples.

EXAMPLES



YOU ASK

YOU REPORT

Ex. Can you fix a dishwasher?

1. Can you fix a food disposer?

2. Can you install a faucet?

3. Can you repair a toilet?

4. Can you fix a sink drain?

5. Can you install a washing machine?

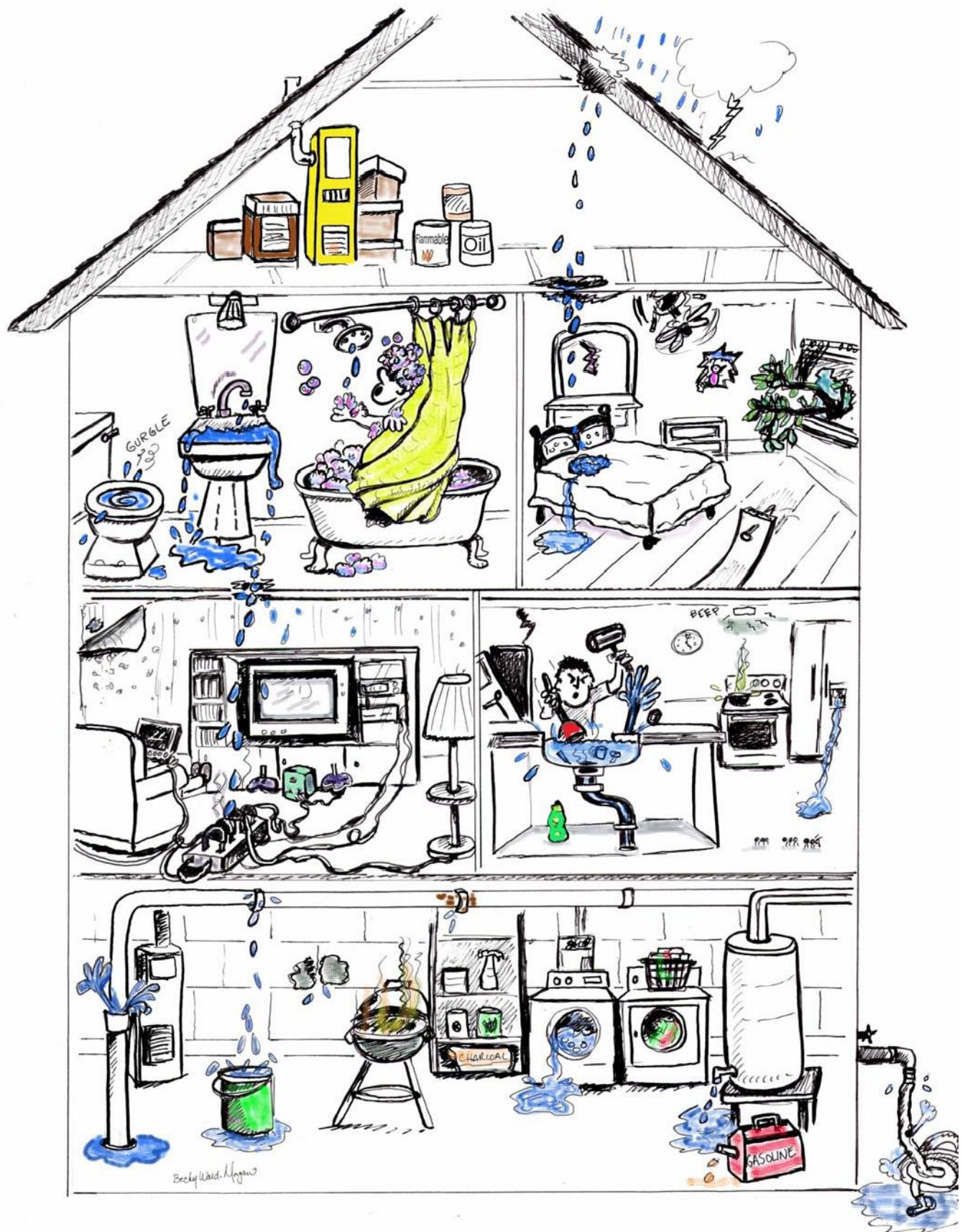
6. Can you install a bath tub?

7. Can you fix a pipe?

8. Can you install a shower head?

9. Can you repair a kitchen sink?

10. Can you fix an ice maker?



Activity #2: What's the Plumbing Problem? Key to Home Plumbing Problem Pictures

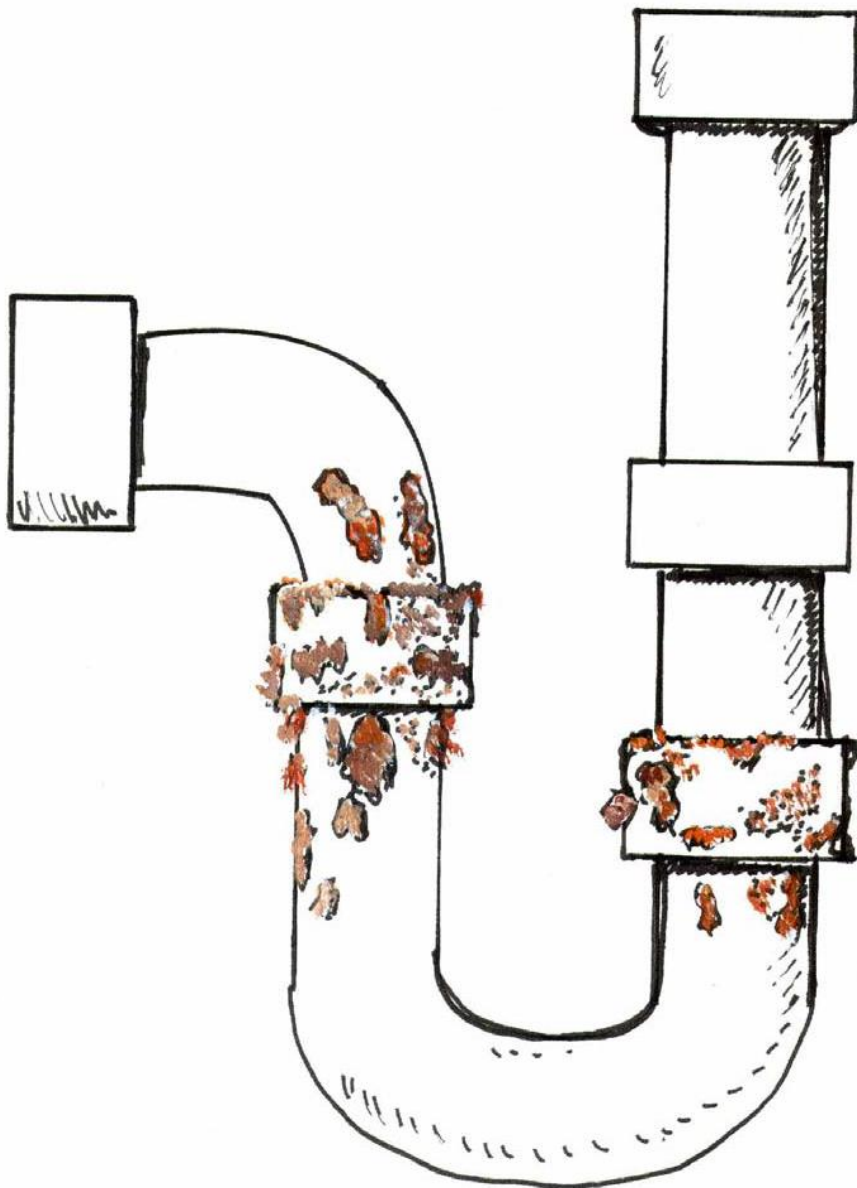
The following large versions of the **Home Plumbing Problem Pictures** are labeled by number only, to make them more useful in classroom activities. The type of problem depicted in each picture is listed below. Show **Picture #11** at the end of the activity for class laughs.

Picture #1	A Dripping Faucet/A Leaky Faucet
Picture #2	A Clogged Drain/A Blocked Drain
Picture #3	A Broken Part/A Bad Part
Picture #4	A Rusty Pipe
Picture #5	Water Hammer/Noisy Pipes
Picture #6	Running Toilet
Picture #7	Low Water Pressure
Picture #8	A Slow Drain
Picture #9	A Cracked Pipe/A Broken Fitting
Picture #10	No Hot Water/A Broken Water Heater
Picture #11	Snake in Toilet

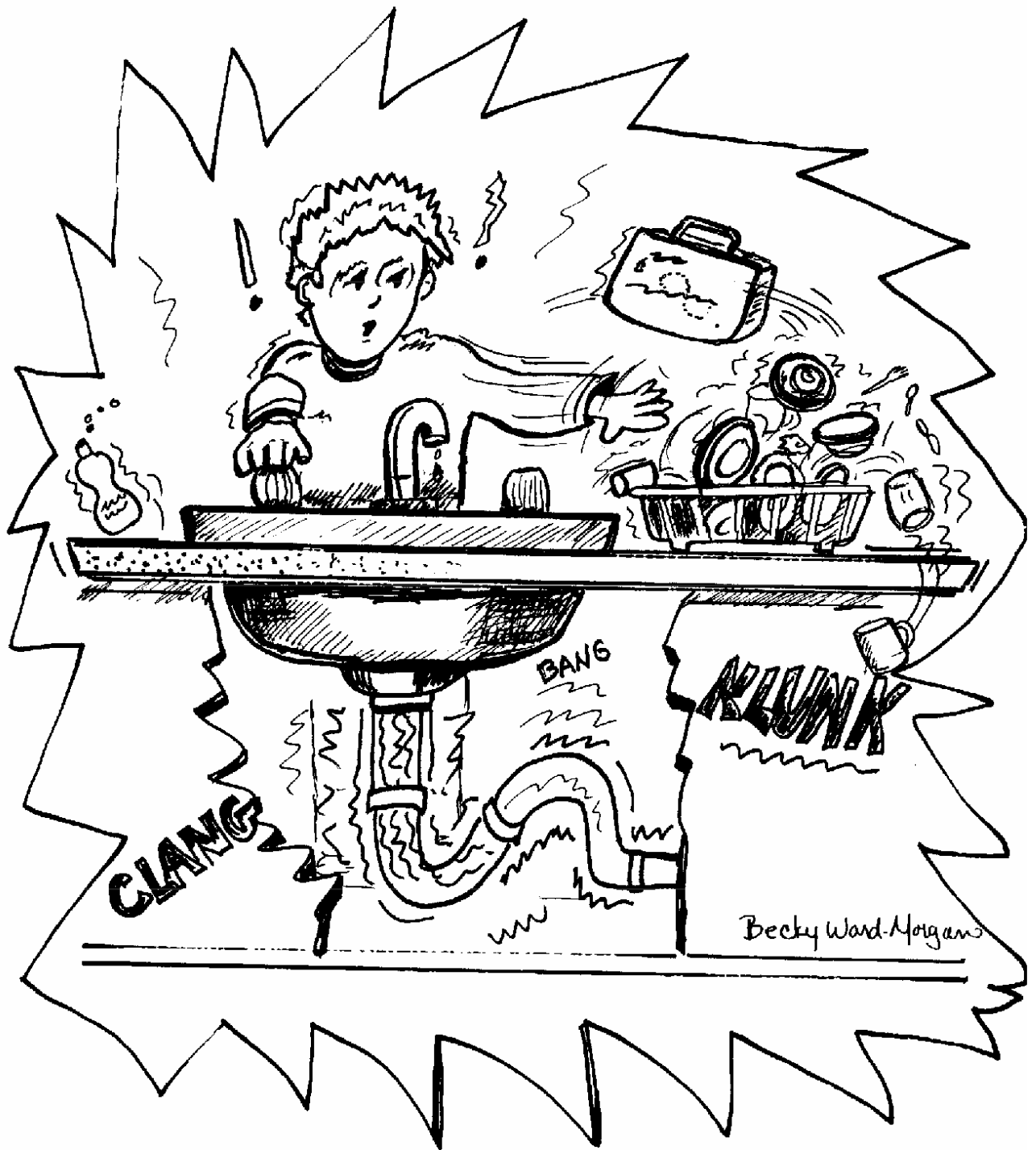


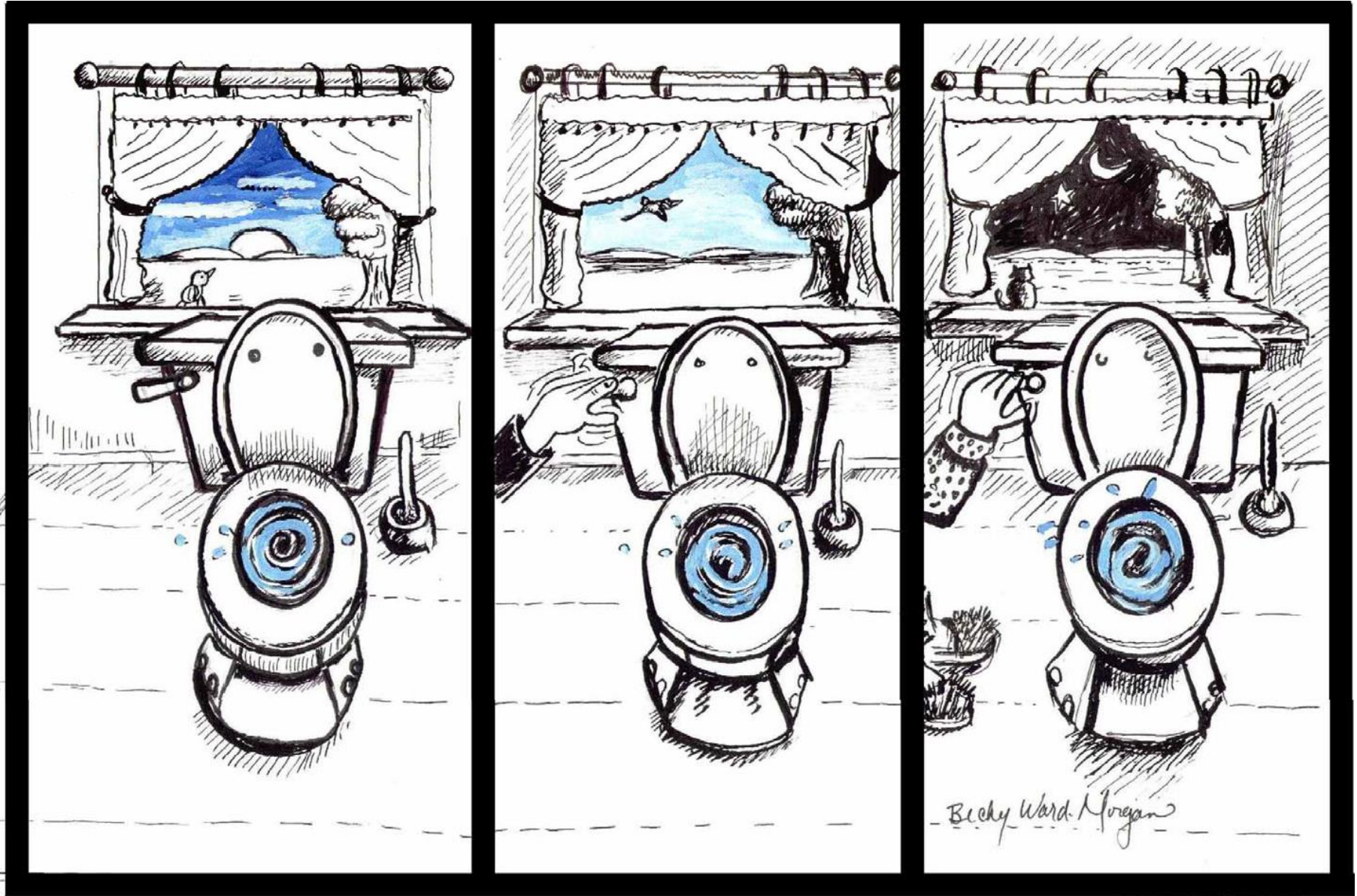




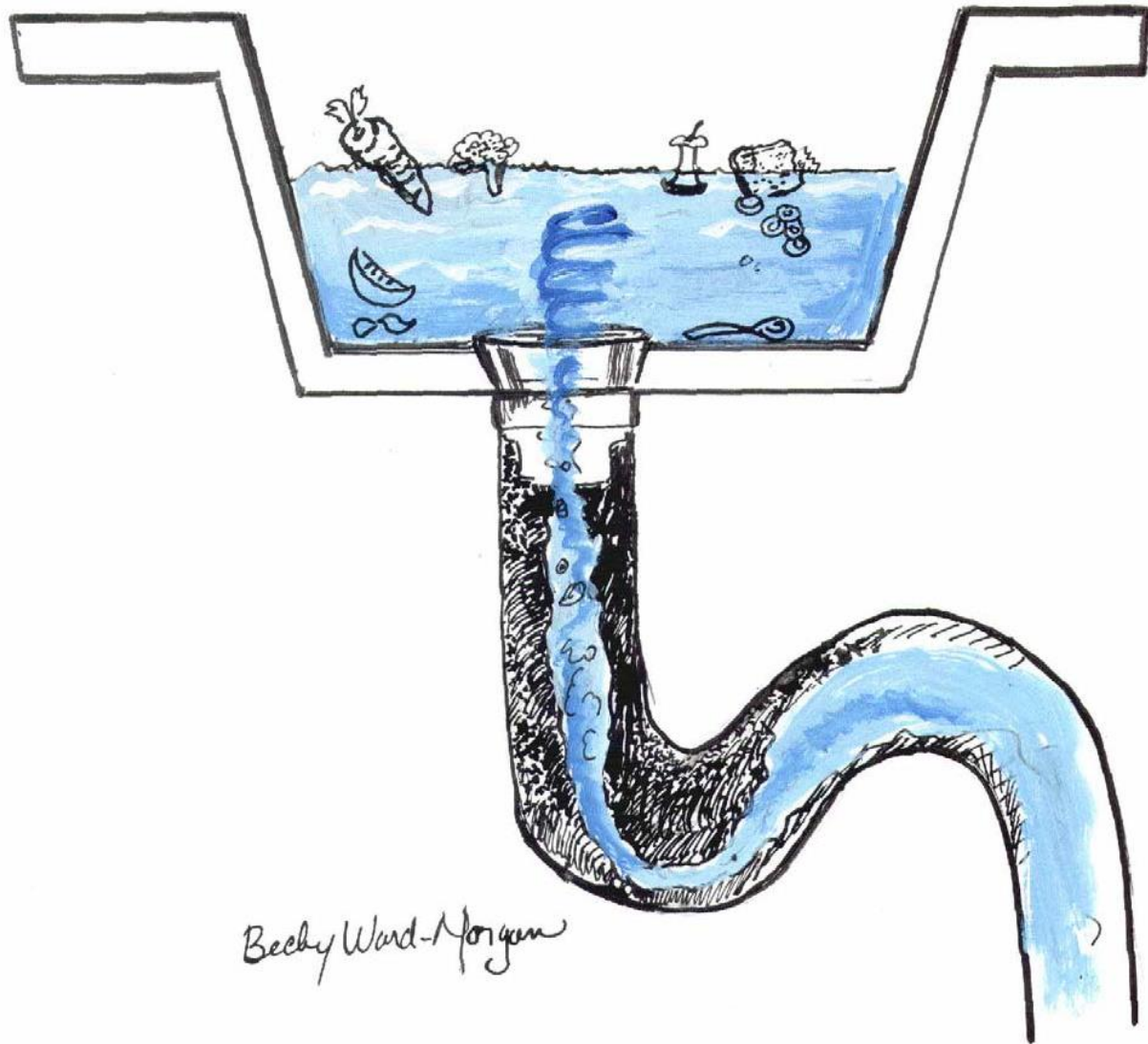


Becky Ward Morgan

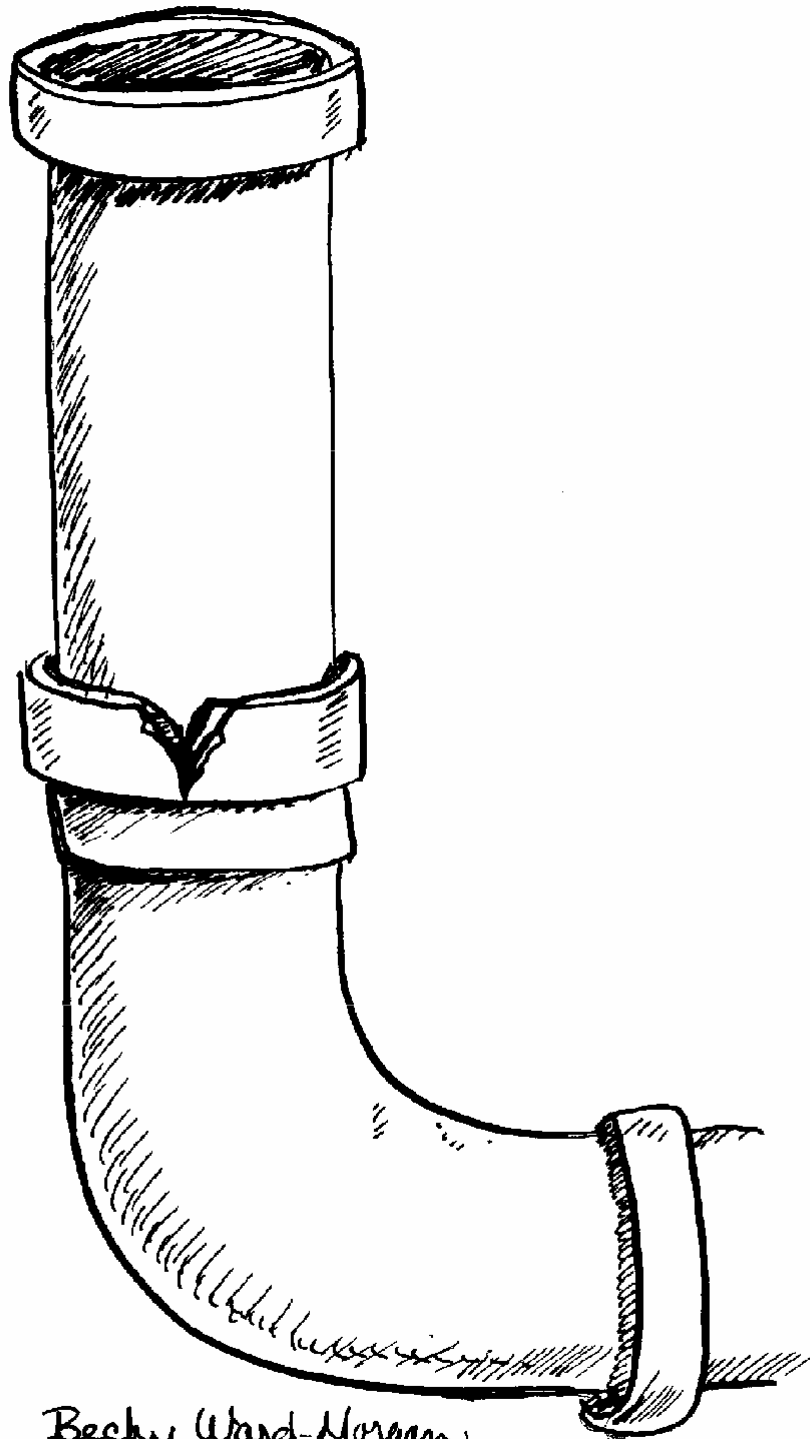








Becky Ward-Morgan



Becky Ward-Morgan





Activity #3: Home Plumbing Problem Vocabulary

Handout A



Look at each picture below. Choose a word or phrase that best describes the problem you see in each picture. Write the missing letters to complete the words.

dripping
running
rusty

slow
blocked
broken

clogged
leaky
worn out

cracked
noisy
low

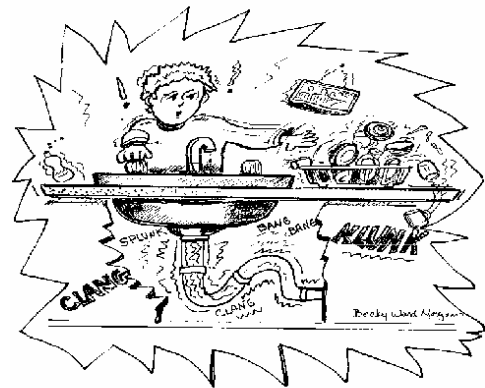
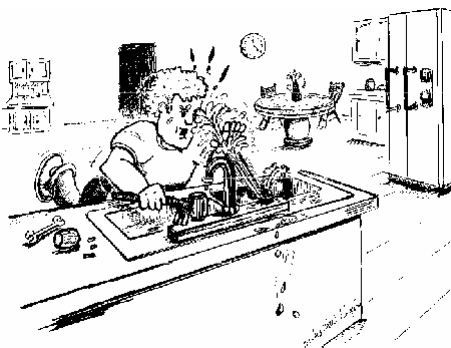
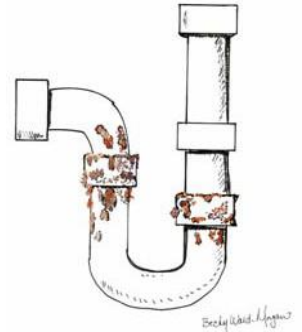
1. a dripping faucet
a leaky faucet



2. a clogged drain
a blocked drain



3. a rusty pipe



Activity #3: Home Plumbing Problem Vocabulary

Handout A



Look at each picture below. Choose a word or phrase that best describes the problem you see in each picture. Write the missing letters to complete the words.

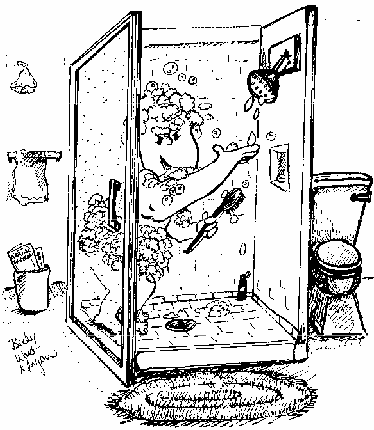
dripping
running
rusty

slow
blocked
broken

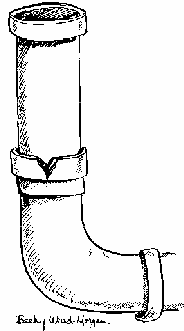
clogged
leaky
worn out

cracked
noisy
low

6. low water pressure



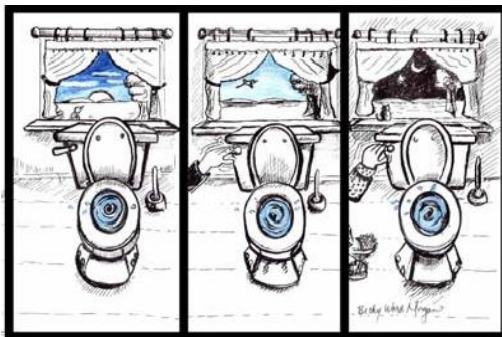
7. a cracked pipe



8. a slow drain



9. running toilet



10. no hot water

a broken water heater



Activity #3: Home Plumbing Problem Vocabulary

Handout B



Look at each picture below. Choose a word or phrase that best describes the problem you see in each picture. Write it on the line above the picture.

dripping
running
rusty

slow
blocked
broken

clogged
leaky
worn out

cracked
noisy
low

1. a dripping faucet

a leaky faucet

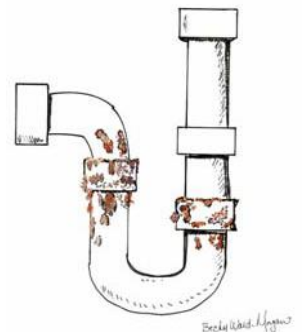


2. a clogged drain

a blocked drain

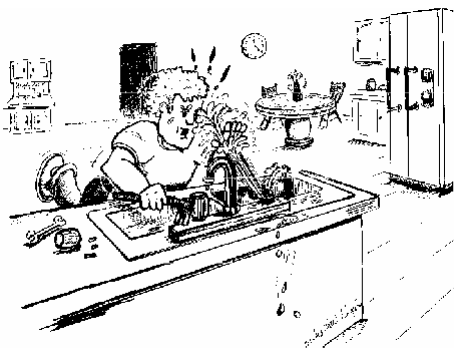


3. a rusty pipe



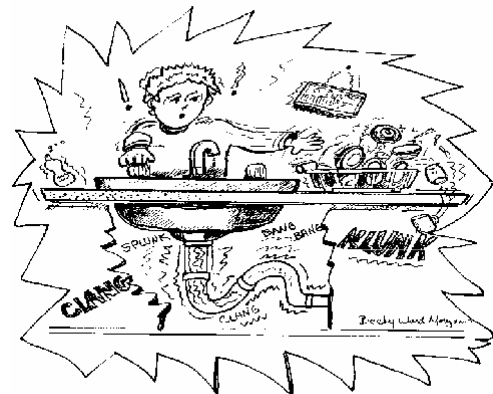
4. a broken part

a worn out part



5. water hammer

noisy pipes



Activity #3: Home Plumbing Problem Vocabulary

Handout B



Look at each picture below. Choose a word or phrase that best describes the problem you see in each picture. Write it on the line above the picture.

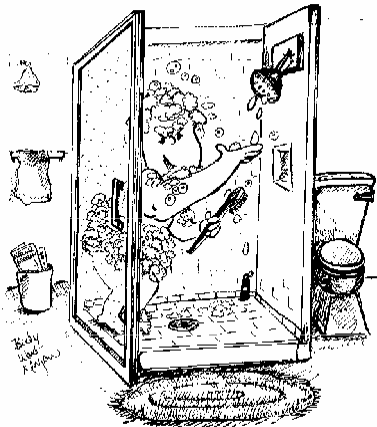
dripping
running
rusty

slow
blocked
broken

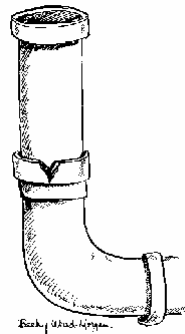
clogged
leaky
worn out

cracked
noisy
low

6. low water pressure



7. a cracked pipe

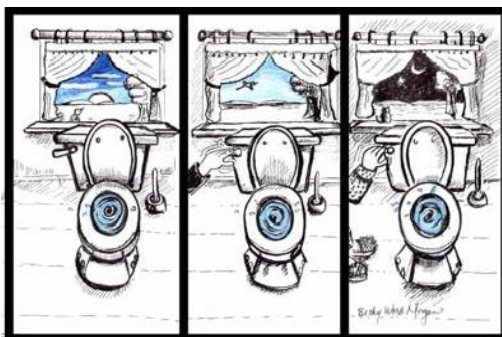


8. a slow drain



10. no hot water

9. running toilet



a broken water heater



Activity #4 Apartment Manager Call Scripts

Handout A

Apartment Manager Script #1A

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

On the third floor, there is a clog in the bathroom sink.

The washing machine on the first floor has a leak.

There is a running toilet on the second floor.

On the first floor, there is a crack in the pipe under the kitchen sink.

There is a flood in the basement. I think the floor drain has a block.

Apartment Manager Call Script #2A

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

In the basement, there is a leak in the washing machine.

On the first floor, there is a clog in the kitchen sink.

On the third floor, the pipes under the toilet are noisy.

On the third floor, there is low water pressure in the shower.

On the second floor, there is no hot water in the bathroom.

Activity #4: Apartment Manager Call Scripts

Handout B

Apartment Manager Script #1B

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

There is a clogged sink in the bathroom on the third floor.

There is a leaky washer on the first floor.

The second floor bathroom has a running toilet.

On the first floor, the pipe under the kitchen sink is cracked.

The basement has 2 feet of water on the floor. The floor drain is blocked.

The ice maker on the third floor is dripping.

Apartment Manager Script #2B

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

There is water under the third floor refrigerator. I don't know why it is leaking.

The faucet in the kitchen of the second floor apartment is dripping.

The pipes under the third floor lavatory sink are rusty.

The drain in the kitchen sink on the first floor is blocked. There is water all over the floor.

There is only a little water coming out of the third floor shower. It has very low water pressure.

The drain from the dishwasher is very slow. There is always a few inches of water in the bottom of the dishwasher.

Activity #4: Apartment Manager Call Scripts

Handout C

Apartment Manager Script #1C

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

The bathroom sink on the third floor is clogged.

The washer on the first floor is leaking. The water is running from the laundry room floor into the bedroom.

The toilet on the second floor apartment is running.

On the first floor, the pipe under the kitchen sink is cracked.

There is 2 feet of water in the basement. I think the floor drain is blocked.

There is a leak in the second floor kitchen. Water is dripping from the ceiling in first floor family room.

Apartment Manager Script #2C

Hello, this is _____ at Sunrise Apartments. We need a plumber to come out here today. We are having a lot of problems.

The washer in the basement is leaking and the floor drain is very slow. Now there is water standing near the drain.

The faucet is dripping in the kitchen of the first floor apartment.

There is a water hammer in the pipes behind the toilet in the second floor apartment.

There is very low water pressure in the shower in the third floor bathroom. There are just a few drips coming out of the shower head.

The hot water in all of the apartments is too hot. I hope we don't need to install a new water heater.

Home Plumbing Problem Checklist

Appliance/Fixture	yes	no	Plumbing Problem
air conditioning system			
bathroom sink			
bathtub			
shower			
commode (toilet)			
dishwasher			
garbage disposer			
freezer			
hot water heater			
kitchen sinks			
food disposer			
refrigerator			
ice maker			
washing machine			
Whirlpool/ sauna			
basement floor drain			