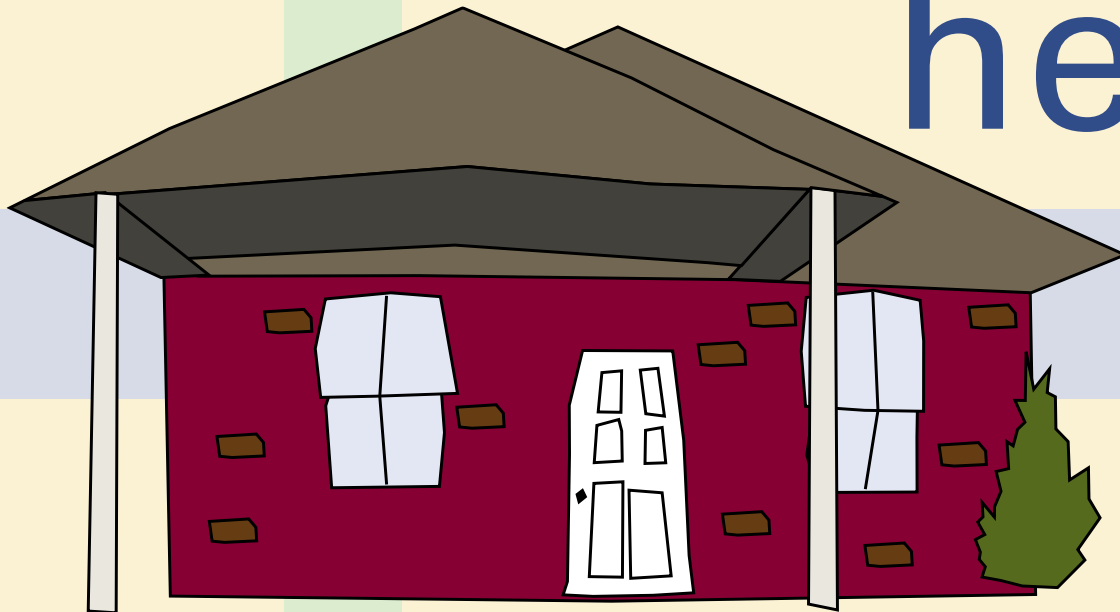


Keeping your home healthy



Habitat's Healthy Building Program

 **Habitat for Humanity**[®]

CONSTRUCTION AND ENVIRONMENTAL RESOURCES

After moving into a new home, adults and children may find indoor air problems that can be controlled through simple home care steps. We hope that this booklet helps you keep a healthy home for you and your family.

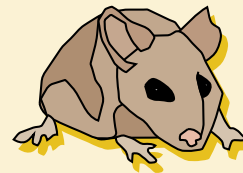
Asthma Triggers

Asthma is a serious lung disease. People with asthma may have a hard time breathing and cough a lot during what is called an asthma attack. Important things that can cause or “trigger” asthma include:

Cockroaches, Mice and Other Pests

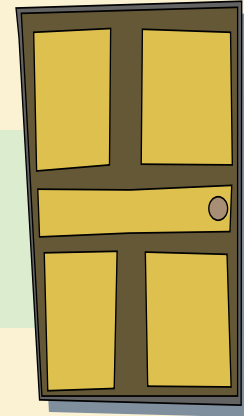
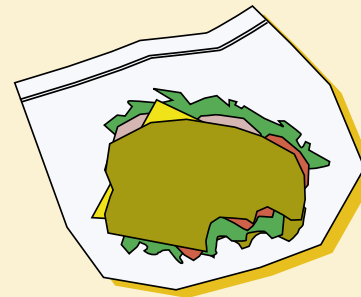
Why inside?

- They crawl through the tiniest of holes into a house.
- They like food and water.



What to do?

- Seal or plug any holes you see with a can of foam (like “Great Stuff” or caulk) from a home store.
- Keep food and water sealed in tight containers or in the refrigerator.
- Do not leave food or garbage out.
- Clean up spills and crumbs.
- Avoid using pesticide sprays. Use poison baits or traps instead, when children and pets are not around.



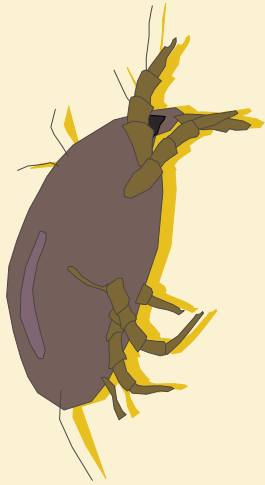
TIP:

It’s a messy job so wear old clothes!

TIP:

Plug holes larger than ½ inch first with a hard material and then use spray foam or caulk.

Dust and Dust Mite Poop



Dust mites are too small to see, but live in every home. They are found in mattresses, pillows, carpets, furniture, clothes and even in stuffed toys.

Why inside?

- Dust mites just love dead human skin, which makes up most of the dust we see in our homes.
- Dust mites need moisture to live—over 50 percent relative humidity inside your home.

What to do?

- Keep air dry inside by running the kitchen fan during and after cooking and until moist air leaves the house.
- Run the bathroom fan during showers and for one hour after.
- Use a damp rag to dust often.
- If a family member has asthma, wash sheets and stuffed toys in hot water weekly.
- Vacuum furniture, carpet and rugs often.
- Do not wear outdoor shoes inside.
- Use dust-proof covers on pillows and mattresses.

TIP:

Check with your Habitat affiliate if your bath fan does not remove moisture from the bathroom!



Indoor Tobacco Smoke

Health Fact:

Indoor tobacco smoke comes from cigarettes, cigars and pipes. It is a danger to adults, but especially to children, pregnant women and their growing babies.

Why inside?

- Some people do not know that smoking inside hurts the people that they care for.

What to do?

- Choose to smoke outside and do not allow others to smoke in your home.



Put a sign on your front door

Smoking inside with a window open or a fan running still makes people breathe the smoke. This does not help your family.

Mold and Moisture

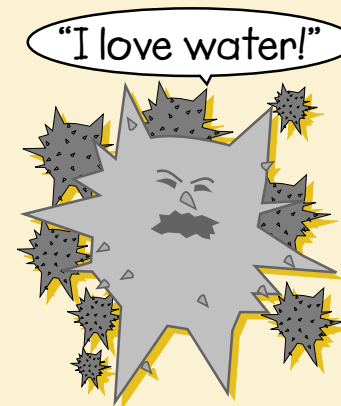
Mold is made up of tiny life forms that love water. They can annoy people's lungs and nose, and may even be dangerous. Mold may be many colors and can also smell, but not always.

Why inside?

- Molds grow on damp materials and water that sits around.
- If the air in your house is too moist, mold can grow.

What to do?

- Run kitchen and bathroom fans when cooking and showering.
- Clean any mold off of hard surfaces quickly with detergent and water. Soft materials with mold (like carpet or cloth) may need to be replaced.
- Clean up or repair any water leaks within 24 hours.
- Use a dehumidifier if humidity is often above 50 percent or if it feels very humid.



TIP:

Keep things dry! Control water and moisture.

NOTE:

In very dry areas or seasons, you may not have to worry about moisture inside the home.

Outside Dirt

Why inside?

- Shoes from outdoors bring inside everything you step on—pollen, dirt, mud, pesticides and poop.
- That is why in many countries and cultures, everyone leaves their shoes at the door.
- Removing shoes keeps homes healthy inside, it is a sign of respect for the home, and you save on house cleaning!

What to do?

- Avoid outdoor shoes in the house!
- Use a large dirt mat and shoe brush outside the front door for cleaning shoes.
- Use another mat just inside the front door for wiping shoes again.
- A shoe basket or shelf just inside the front door is a good place for outdoor shoes.
- Keep slippers and slip-ons near the front door for your family and guests. They are warm and comfortable to wear inside.

“The less housework the better!”

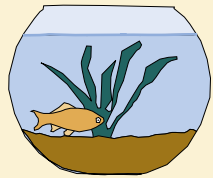


Pets

Your pet's saliva, urine and skin flakes can trigger or cause asthma.

Why inside?

- We all know that dogs need shelter and are social animals, so we keep them as part of the family.
- Many cat owners keep their cats inside because they kill way too many songbirds worldwide.



What to do?

- If someone in your home suffers from asthma or has allergies to cats or dogs, consider getting a different kind of pet instead, like a fish!
- If you have pet allergies:
 - Keep pets out of bedrooms and away from stuffed children's toys.
 - Keep pets off of furniture.
 - Try and keep pets in areas without carpet.
 - Vacuum and dust often to get rid of pet hair and skin.



Pesticides

Pesticides are chemicals used to kill plants, animals, bugs and other living things. Many pesticides stay in nature's food chain (animals, plants and humans) for a long time and get stronger as they are passed from animal to animal and to humans. Some cities have stopped using pesticides because they have been found in drinking water.

Why inside?

- Studies have found more pesticide inside homes than outside. A big reason? Shoes.
- Shoes track pesticide from outside into homes.
- Also, some people use pesticides inside their homes.

Did you know?

Pesticides are used way too much in our world today. Most are harmful to humans and many leak into our water supply from the ground.

**Warning: Keep away
from children and pets!**

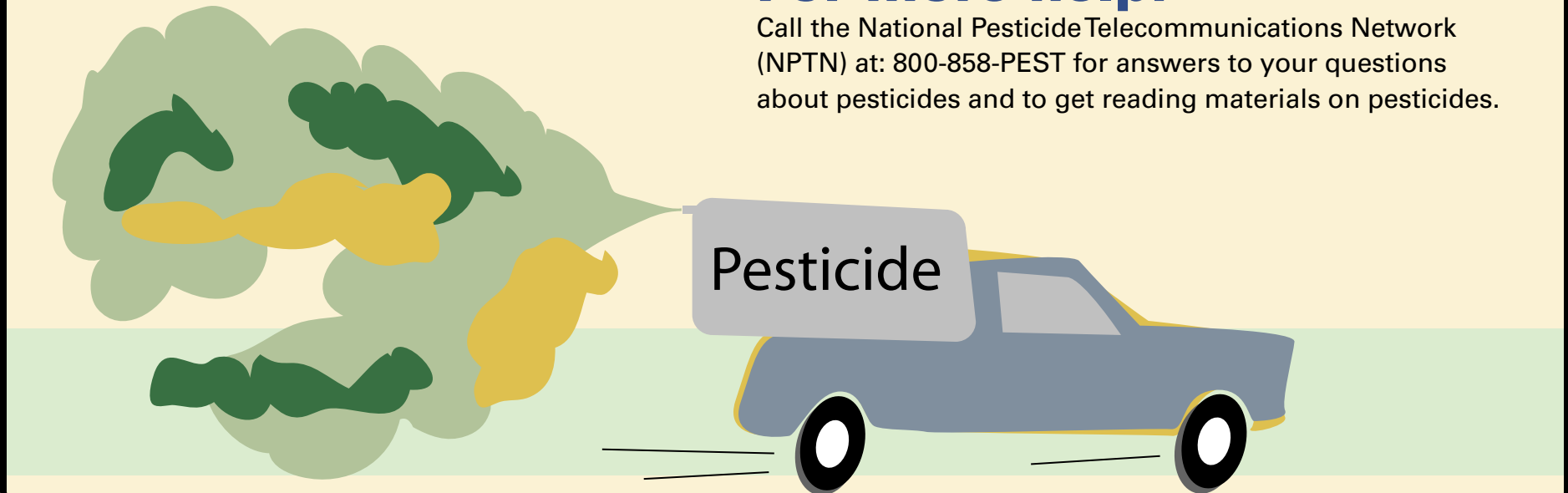


What to do?

- Take your outdoor shoes off at the front door.
- Avoid using pesticides inside the home. Read the information under “Cockroaches, Mice and Other Pests” for how to get rid of pests inside the home. Only use a pesticide in a small amount if nothing else will work. Some kill many things, including good things. Use one that only kills what needs to be killed.
- Avoid moth bolls in the home.
- Use less pesticides outdoors. Call or visit your local county extension office for natural ways to reduce pests in your yard and garden. Some bugs are good to have around as they eat other bugs that are pests.
- Weeds—Pulling weeds out with a garden tool keeps weeds away, is cheaper than pesticides, and will not hurt children, animals, birds, and the water near you.

For more help:

Call the National Pesticide Telecommunications Network (NPTN) at: 800-858-PEST for answers to your questions about pesticides and to get reading materials on pesticides.



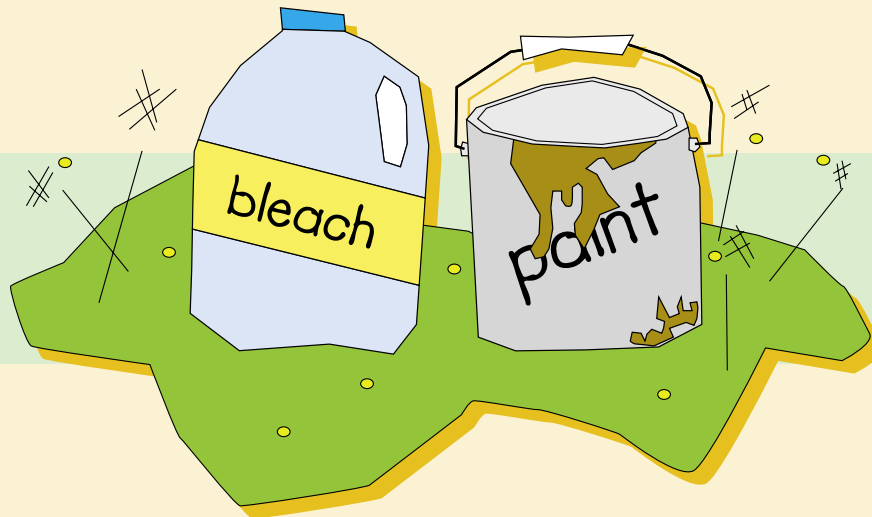
Other Chemicals

Why inside?

- Our own hair spray, hair dye, cleaners, candles and other products in the home may have bad chemicals.

What to do?

- Use healthier products in your home instead of ones with harsh chemicals:
 - Candles--Choose candles that do not have a wire wick.
 - Air fresheners and room air deodorants can give off chemicals that can make you sick. Think of natural air fresheners instead.
 - Hair Dye—Choose not to use hair dye and “go natural.” Hair dye has toxins and some research links it with cancer. Bleaching is OK.



Warning:

**Never mix ammonia and bleach together. This makes a toxic gas!
Keep away from children and pets!**

Simple cleaning products are cheaper and still work well!

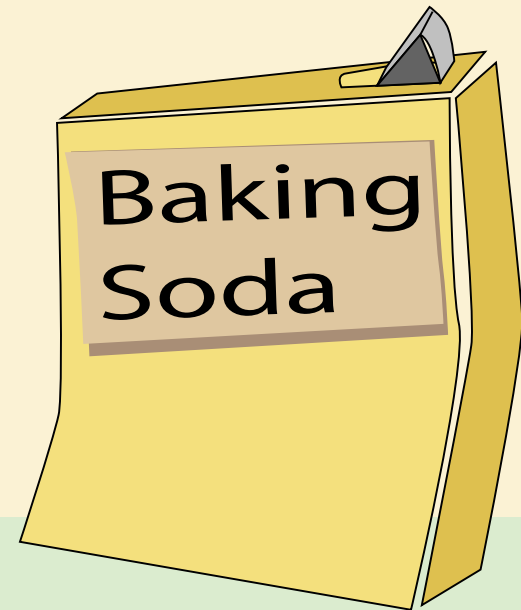
Basic Cleaning Solution

Water with some vinegar makes a good cleaning solution for floors, other surfaces and toilets. It has been used for hundreds of years and still works great today. Add a small amount of non-fat milk to the rinse water. This will shine the floor.

Detergent or Baking Soda and Water

Water with some detergent or baking soda works great for mold and for cleaning up bad germs.

- Where raw meat has touched surfaces (counter, sink, knives), you may need to clean those areas with bleach.





Toilet Bowl Cleaner

Sprinkle baking soda around the inside of the toilet bowl and then clean with a toilet brush. Also try letting white vinegar sit for a few minutes in the bowl before cleaning with the toilet brush.

- The normal germs in toilets actually clean the toilet bowl so you do not want to kill that bacteria, just make it smell nicer.

Other Natural Cleaners

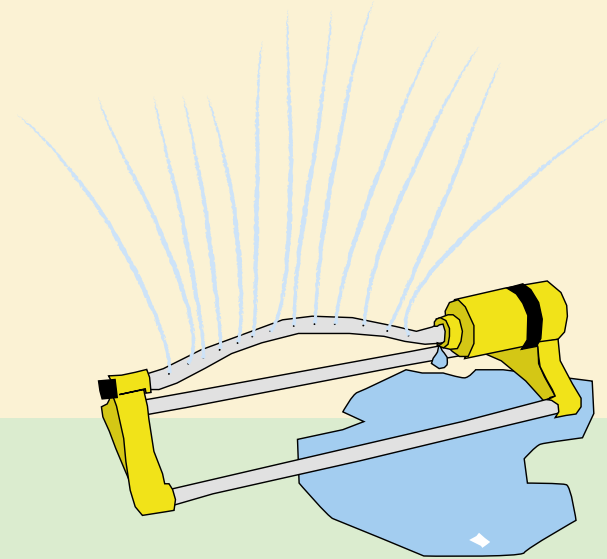
- Rug and Sofa Stain Remover—Club soda works well as a stain remover as does a solution of water and vinegar (1/4 cup each).
- Window Cleaner—Water with vinegar makes an excellent glass cleaner. Use newspapers or cloth.
- Shoe Polish—Use a vegetable oil like olive oil.

Warning:

If you use harsh chemical products, always open the windows and run fans to get fresh air while cleaning. Store paints, solvents, pesticides and other chemicals outside in a secure storage container.

A Healthy Yard for You and Your Family

- Most people use way too much fertilizer in their yard, especially on their grass.
- A few tips for using less fertilizer:
 - Mow your grass when it is dry.
 - Keep clippings on your lawn.
 - Keep grass longer, from 2 to 3 inches tall. This strengthens grass roots.
 - Water in the morning.
 - When grass starts to wilt, water really well (called “deep watering”) for 30 minutes to make strong roots. This way, you can water less often.
- Outdoor Storm Drains—Remember not to dump poisons, toxins, chemicals or pesticides in streets or drains. This water is often not treated and flows directly to your river, stream or bay, where fish, birds and other animals live.
- Outdoor Pet Poop—Putting pet poop in bags and then in the garbage keeps your streams and water supply healthy, and makes your neighbors happy!

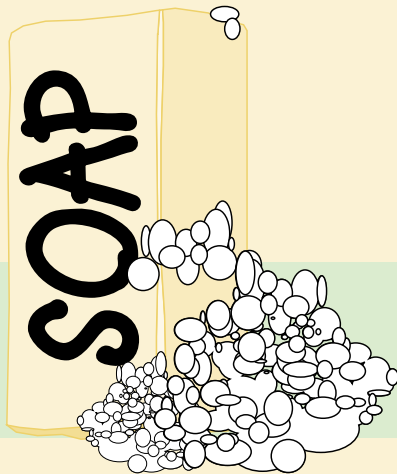


Keep Away Bad Germs

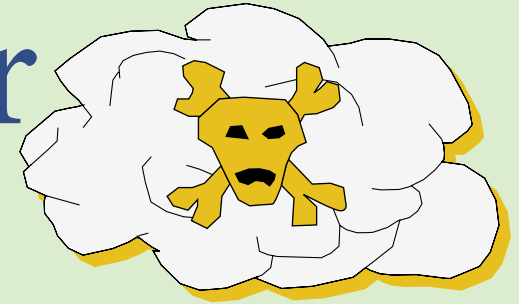
- Washing hands with warm, soapy water (long enough to say the alphabet twice!) after using the toilet and before handling food or eating is the best way not to get sick.
- Germs on Clothes—Germs are best killed in your clothes dryer. Hot water, unless it is boiling, just does not work as well.
- Germs in the Kitchen—Use water with bleach when washing dishes and counters that had raw meat on them.
- Food poisoning is a very common sickness for people and many do not know that they have it.

And so:

- Only keep fresh food and check the date stamped on groceries. When in doubt, throw it out!
- Meat should either be kept hot or cold and not at room temperature for very long. Freeze leftover meat if you do not want to eat it within a few days of cooking.



Other Healthy Indoor Air Issues



Carbon Monoxide

You cannot see or smell carbon monoxide, but it is a gas that can kill you quickly. At low doses, you can be poisoned by this gas for many years and not die, but suffer from problems such as headaches and nausea.

What to do?

- You may have gas or propane appliances in the home (hot water heater, stove, clothes dryer or heater). If you do, you should buy a \$20 carbon monoxide monitor from a home store. This will tell you if you have a carbon monoxide problem in your home.
- If you have a garage, do not warm up your car inside of it. Fumes and gas can travel into your home.
- Use propane, kerosene and other gas appliances (like grills and small heaters) outside unless you know for sure that they are labeled to be safe for indoor use.
- Each year, have a trained technician check your gas furnace and hot water heater to make sure that they work well.

Radon

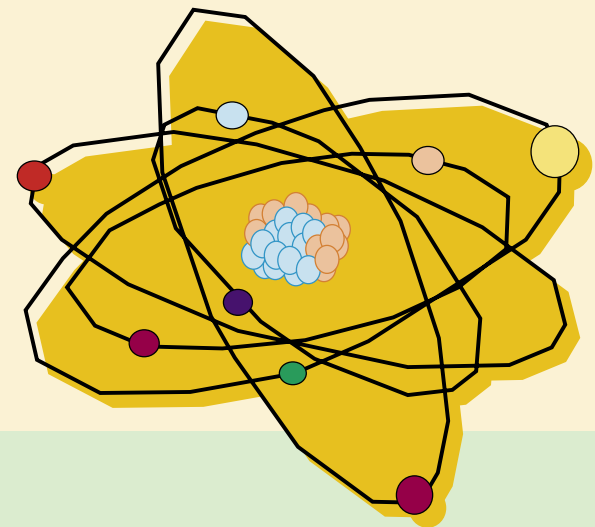
Radon is a gas from the earth that you cannot see or smell. Radon enters our houses and we breathe it into our lungs. Radon can cause lung cancer, especially in people who smoke tobacco.

Radon Systems in Houses

- In areas where there are high amounts of radon, Habitat staff may place a radon system in houses during the building of the house.
- This system sucks radon gas from the ground through a pipe in the house and out through the roof.

If You Have a Radon System in Your House

- Test for radon after you move into your house.
- Test for radon using a radon test kit. Ask your county extension office or health department for a kit or ask for help from your Habitat for Humanity affiliate.
- Radon should be less than 4 pCi/L in your house. If it is 4 or higher, ask your affiliate if they can install a fan in your radon system.
- If you are able to crawl underneath your house, try not to tear or remove the plastic on the ground because this is part of the radon system.



House Maintenance Tips to Save Money

Air Filters

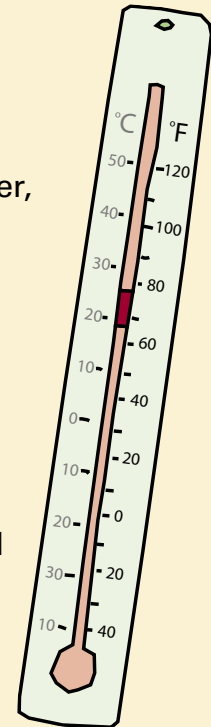
Replace air filters in your heating and cooling system at least once every season—in winter, spring, summer and fall. Some may need a check once a month.

Check-up of Equipment

- Have a service person check each year, your:
 - Heating and cooling system.
 - Hot water heater.

Know Shut-offs

- Know how and where to shut off the water and gas to the house and also the electrical power. This is important to know if there ever is a problem.



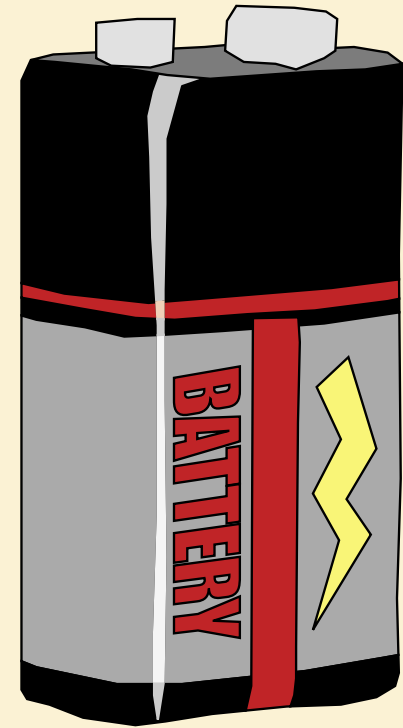
Save on Energy Bills

Save money by turning down the temperature on your water heater. Save more money with these extra steps:

- Turn down the heat in your house during winter to 68 degrees or less (put on more clothes!) and keep doors and windows shut.
- Turn up the temperature of your air conditioner in the summer to 78 degrees or more. Use fans to keep cool. Cook less hot meals to make inside air feel cooler in summer.
- Set your heating and cooling system to "auto".
- Use ceiling fans to cool rooms in your house. Turn off when you leave the room.
- Wash clothes with cold water. Soak stains before washing.

Change Batteries

Change batteries in the smoke detectors and in any carbon monoxide detector twice each year. Pick a date in spring and in fall and write it on your calendar so you remember!



Important phone numbers

Please fill in the numbers that are most important to you for quick reference.

Police _____

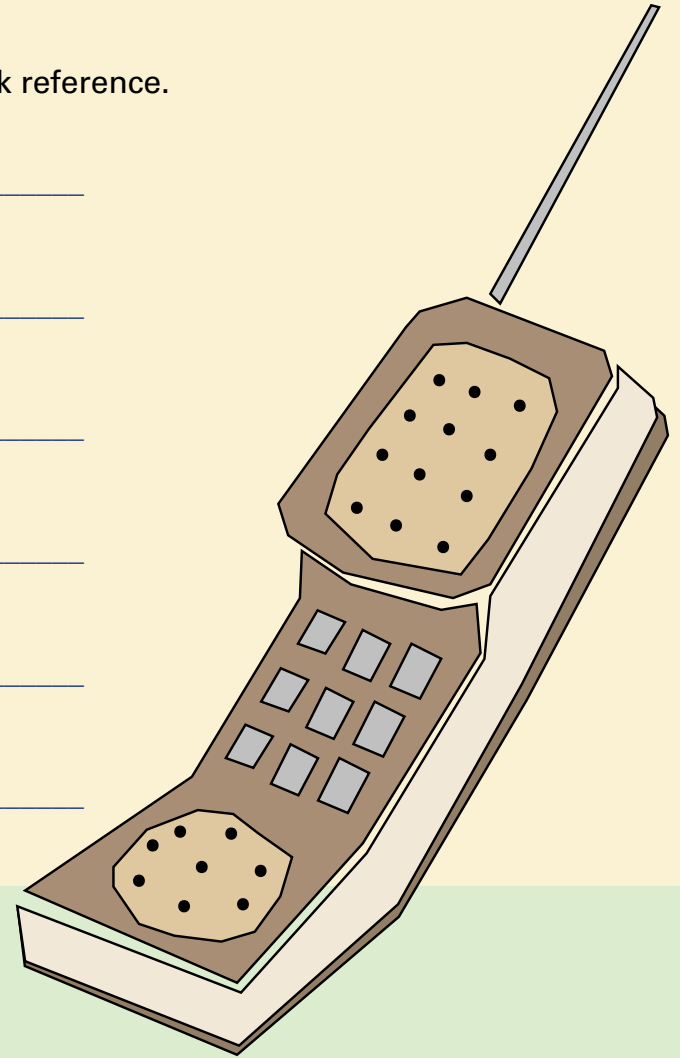
Fire _____

Emergency _____

Poison Control _____

Doctor _____

Dentist _____



Veterinarian _____

School _____

Phone Company _____

Cable Company _____

Electric Company _____

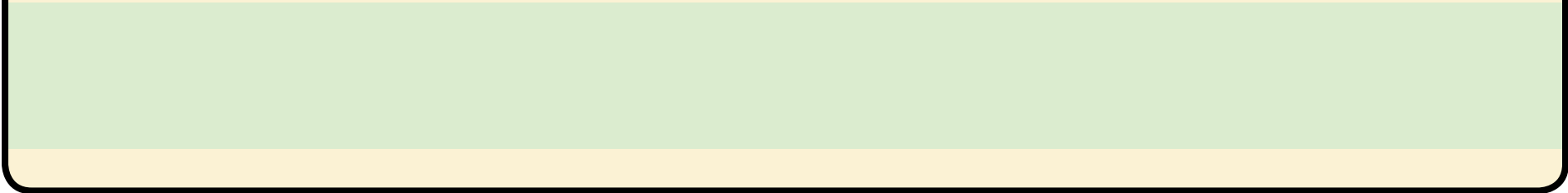
Gas Company _____

Public Library _____

Voter Registration _____

Local Habitat For Humanity _____

Notes:



For more help and information, contact:

- <http://www.epa.gov/iaq/>
- <http://www.healthhouse.org/>
- Construction & Environmental Resources, HFHI: ConsEnv@habitat.org



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