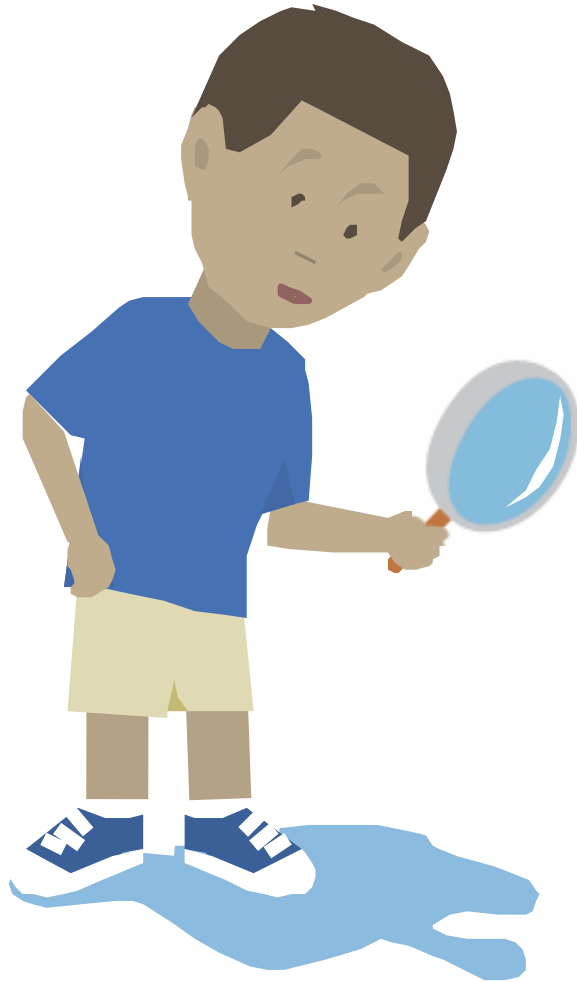


# Henry and Fred Learn about Lead

Joan Bothell

**Activity book**



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## About this book

This activity book is designed to accompany the children's storybook *Henry and Fred Learn about Lead/Enrique y Federico aprenden sobre el plomo* (2003) by Joan Bothell and Sarah Bothell, with a translation by José E. Arce. An online version of the storybook is available at [www.hec.uconn.edu/h-f/henry\\_fred2.html](http://www.hec.uconn.edu/h-f/henry_fred2.html). The full text of the English storybook is at the end of this activity book.

The *Henry and Fred* storybook is about keeping children safe from lead poisoning, a serious but *preventable* health problem. This activity book should be completed after children have read the storybook. Conducting a few activities a day over several days will probably be more effective than completing the entire book at once, allowing children more time to process and review the information.

While the primary purpose of *Henry and Fred* is to teach young children about lead safety, which may be part of a comprehensive health education program, the original storybook and this activity book can also be used to help children develop their reading and critical thinking skills—through oral language experience (reading aloud), as well as word recognition, vocabulary building, spelling, rhyming, and writing activities. If children cannot write their answers, an adult can write them for the children. Moreover, the activities suggested in the following pages can be expanded by imaginative children and adults.

### Rules to stay lead-safe

The story introduces Henry B. Careful and his family—his mother, father, grandmother, little sister Sue, and pet mouse Fred. Henry and his family have moved into Grandma's old house. As Henry's father explains, an old house may contain lead paint. The dust and flakes from that paint are a serious health hazard, especially to young children like Henry and his little sister Sue.

Henry's father notes that lead can make kids sick. Lead can cause permanent damage—especially to the developing brains and nervous systems of unborn children and children under six years old. While no amount of lead in the body is safe, the effects depend upon the level of lead in the blood. In children, even very low levels are associated with lowered intelligence, behavior problems, growth problems, hearing loss, and problems in maintaining a steady posture. Moderate levels can also harm the kidneys and liver. Very high levels can cause deafness, blindness, coma, convulsions, and even death.

Children who have been lead poisoned are much more likely to have problems with reading, vocabulary, attention, fine-motor coordination, school attendance, and academic achievement. They are more likely to drop out of high school.

Although Henry's father doesn't say so, lead can also damage adults. It can cause problems with reproduction, blood pressure, digestion, the nervous system, memory and concentration, and muscles and joints. It is especially dangerous for pregnant women and their unborn babies.

Henry's father plans to make Grandma's house lead-safe. To do so, he'll need to take a course in lead-safe work practices (if he decides to do the work himself) or hire a contractor who has been trained in these practices. But until repairs are completed, he teaches Henry some simple rules to protect himself, Sue, and Fred from lead.

**Rule 1: Stay away from paint dust and paint flakes.** Lead paint was banned for use in U.S. homes in 1978, but many houses and apartment buildings built before 1978 still have paint that contains lead. As the paint gets old, it may create dust and flakes that contain lead. If children swallow the dust or flakes, or breathe in dust, they can become lead poisoned. As a result, children who live in or visit homes built before 1978 may be at risk for lead poisoning. And if a home with lead paint has been or is being remodeled or renovated without proper precautions, these home repairs can create dangerous lead dust and paint flakes.

Children with lead poisoning may not look or act sick. Even if the children do show some signs of lead poisoning, these symptoms can often be mistaken for other illnesses, such as the flu, or other conditions.

Some early symptoms of lead poisoning may include tiredness or restlessness, stomachache, constipation, irritability, and poor appetite. As more lead accumulates, children may become clumsy and weak, and they may lose skills that they have already learned. More severe symptoms may include vomiting, loss of sight or hearing, and lapses in consciousness (that is, going in and out of consciousness).

Children who are not lead poisoned may also show some of these symptoms. And many of the symptoms of lead poisoning may also indicate other health conditions or learning and behavior problems. The only way to know if a child has been lead poisoned is through a blood test, so Sue must be checked by a doctor.

**Every child should be screened for lead poisoning at the ages of one year and two years** (and at other times if the child is at risk or the doctor recommends).

*Continued on page 21.*

## Activities for page 1: Meet Henry

Henry B. Careful is someone you'd like.  
He's friendly and cheerful, a happy small *tike*.

A *tike* is a young child. The word is often used just for boys.

Are you a tike?

- Yes, I am a tike.
- No, I'm not a tike.

What kind of boy is Henry?

Use your own words to describe him here:

---

---

Does Henry sound like someone you would like to have for a friend?

Why or why not? \_\_\_\_\_

---

---

He's a regular boy with one *habit* that's great:

---

Do you know what a *habit* is?

A *habit* is something you do all the time, without even thinking about it.

What do you think Henry's great habit is? Pick the best answer:

- He picks his nose.
- He eats pickles for breakfast: sometimes he eats eight!
- He thinks about safety before it's too late.
- He forgets to do his homework.
- He watches TV until it's too late.

Turn the page to see the right answer.

*Here's the right answer.*

Henry B. Careful is someone you'd like.  
He's friendly and cheerful, a happy small tike.  
He's a regular boy with one habit that's great:  
He thinks about safety before it's too late.

**Remember:**  
**A habit is something you do all the time, without even thinking about it.**

**Think about it**

Henry thinks about safety a lot. Do you?

Pick your answer:

- Yes, I think about safety a lot.  
If your answer is yes, give an example of how you think about safety:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- No, I don't think about safety a lot.

Do you already have a habit that's great? Pick your answer:

- Yes. If your answer is *yes*, what is your great habit?  
You can write your habit here:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- No. If your answer is *no*, would you like to have a great habit? What habit would you like to have? You can write your answer here:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Activities for page 2: Meet Henry's family

Now Henry B. Careful and Fred, his pet mouse,  
Have moved in with Grandma in her great gray old

\_\_\_\_\_.

Where do you think Henry and his family have moved to?

Pick the best answer to fill in the blank:

- Grandma's great gray old house
- Grandma's great gray old coffee cup
- Grandma's great gray old grocery store
- Grandma's great gray old bathtub

← *You can draw a picture of your answer here.*

---

With his mom and his dad and his sweet sister Sue,  
They're snug and together, like toes in a

\_\_\_\_\_.

What do you think Henry's family is like? Pick the best  
answer to fill in the blank:

- Like toes in a sneaker
- Like toes in a shoe
- Like toes in a hat
- Like toes in an ice cream cone

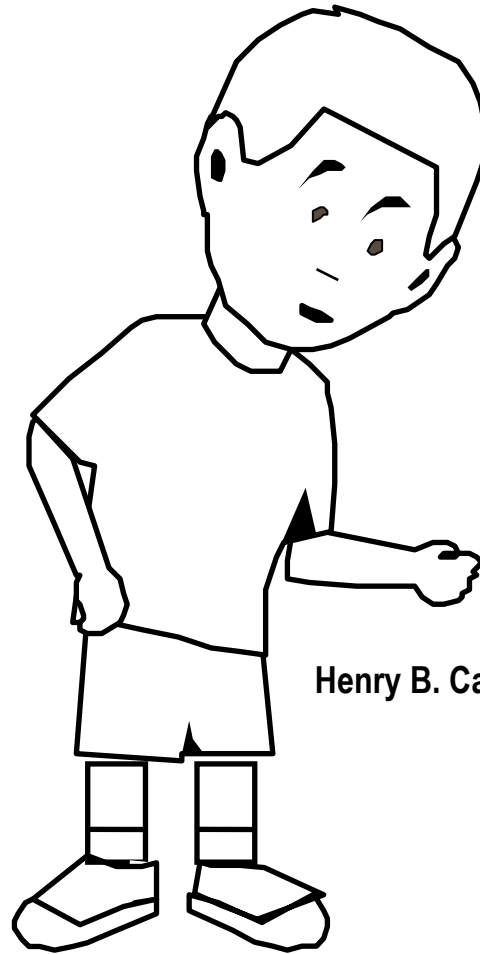
← *You can draw a picture of your answer here.*

*Turn the page to see the right answers.*

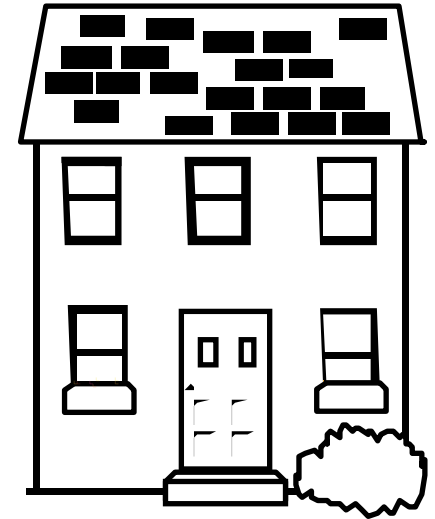
*Here are the right answers.*

Now Henry B. Careful and Fred, his pet mouse,  
Have moved in with Grandma in her great gray old house.  
With his mom and his dad and his sweet sister Sue,  
They're snug and together, like toes in a shoe.

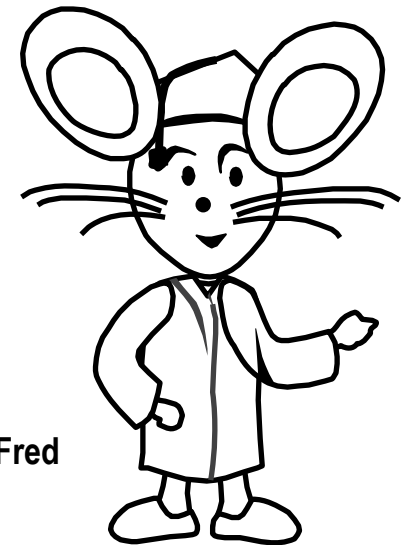
Here are some pictures that you can color.



Henry B. Careful



Grandma's house



Fred

Henry's pet's name is Fred. The word *lead* rhymes with *Fred*. How many other words can you think of that rhyme with Fred?

Write them here: \_\_\_\_\_  
\_\_\_\_\_

What kind of animal is Fred? Write the word here: \_\_\_\_\_.

In the word search below, can you find the word that describes Fred? Circle the word.

G	Z	R	E	F	L	D
R	M	O	U	S	E	A
A	O	Q	N	U	K	D
N	M	O	F	E	I	H
D	A	R	R	T	M	A
M	A	H	E	N	R	Y
A	T	E	D	I	O	R

Who lives in Grandma's house? Can you find their names in the word search above? Circle the names. Then you can copy the names here: \_\_\_\_\_  
\_\_\_\_\_

How many people are in Henry's family? \_\_\_\_\_.

*Turn the page to see the right answers.*

Here are the right answers.

Some words that rhyme with *Fred* and *lead* are

bed, bread, fed, head, led, red, said, shed, spread, and thread

Did you think of any others?

What kind of animal is Fred? He's a mouse.

Who lives in Grandma's house?

Henry      Fred      Mom      Dad      Sue      Grandma

Did you find all the names in the word search? You can check your answers below.

G	Z	R	E	F	L	D
R	M	O	U	S	E	A
A	O	Q	N	U	K	D
N	M	O	F	E	I	H
D	A	R	R	T	M	A
M	A	H	E	N	R	Y
A	T	E	D	I	O	R

How many people are in Henry's family?

There are five people and one mouse.

Did you count Fred as a person? Did you say there were six people in Henry's family?

It's OK if you did. To Henry's family, Fred is just like a person, even though he's a mouse.



How many people are in your family? \_\_\_\_\_ people

If you want, you can write their names here: \_\_\_\_\_

\_\_\_\_\_

Is your family:       Bigger than Henry's?       Smaller than Henry's?       The same size as Henry's?

Henry has a pet mouse named Fred.

He wants to keep Fred safe from lead.

Do you have any pets that you want to keep safe from lead? If you do, you can write their names here: \_\_\_\_\_

\_\_\_\_\_

If you don't have a pet, you can write the name of any animal that you want to keep safe from lead: \_\_\_\_\_

\_\_\_\_\_

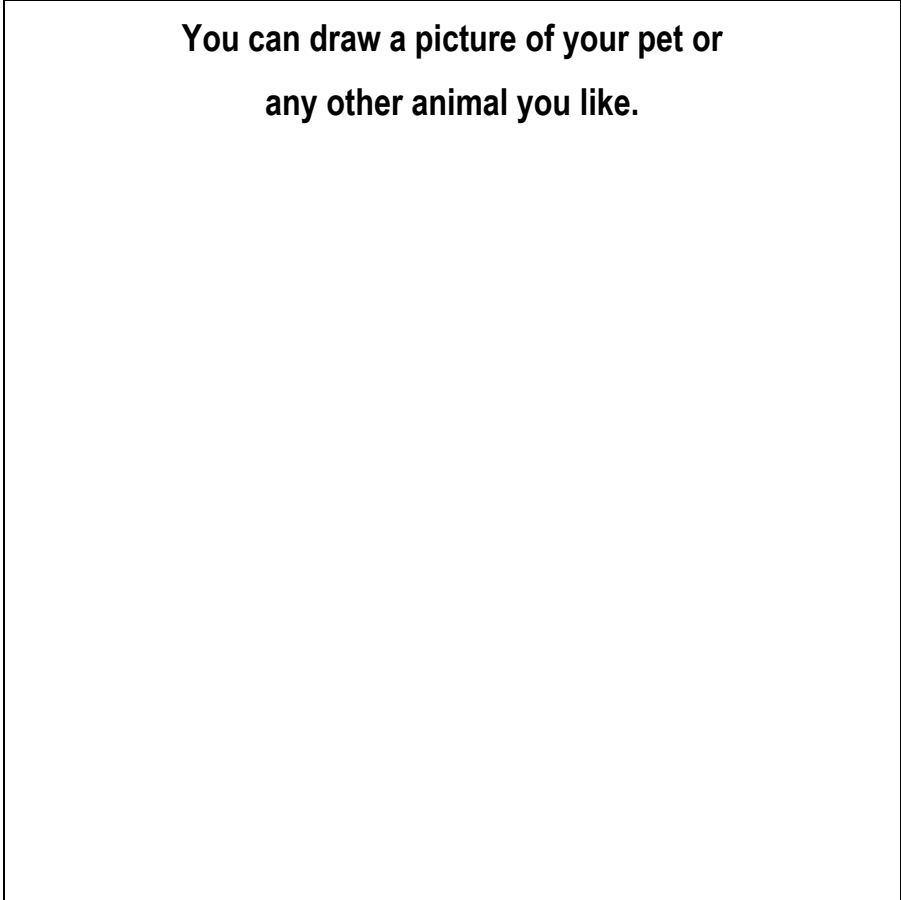
What do you like best about your pet or any animal that you want to keep safe? You can write your answer here: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



### Activities for page 3: Lead dangers

Grandma's house is old, with  
gray paint on the outside  
and  
blue paint on the inside.

Henry and Fred find some things that show that the paint is old.

What do Henry and Fred find? Fill in the blank letters to find out:

Henry and Fred find paint f l \_\_\_\_ k \_\_\_\_ s and paint d \_\_\_\_ \_\_\_\_ t .

*After you fill in the blanks, turn this page upside down to see the right answer.*

What color is your house on the outside?

You can write the color here: \_\_\_\_\_

What color is your favorite room?

You can write the color here: \_\_\_\_\_

You can draw a picture of the outside of your house here.

You can draw a picture of your favorite room here.

Answer: Henry and Fred find paint flakes and paint dust.

### Activities for page 4: Why lead is bad for you

In each box below, connect the dots in order to find out the mystery word in the sentence below:

--	--	--	--

can make you sick.

Turn the page upside down to see the right answer.

Answer: Lead can make you sick.

## Activity for page 5: Henry's dad talks about rules

Henry and Fred learn some rules. What is the reason for the rules? Pick the best answer:

- To paint the kitchen red
- To keep them safe from lead
- To help them make the bed
- To bake a loaf of bread

## Activity for page 6: Henry and Fred learn the rules

Henry and Fred learn the first rule of lead safety. They must keep away from things that might have lead.

What is the rule? Pick the best answer:

- Keep away from strange mice.
- Keep away from books.
- Keep away from paint dust and paint flakes.
- Keep away from Grandma.

*Turn the page upside down to see the right answers.*

Answers:  
5. The reason for the rules: To keep them safe from lead.  
6. The first rule: Keep away from paint dust and paint flakes.

## Activity for page 7: Lead is really bad for little kids

Henry learns to help his baby sister, Sue. He can help to keep her away from paint dust and paint flakes.

Who else helps Henry's sister to stay safe from lead? Pick the best answer:

- A doctor who checks her
- A mouse who drinks Sue's milk
- A cat who chases the mouse
- A rabbit who eats Sue's veggies

## Activity for page 8: Cleaning up paint dust and paint flakes is a job for grownups

Henry learns not to clean up paint dust or paint flakes by himself.

Who can he ask to help? Pick all of the right answers:

- Mom
- Dad
- Grandma
- Sue
- Fred

*Turn the page upside down to see the right answers.*

Answers:  
7. A doctor who checks Sue helps keep her safe from lead.  
8. Mom, Dad, and Grandma can clean up paint dust or paint flakes.

## Think about it

In your house, what grownups could you ask to clean up paint dust or paint flakes?

You can write their names here: \_\_\_\_\_  
\_\_\_\_\_

## Activities for page 9: Keep clean to get rid of lead

Henry can help keep lead away by some simple actions. What are they? Pick all the right answers:

- Wash his feet after eating and before playing
- Wash his hands after playing and before eating
- Leave his shirt at the door, and wear pajamas inside
- Leave his shoes at the door, and wear slippers or socks inside

*Turn the page upside down to see the right answers.*

Answers:  
To stay safe, Henry can  
--Wash his hands after playing and before eating.  
--Leave his shoes at the door, and wear slippers or socks inside.

# Activity for page 10: Foods that keep kids healthy

Here are some foods. Some of them are healthy foods that help fight lead.

Circle the healthy foods. Then draw a line from the healthy foods to Henry's grocery bag.

Candy bar

Beans

Milk

Cookies

Tuna

Yogurt

Gum

Eggs

Potato chips

Answers: Healthy foods include  
 --Beans  
 --Eggs  
 --Milk  
 --Tuna  
 --Yogurt

Turn the page upside down to see the right answers.

## Activity for page 11: Help Fred escape the maze

Fred is stuck in the center of a maze because he can't remember the rules to protect himself and his family from lead. Can you draw a line to help Fred get out of the maze and find lead safety?

### Rules to protect us from lead

Wash your hands after playing and before eating.

Eat healthy foods.

Leave your shoes at the door.

Stay away from paint dust and paint flakes.

Ask adults to clean up paint dust and paint flakes.

**LEAD SAFETY!**



## **Activity for page 12: Fix Fred's poster**

**Fred wanted to make his own poster about lead. He tried to write down the rules of lead safety, but he made some mistakes.**

**Find all of Fred's mistakes. Cross out the wrong words and write in the right words.**

### **Rules to protect us from bread**

- 1. Stay away from paint brushes and paint cans.**
- 2. Ask a dog to clean up paint dust and paint flakes.**
- 3. Leave your toes at the door.**
- 4. Wash your hat after playing and before eating.**
- 5. Eat happy foods.**

*Turn the page to see the right rules to stay safe from lead.*

### Rules to protect us from ~~bread~~

lead

dust

flakes

an adult or  
a grownup

1. Stay away from paint ~~brushes~~ and paint ~~eans~~.

2. Ask ~~a dog~~ to clean up paint dust and paint flakes.

shoes

hands

3. Leave your ~~tees~~ at the door.

healthy

4. Wash your ~~hat~~ after playing and before eating.

5. Eat ~~happy~~ foods.

### More activities

- Unscramble the underlined words:

1. Stay away from paint kleafs and paint tuds.
2. Ask dalust to nacel up paint dust and paint flakes.
3. Leave your osesh at the orod.
4. Wash your snahd after playing and before tineag.
5. Eat heylath foods.

### Unscrambled words

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

*Turn the page upside down to see the right answers.*

- You can act out the story of Henry and Fred with your friends. Or you can make puppets to act out the story. You can use the words in the book, or you can make up your own words to show:

- |   |  |
|---|--|
| 1. Henry, Fred, Mom, Dad, and Sue moving into Grandma’s old house.    | 4. Mom and Sue going to the doctor to get Sue checked.       |
| 2. Dad explaining to Henry and Fred the dangers of lead.              | 5. Henry and Fred planning and eating a healthy meal.        |
| 3. Dad explaining to Henry and Fred the rules to stay safe from lead. | 6. Henry reminding Fred of the rules to stay safe from lead. |
|   | 7. Fred repeating the rules.                                 |

Answers:

1. Stay away from paint flakes and paint dust.
2. Ask adults to clean up paint dust and paint flakes.
3. Leave your shoes at the door.
4. Wash your hands after playing and before eating.
5. Eat healthy foods.

**You can draw your own picture of Henry and Fred on this page.**

**You can also draw a new, lead-safe house for them.**

## Henry and Fred Learn about Lead

Henry B. Careful is someone you'd like.

He's friendly and cheerful, a happy small tike.

He's a regular boy with one habit that's great:

He thinks about safety before it's too late.

Now Henry B. Careful and Fred, his pet mouse,

Have moved in with Grandma in her great gray old house.

With his mom and his dad and his sweet sister Sue,

They're snug and together, like toes in a shoe.

But the house is so old that its gray paint is peeling,

With flakes on the windows and flakes on the ceiling.

Paint dust on the floors is as blue as the walls,

Making puffy blue dust clouds wherever it falls.

"Henry B. Careful," his dad said one evening,

"You've got to watch out for the paint that is peeling.

In houses so old, the paint contains lead,

And lead makes kids sick—it could even hurt Fred."

"We'll help Grandma fix it, of that there's no doubt,

But until it is fixed, you've got to watch out.

A few easy rules can protect you and Sue.

Listen carefully now as I say what to do."

"You've both got to stay far away from paint dust.

As well as paint flakes: please don't touch this stuff.

Keep dust out of your mouth, keep it out of your nose.

This rule may seem silly, but that's how it goes."

**“Your sister is little. We’ve got to protect her.  
To make sure she’s lead-safe, the doctor will check her.  
If you see little Sue near paint flakes or paint dust,  
Please whisk her away: you really just must.”**

**“Tell Mom, Grandma, or me where dust hides or flakes lurk.  
And we’ll clean it up so that you don’t get hurt.  
With wet rags and some soap, we’ll clear it away.  
We’ll make it safe for you and then you can play.”**

**“Wash your hands after playing, and before you start eating.  
Use soap and warm water: don’t think about cheating.  
Leave your shoes at the door. Don’t track lead dust inside.  
Put on slippers or socks: I’ll let you decide.”**

**“Eat foods that are healthy, like cheese and good bread.  
'Cause they help your body to fight off bad lead.**

**Yogurt and milk, and tuna and beans,  
Veggies and eggs and meat that is lean.”**

**Henry B. Careful went over to Fred,  
And told his pet mouse some things about lead.**

**“I’ll stay far from lead paint—its flakes and its dust,  
If I see it around, I’ll tell grownups I trust.”**

**“I’ll wash my hands slowly and use lots of soap.  
I’ll rinse really well: that’s one way to cope.**

**I’ll leave shoes at the door, on the mat, nice and neat.  
I’ll eat healthy foods, not just chips and things sweet.”**

**Henry B. Careful lives in Grandma’s old house,  
With his mom, dad, and sister, and his little pet mouse.**

**Henry B. Careful has learned what to do,  
To keep safe from lead, and stay healthy like you.**

## More information about this book *(continued)*

**Rule 2: Ask adults to clean up paint dust and paint flakes.** Children and pregnant women should always stay away from lead paint dust and flakes. They should not be responsible for cleaning it up. Adults other than pregnant women can use soap, water, and rags to clean up any materials that may be contaminated with lead. They should be careful not to spread the dust or flakes to other parts of the house. After cleaning up, they should throw away the rags and wash their hands thoroughly.

Even if there is no obvious paint dust or flakes, adults should regularly clean floors, windowsills, and other surfaces using wet or damp cleaning tools, such as rags and mop heads that they can throw away after cleaning. Using wet or damp tools helps to keep lead dust from spreading.

**Rule 3: Leave your shoes at the door.** While this book talks about the dangers of lead paint, there are also other sources of lead. Outside soil may contain lead—not only from old outdoor paint but also from old leaded gasoline. Leaving shoes at the door keeps this lead from getting inside the house.

Other possible sources of lead include old lead pipes and solder; some old or imported pottery, toys, and novelties; and batteries.

To avoid lead from old water pipes and solder, adults should run tap water until it is cold and use only cold water for making baby formula, drinking, and cooking. They can also use filters on faucets to remove lead from tap water. They should not use imported pottery to store or serve food.

Adults can check for toys and other items that have been recalled because of lead at [www.recalls.gov](http://www.recalls.gov).

Adults who work in lead industries (such as battery plants, radiator repair shops, or construction) could carry lead particles home on their clothing, shoes, and hair. If possible, they should remove their dirty clothing and shoes, and shower and wash their hair, before coming home. If that's not possible, they should change their clothes and shower right away when they get home. Their work clothing should be washed separately from the rest of the family laundry.

**Rule 4: Wash your hands after playing and before eating.** A good scrubbing with soap and water, followed by thorough rinsing, can help to remove any lead dust and flakes that may be on a child's hands.

Adults should frequently wash other items that young children put in their mouths, such as bottles, pacifiers, and toys.

**Rule 5: Eat healthy foods.** Foods that are low in fat and that contain the right amounts of calcium and iron can help the body absorb less lead.

Good sources of calcium include milk, yogurt, cheese, and leafy green vegetables (such as spinach, kale, and collard greens). Good sources of iron include lean red meats, fish, chicken, and iron-fortified cereals. Foods that are rich in vitamin C (such as oranges and orange juice, grapefruit and grapefruit juice, tomatoes and tomato juice, and green peppers) help the body to use iron.

Children should also eat regular meals, because a full stomach absorbs less lead than an empty stomach does.

**For more information** about lead poisoning, contact your state or local health department.

Useful websites include the following:

[www.epa.gov/lead](http://www.epa.gov/lead)

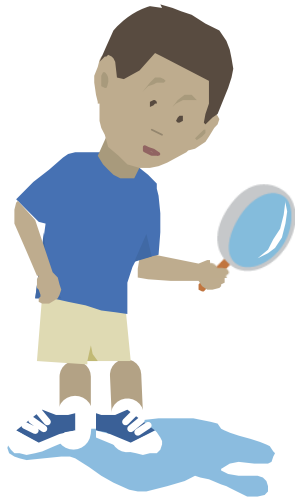
[www.cdc.gov/nceh/lead](http://www.cdc.gov/nceh/lead)

[www.hud.gov/offices/lead](http://www.hud.gov/offices/lead)



This activity book was developed under the auspices of the University of Connecticut's Healthy Environments for Children Initiative ([www.hec.uconn.edu](http://www.hec.uconn.edu)), with support from the Connecticut Department of Public Health ([www.ct.gov/dph](http://www.ct.gov/dph)).

**Acknowledgments:** Thanks to the following people for their very helpful suggestions on this activity book: Marcia Gustafson of the Vermont Department of Health's Childhood Lead Poisoning Prevention Program; Alan Buzzetti and Rhonda Pales of the Connecticut Department of Public Health's Lead Poisoning Prevention and Control Program; Mary-Margaret Gaudio of the University of Connecticut's Healthy Environments for Children Initiative, in the Department of Extension; and Tina McCarthy, of the City of New Britain(CT) Health Department's Childhood Lead Poisoning Prevention Program.



I, \_\_\_\_\_,  
[write your name]

**promise to follow the rules to stay safe from lead.**

**I will stay away from paint dust and paint flakes.**

**I will ask adults to clean up paint dust and paint flakes.**

**I will leave my shoes at the door.**

**I will wash my hands after playing and before eating.**

**I will eat healthy foods.**

