





NAME: _____

Note to Parents

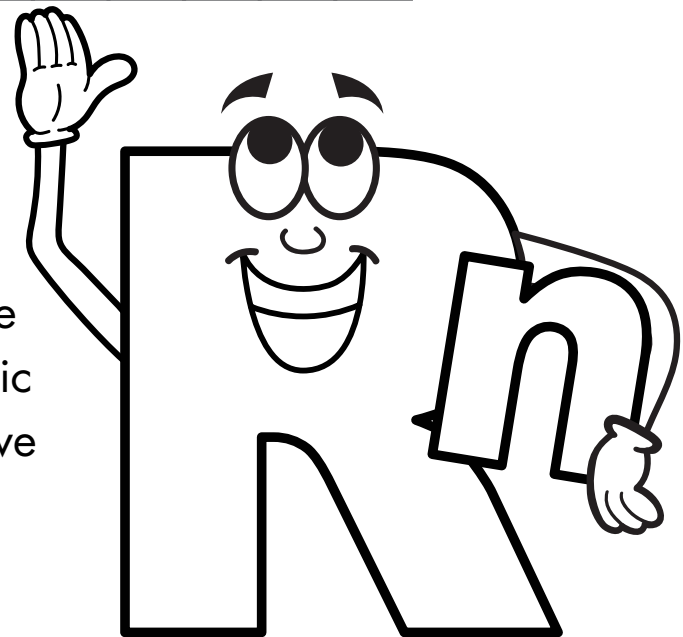
The Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) created this activity book to help families learn about radon. This activity book is a resource to promote environmental health and educate families, schools, and communities about radon in the environment. Ray, the radon guide, will show you where radon can be found and how it can affect people's health.

Periodic Table of the Elements

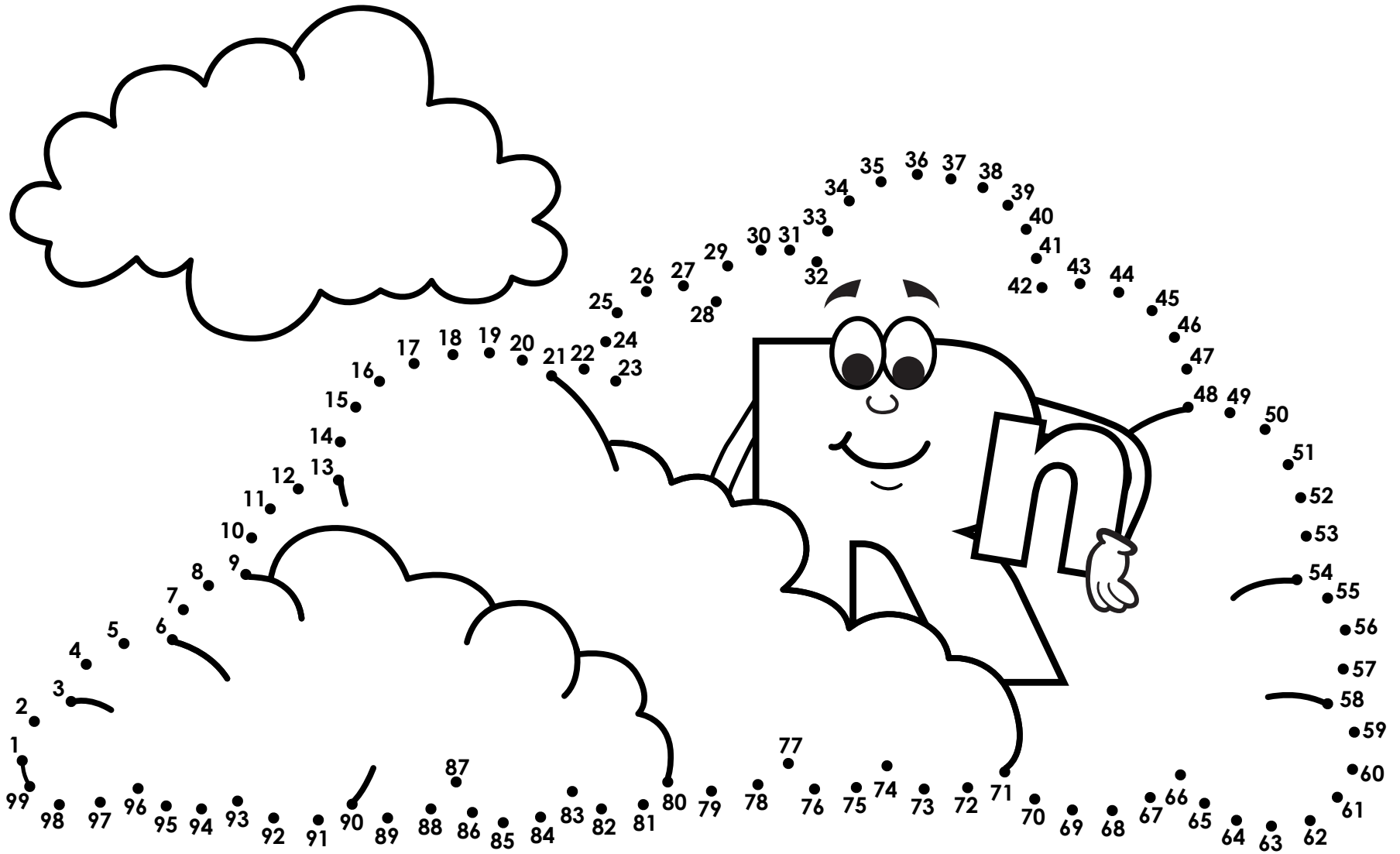
H ¹																	He ²																	
Li ³	Be ⁴											B ⁵	C ⁶	N ⁷	O ⁸	F ⁹	Ne ¹⁰																	
Na ¹¹	Mg ¹²											Al ¹³	Si ¹⁴	P ¹⁵	S ¹⁶	Cl ¹⁷	Ar ¹⁸																	
K ¹⁹	Ca ²⁰	Sc ²¹	Ti ²²	V ²³	Cr ²⁴	Mn ²⁵	Fe ²⁶	Co ²⁷	Ni ²⁸	Cu ²⁹	Zn ³⁰	Ga ³¹	Ge ³²	As ³³	Se ³⁴	Br ³⁵	Kr ³⁶																	
Rb ³⁷	Sr ³⁸	Y ³⁹	Zr ⁴⁰	Nb ⁴¹	Mo ⁴²	Tc ⁴³	Ru ⁴⁴	Rh ⁴⁵	Pd ⁴⁶	Ag ⁴⁷	Cd ⁴⁸	In ⁴⁹	Sn ⁵⁰	Sb ⁵¹	Te ⁵²	I ⁵³	Xe ⁵⁴																	
Cs ⁵⁵	Ba ⁵⁶											Hf ⁷²	Ta ⁷³	W ⁷⁴	Re ⁷⁵	Os ⁷⁶	Ir ⁷⁷	Pt ⁷⁸	Au ⁷⁹	Hg ⁸⁰	Tl ⁸¹	Pb ⁸²	Bi ⁸³	Po ⁸⁴	At ⁸⁵	Rn⁸⁶								
Fr ⁸⁷	Ra ⁸⁸											Rf ¹⁰⁴	Db ¹⁰⁵	Sg ¹⁰⁶	Bh ¹⁰⁷	Hs ¹⁰⁸	Mt ¹⁰⁹	Ds ¹¹⁰	Rg ¹¹¹	Cn ¹¹²	Nh ¹¹³	Fl ¹¹⁴	Mc ¹¹⁵	Lv ¹¹⁶	Ts ¹¹⁷	Og ¹¹⁸								
																		La ⁵⁷	Ce ⁵⁸	Pr ⁵⁹	Nd ⁶⁰	Pm ⁶¹	Sm ⁶²	Eu ⁶³	Gd ⁶⁴	Tb ⁶⁵	Dy ⁶⁶	Ho ⁶⁷	Er ⁶⁸	Tm ⁶⁹	Yb ⁷⁰	Lu ⁷¹		
																		Ac ⁸⁹	Th ⁹⁰	Pa ⁹¹	U ⁹²	Np ⁹³	Pu ⁹⁴	Am ⁹⁵	Cm ⁹⁶	Bk ⁹⁷	Cf ⁹⁸	Es ⁹⁹	Fm ¹⁰⁰	Md ¹⁰¹	No ¹⁰²	Lr ¹⁰³		

Hi, my name is Radon, but you can call me Ray. See that spot over there? That's where I sit on the periodic table next to all my friends, the elements. Together we make up everything in the earth and sky.

Can I tell you a story?



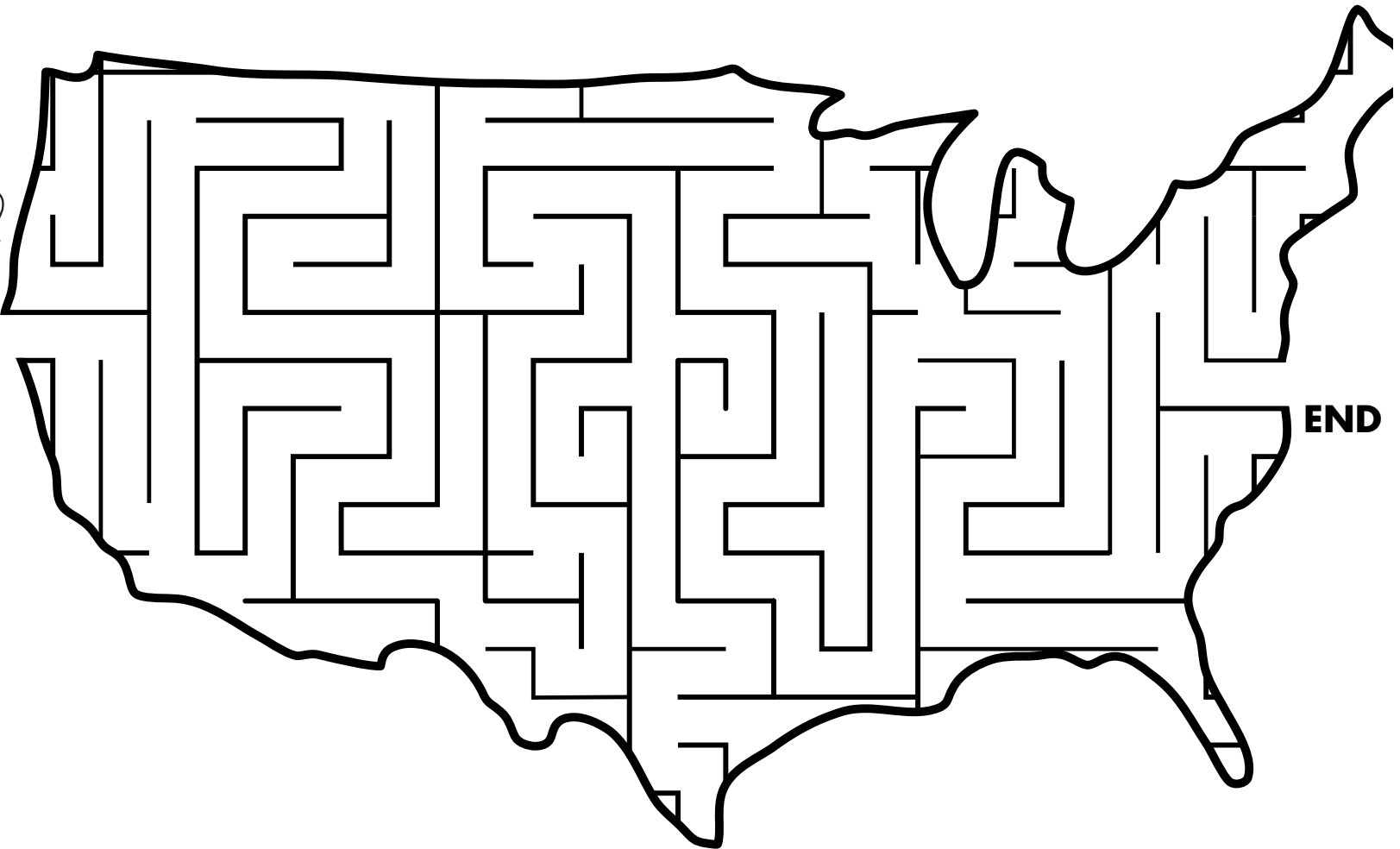
The first thing you need to know about me is that I'm a gas. I am like oxygen and other gases in the air. You can't see me, smell me, or taste me. But I am always there.



Even though you can't see me, I am found all around you in the soil, water, rocks, and air. I am normally there in very small amounts. A small amount of me isn't bad. I can also travel far distances through the air and water.



Ray is everywhere. Can you help Ray on his cross-country road trip?

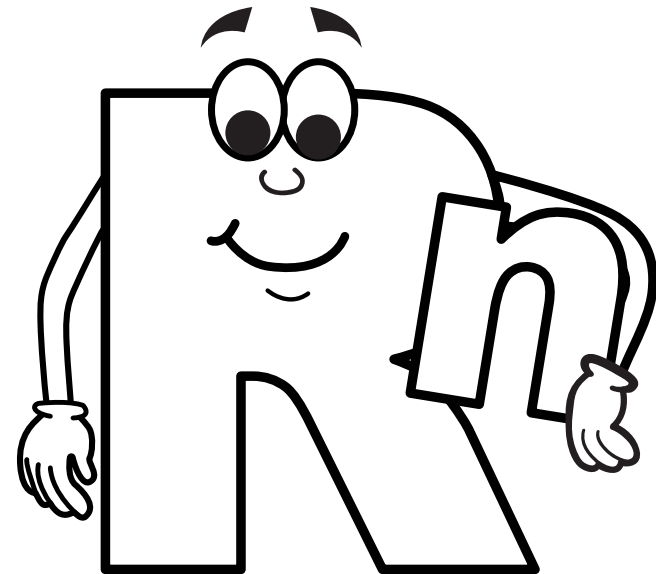


Decode the secret message to find out where you should look for Ray!

20 5 19 20 25 15 21 18
8 15 13 5 6 15 18
18 1 4 15 14 !

KEY

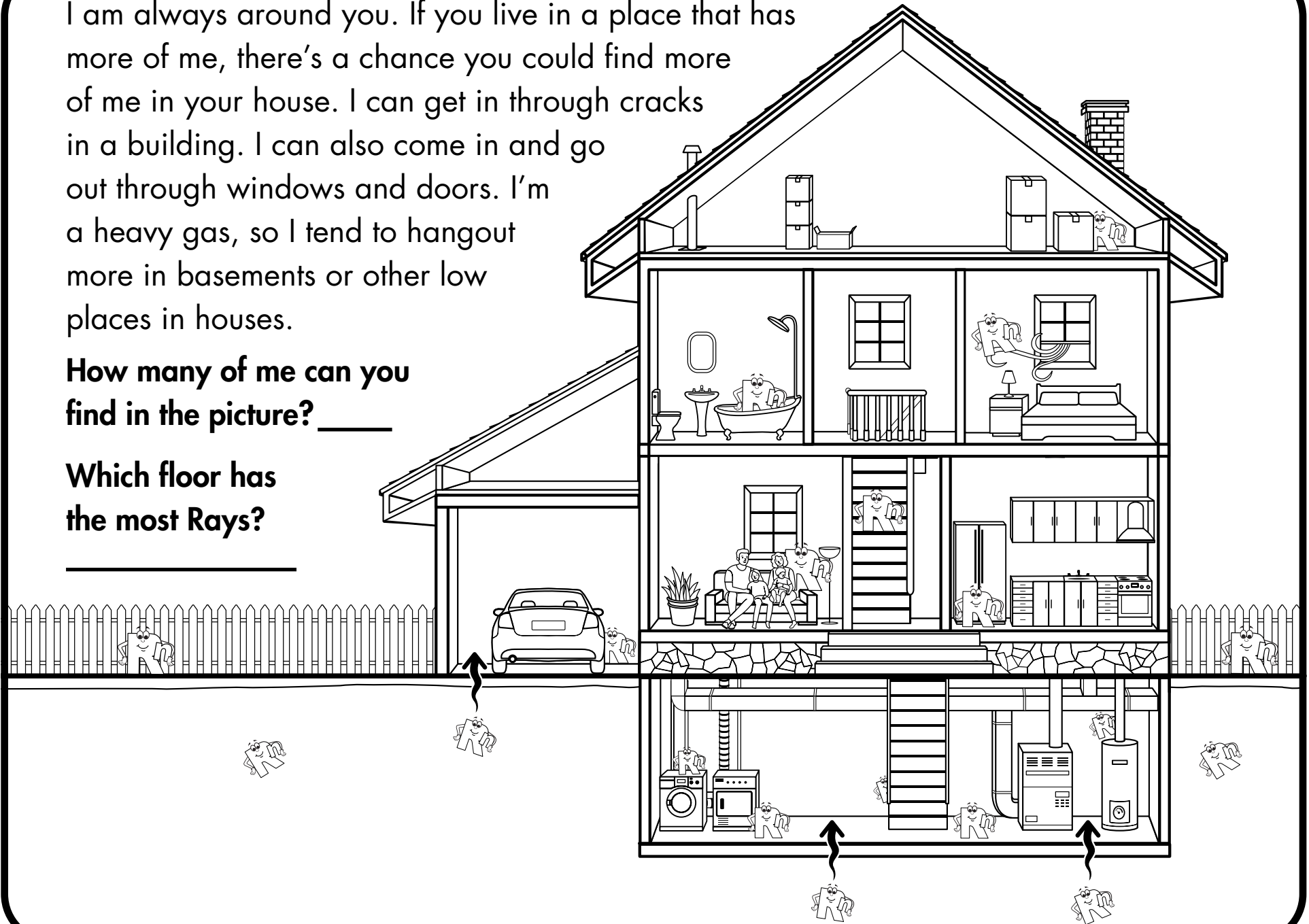
- | | | | |
|-------|--------|--------|--------|
| 1 - A | 7 - G | 14 - N | 21 - U |
| 2 - B | 8 - H | 15 - O | 22 - V |
| 3 - C | 9 - I | 16 - P | 23 - W |
| 4 - D | 10 - J | 17 - Q | 24 - X |
| 5 - E | 11 - K | 18 - R | 25 - Y |
| 6 - F | 12 - L | 19 - S | 26 - Z |
| | 13 - M | 20 - T | |



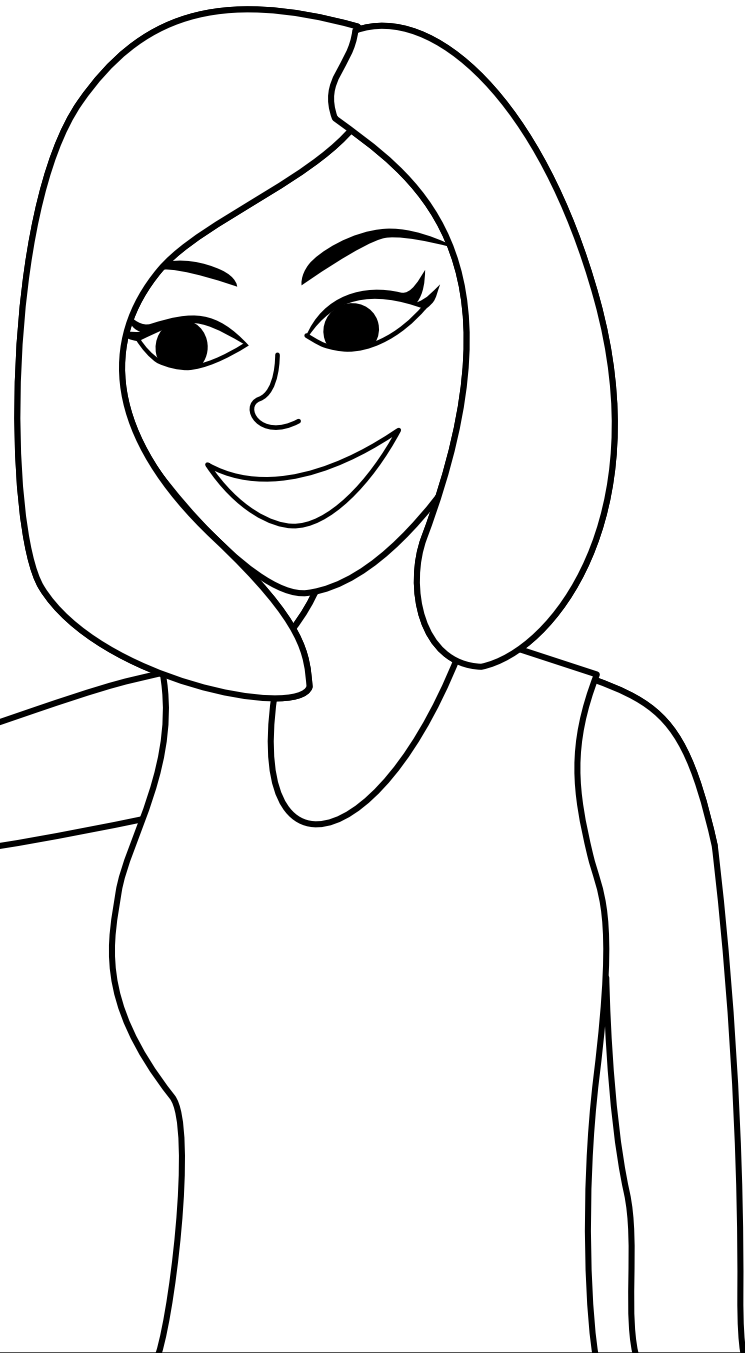
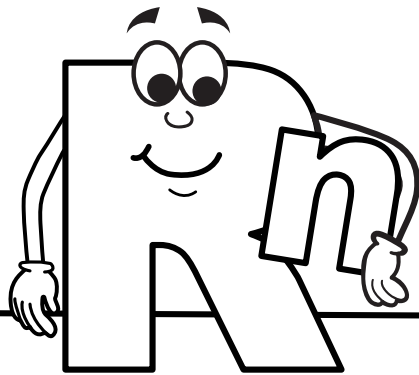
I am always around you. If you live in a place that has more of me, there's a chance you could find more of me in your house. I can get in through cracks in a building. I can also come in and go out through windows and doors. I'm a heavy gas, so I tend to hangout more in basements or other low places in houses.

How many of me can you find in the picture? _____

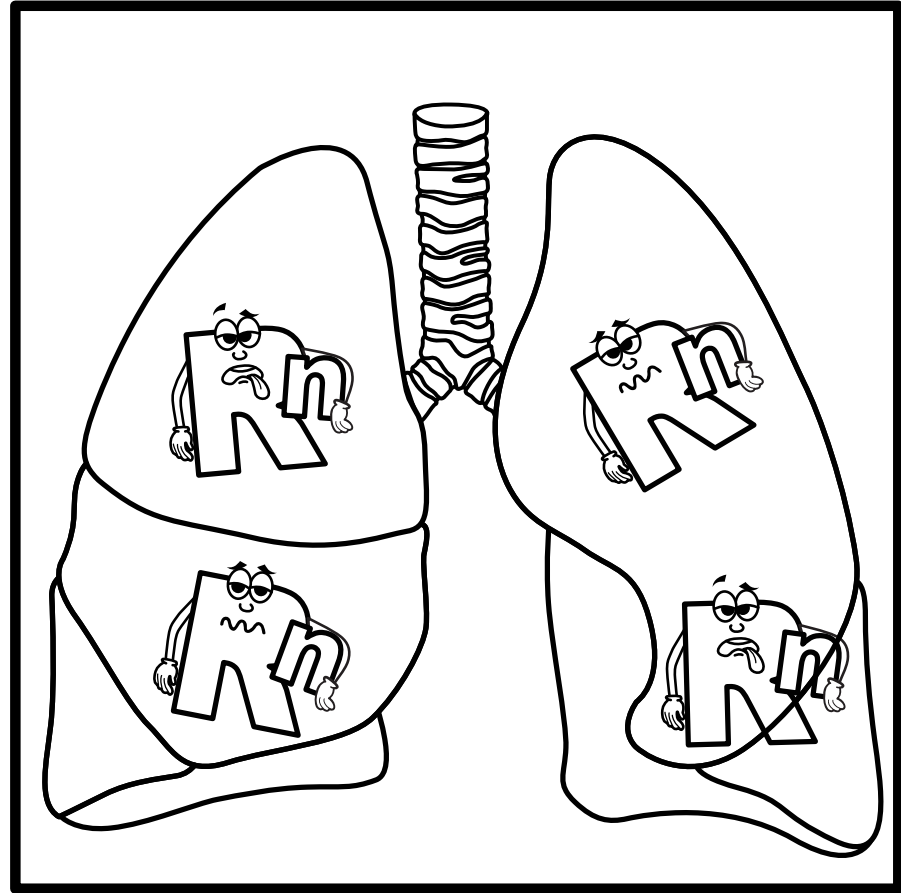
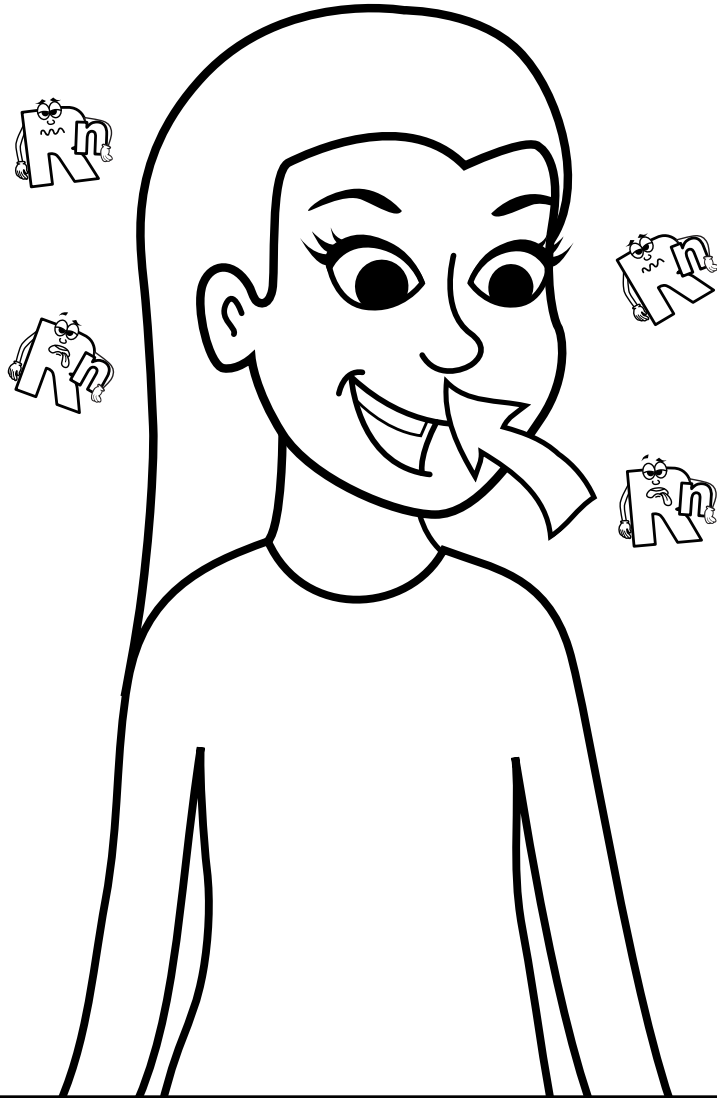
Which floor has the most Rays? _____



There are ways to find out how much of me is in the air in your house. Your family can order a radon test kit. There are also ways to find out how much of me is in your water. An adult can get a test kit on your state's radon website or from a store.



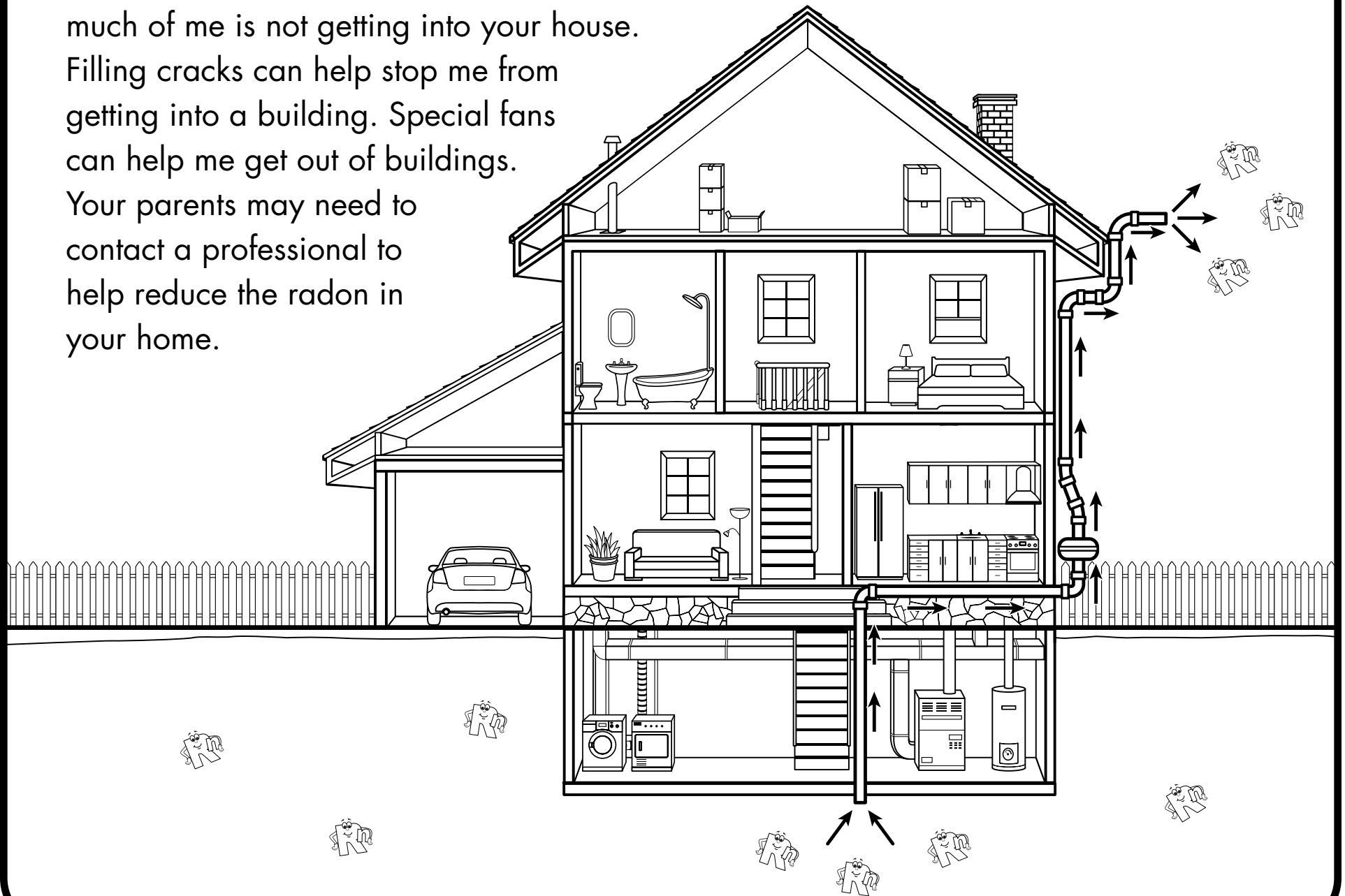
Sometimes you can have too much of me in your house, and I can't get out. When the air is dusty or someone smokes, I catch a ride and stay in the air. When that happens, I can get stuck in your lungs. When more of me is around you for a longer time, I am more likely to make your lungs sick over time.



Doctors know about me. They can check to see if you are healthy. The best way to know if you are around too much of me is to test your home for radon. If there is too much of me, then there are changes your family can make to be safer.

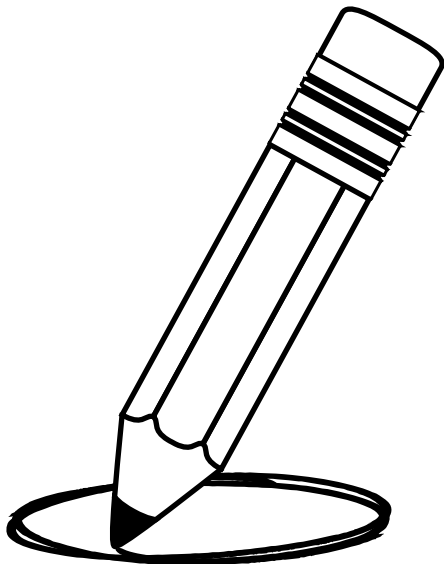


There are lots of ways to make sure that too much of me is not getting into your house. Filling cracks can help stop me from getting into a building. Special fans can help me get out of buildings. Your parents may need to contact a professional to help reduce the radon in your home.



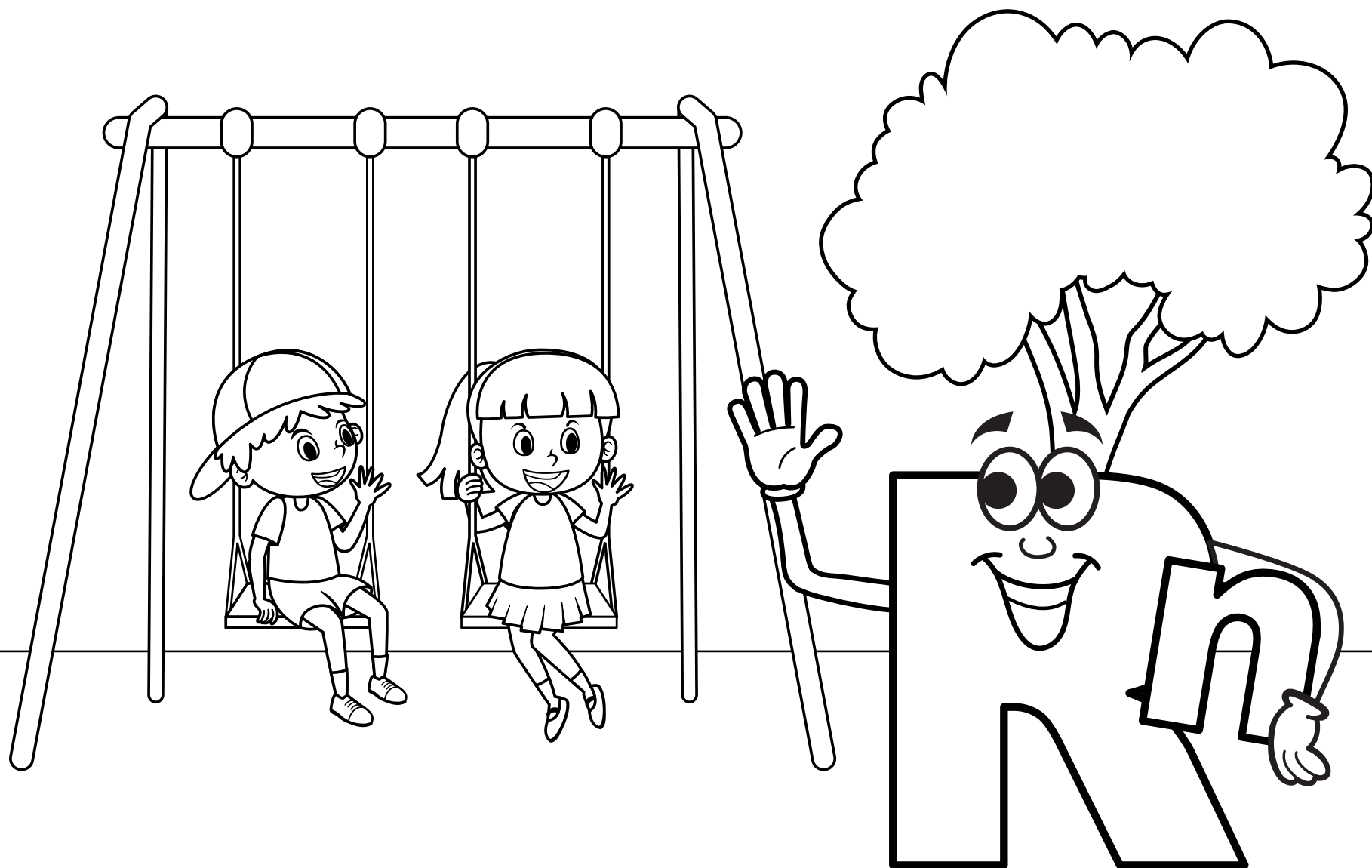
Can you find the different words that you have learned about me?

AIR	RADON
CRACKS	ROCK
FAN	SICK
GAS	SOIL
HEALTHY	TEST KITS
HOUSE	WATER
LUNGS	



E	O	L	P	V	K	N	N	Q	N	Y	H	S	C
H	S	I	T	J	K	K	I	Q	X	E	E	C	R
I	W	U	X	C	E	S	F	B	E	U	A	O	A
G	P	Z	O	A	B	L	A	C	O	W	L	L	C
B	Y	R	Q	H	H	E	N	J	A	F	T	U	K
E	V	T	Z	A	W	J	L	T	C	M	H	N	S
P	J	W	A	K	I	P	E	S	H	Y	Y	I	S
X	E	R	E	B	S	R	I	O	N	Z	Y	P	B
Z	M	Z	N	D	C	K	Z	J	J	I	Q	L	L
E	H	Y	M	X	Q	L	U	P	B	B	L	I	X
G	A	S	J	Y	D	E	R	W	J	U	L	O	Z
T	E	S	T	K	I	T	S	X	N	A	W	S	N
B	E	Q	R	L	X	P	I	G	N	O	D	A	R
S	I	C	K	Q	V	C	S	V	O	H	G	Y	R
N	V	H	M	A	F	T	K	P	N	T	U	K	M

It's time for me to go now! I need to get back with my friends in the periodic table. Together we make up everything in the earth and sky. Make sure to come back and share with your friends and family so they can learn about me too.



Can you answer these questions about me?

1. What is radon?
 - a. Solid
 - b. Liquid
 - c. Gas
2. You can see, smell, touch, and taste me when I am nearby.
 - a. True
 - b. False
3. Radon is found:
 - a. In the soil
 - b. In the water
 - c. In rocks
 - d. In the air
 - e. All of the above
4. Your family can use a radon test kit to find out how much radon is in your house.
 - a. True
 - b. False
5. If you get too much radon, where does it get stuck?
 - a. Lungs
 - b. Eyes
 - c. Hair
6. What are ways to get rid of radon?
 - a. Filling cracks
 - b. Fans
 - c. Washing radon away
 - d. A and B
 - e. All of the above

KEY: 1-c, 2-b, 3-e, 4-a, 5-a, 6-d

Resources for Parents

The CDC and the Environment Protection Agency (EPA) have guidance for radon levels in homes and schools.

If you have health concerns regarding exposure, talk with a health care provider.

For more information, you can contact your local community health department or state radon program. You can also contact CDC/ATSDR at the phone number below.

Toll-free information and technical assistance: 1-800-CDC-INFO (1-800-232-4636)

Sources

[CDC Radon Website](#)

[ATSDR Toxic Substances Portal for Radon](#)

[CDC Tracking Database](#)

[EPA Radon Website](#)

[EPA Map of Radon Zones by State](#)

[EPA Radon Test Kit Ordering Information](#)

