

K-1 At-Home Learning Resources

(Yellow Packet)

Week #7

The Richland School District cares deeply about the well-being of our students and families. We highly encourage our students and families to set a daily routine that includes the following:

For our elementary families:

- Read daily with your child
- Play family games (board games, cards, puzzles, charades, pictionary, etc.)
 - Engage in an outside activity
 - Cook/bake with your child
- Maintain relationships with your child's teacher

These supplemental activities, readings, and other resources are available to students and families to continue learning and exploring while schools are closed in response to the novel coronavirus.

Students are not required to complete and/or turn in any assignments nor will any of these materials be used to assess students academically. Please feel free to use these optional resources as needed. Additional resources are available at:

<https://www.rsd.edu/programs/at-home-learning/pre-k-elementary-resources>



Canned Sort



Objective

The student will identify variant correspondences in words.



Materials

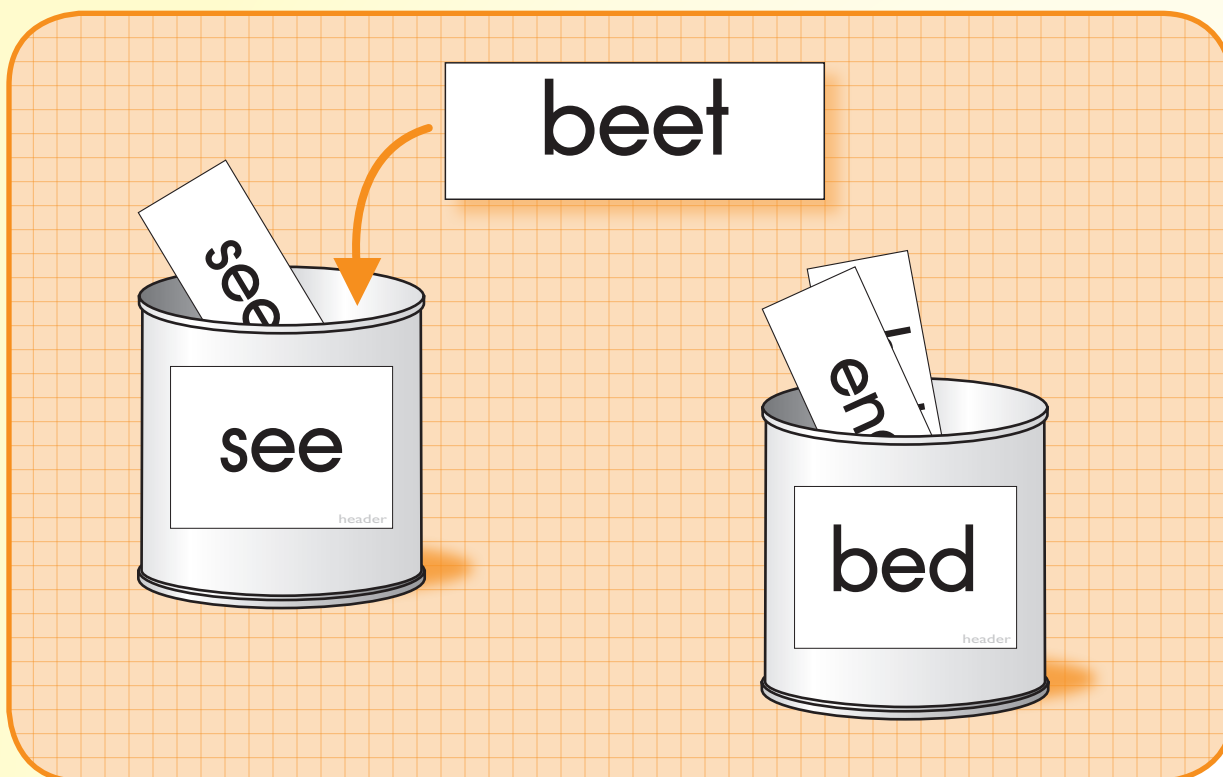
- ▶ Header and word cards (Activity Master P.047.AM1a - P.047.AM1e)
Choose target header and corresponding word cards for the same vowel (e.g., short and long “a”).
- ▶ Cans
Attach the header cards to the cans.



Activity

Students read and sort words by vowel sounds.

1. Place cans on a flat surface. Place the word cards face down in a stack.
2. Taking turns, students select a card, read the word orally, and say the sound of the vowel (e.g., “beet, /ē/”).
3. Read the word on each can and say the sound of each vowel (e.g., “bed, /e/, see, /ē/”).
Place the word card in the can that has the corresponding vowel sound (i.e., “beet goes in the /ē/ can”).
4. Continue until all words are sorted.
5. Peer evaluation



Extensions and Adaptations

- ▶ Record words on paper.
- ▶ Use other header and word cards (Activity Master P.047.AM2a - P.047.AM2c).
- ▶ Make and use other header and word cards (Activity Master. P.047.AM3).
- ▶ Sort more than one vowel pair at a time.

cat

header

late

header

fast

ape

camp

shake

and

fame

trash

base

back

make



Phonics

Canned Sort

P.047.AM1b

bed

header

see

header

went

sleep

help

seed

pet

eel

end

queen

them

beet

header and word cards



big

header

five

header

pick

ice

fix

time

fish

slide

him

kite

itch

nine



Phonics

Canned Sort

P.047.AMId

got

header

home

header

lock

note

spot

owe

shop

phone

ox

code

dog

rope

header and word cards



dug

header

cube

header

duck

use

must

mule

us

fume

rush

huge

jump

cute



Phonics

Canned Sort

P.047.AM2a

far

header

flare

header

arm

rare

farm

hare

start

bare

yard

square

part

dare

header and word cards



any

header

cry

header

very

deny

many

dry

easy

July

story

sly

only

fry



Phonics

Canned Sort

P.047.AM2c

down

header

own

header

town

bowl

cow

low

brow

tow

brown

grow

now

mow

header and word cards



P.047.AM3

Canned Sort

	header	header

blank header and word cards



**Objective**

The student will gain speed and accuracy in letter recognition.

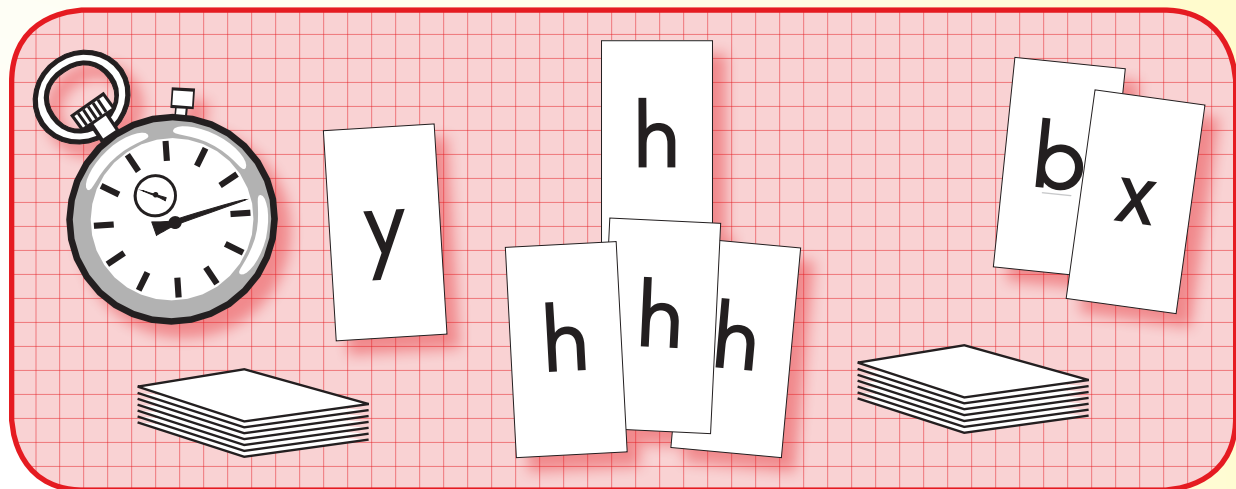
**Materials**

- ▶ Letter cards (Activity Master F.003.AM1a - F.003.AM1i)
Choose six target letters, copy on card stock six times, and cut into cards.
- ▶ Time record student sheet (Activity Master F.003.SS)
- ▶ Timer (e.g., digital)
- ▶ Pencils

**Activity**

Students identify letters while playing a card game.

1. Place the letter cards face down in a stack. Place the timer at the center. Provide the students with one time record.
2. Working in pairs, student one selects the top card from the stack as the target letter and places it face up on the table. Student two divides the remaining letter cards into two stacks and each student gets one stack.
3. Student one starts the timer and says “begin.” Each student turns over one card, says the letter as quickly as possible, and taps his card if it matches the target letter.
4. If a match is made, places the card below the target letter. If a match is not made, places the card to the side.
5. Play until each student uses all his cards. Student one stops timer and records time on student sheet.
6. Reverse roles and repeat the activity attempting to increase speed and accuracy.
7. Continue until student sheet is complete.
8. Teacher evaluation

**Extensions and Adaptations**

- ▶ Use other target letters.
- ▶ Use target words.

Fluency

Tap Stack

F.003.AM1a

A

B

C

D

E

F

letter cards



F.003.AM1b

Tap Stack

G

H

I

J

K

L

letter cards



M

N

O

P

Q

R



S

T

U

V

W

X



Fluency

Tap Stack

F.003.AM I e

Y

Z

a

b

c

d

letter cards



F.003.AM If

Tap Stack

e

f

g

h

i

j

letter cards



Fluency

Tap Stack

F.003.AM Ig

k

l

m

n

o

p

letter cards



q

r

s

t

u

v



Fluency

Tap Stack

F.003.AM.I.i

w

x

y

z

letter cards



Name _____

F.003.SS

Tap Stack

Time Record

	Minutes	Seconds
1 st Try	_____ : _____	_____
2 nd Try	_____ : _____	_____
3 rd Try	_____ : _____	_____
4 th Try	_____ : _____	_____
5 th Try	_____ : _____	_____



Multiple Meaning Bugs

Objective

The student will identify the multiple meanings of words.

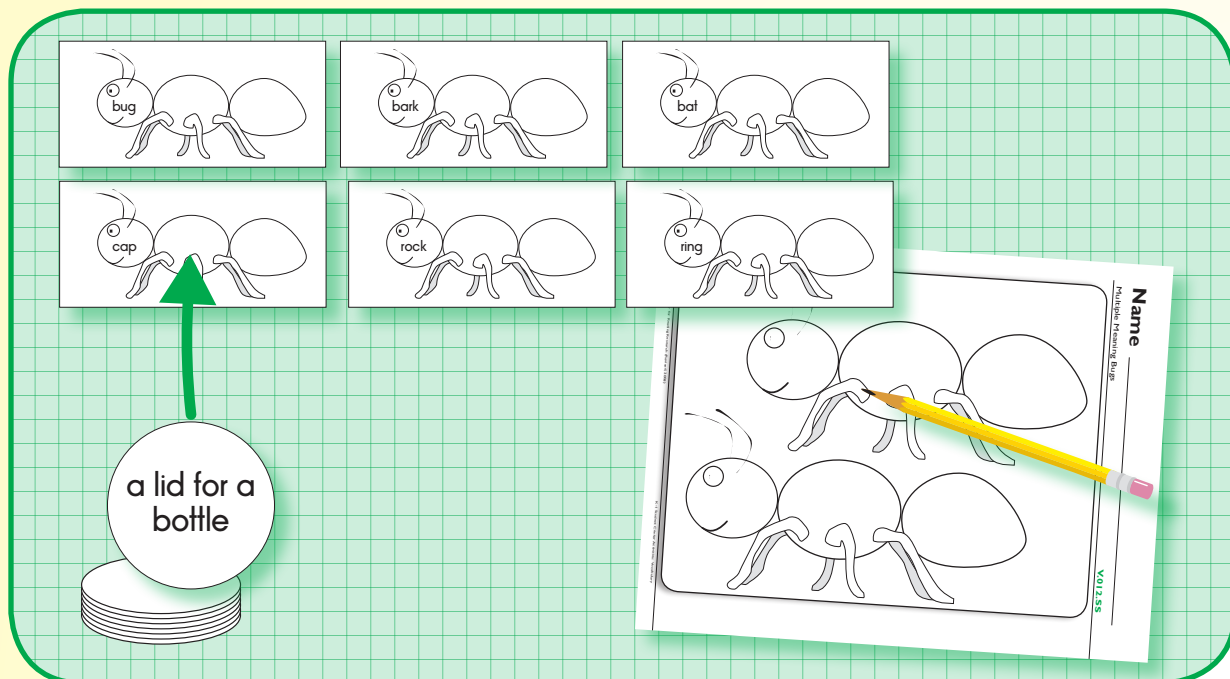
Materials

- ▶ Multiple Meaning Bugs work boards (Activity Master V.012.AM1a - V.012.AM1f)
Copy on card stock, laminate, and cut.
- ▶ Meaning word circles (Activity Master V.012.AM2a - V.012.AM2b)
Copy on card stock, laminate, and cut.
- ▶ Student sheet (Activity Master V.012.SS)
- ▶ Pencil

Activity

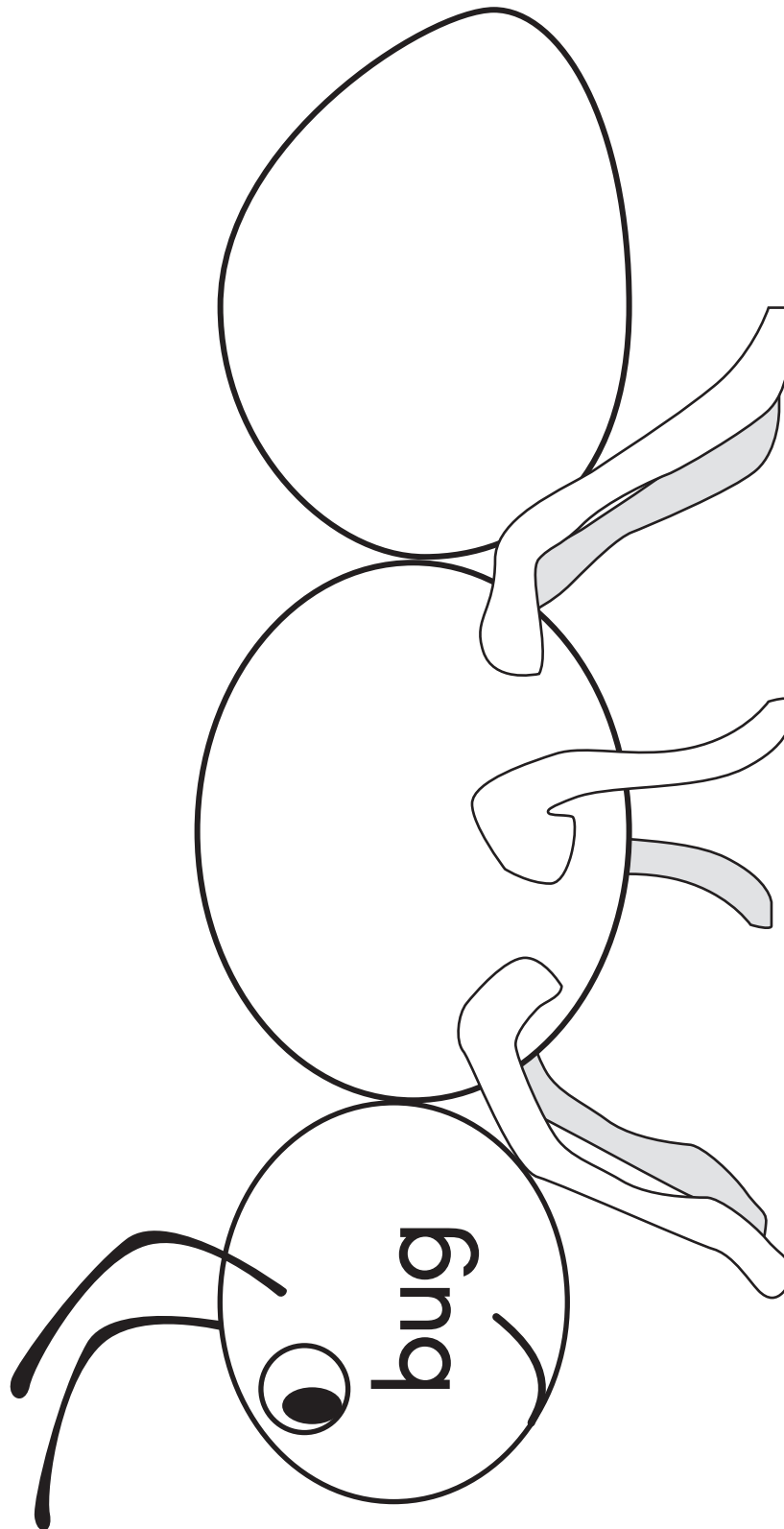
Students identify multiple meanings of words while making bugs.

1. Place the Multiple Meaning Bugs work boards face up in rows. Place the meaning word circles face down in a stack. Provide the student with a student sheet.
2. The student reads each word on the head of each bug.
3. Selects a meaning word circle from the stack, reads it, and determines meaning (e.g., “lid for a bottle; that is a cap”). Places on the work board containing the corresponding word.
4. Continues until all bugs have two meaning word circles on them.
5. Selects two words and definitions from the work boards and records on student sheet.
6. Teacher evaluation



Extensions and Adaptations

- ▶ Use other words with multiple meanings to record on student sheet.
- ▶ Make and use other multiple meaning bugs and meaning word circles (Activity Master V.012.AM3 - V.012.AM4).



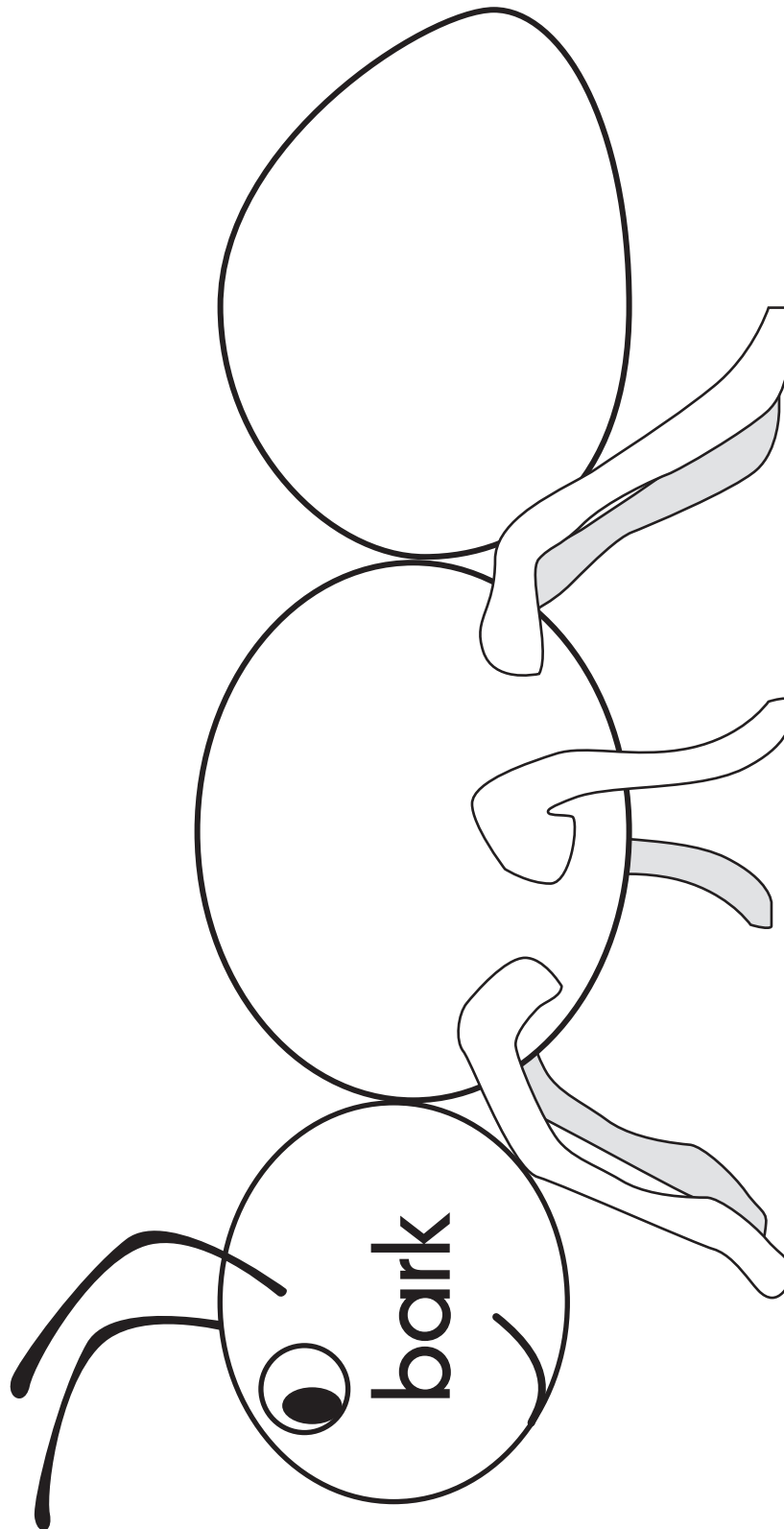
multiple meaning bugs work board



Vocabulary

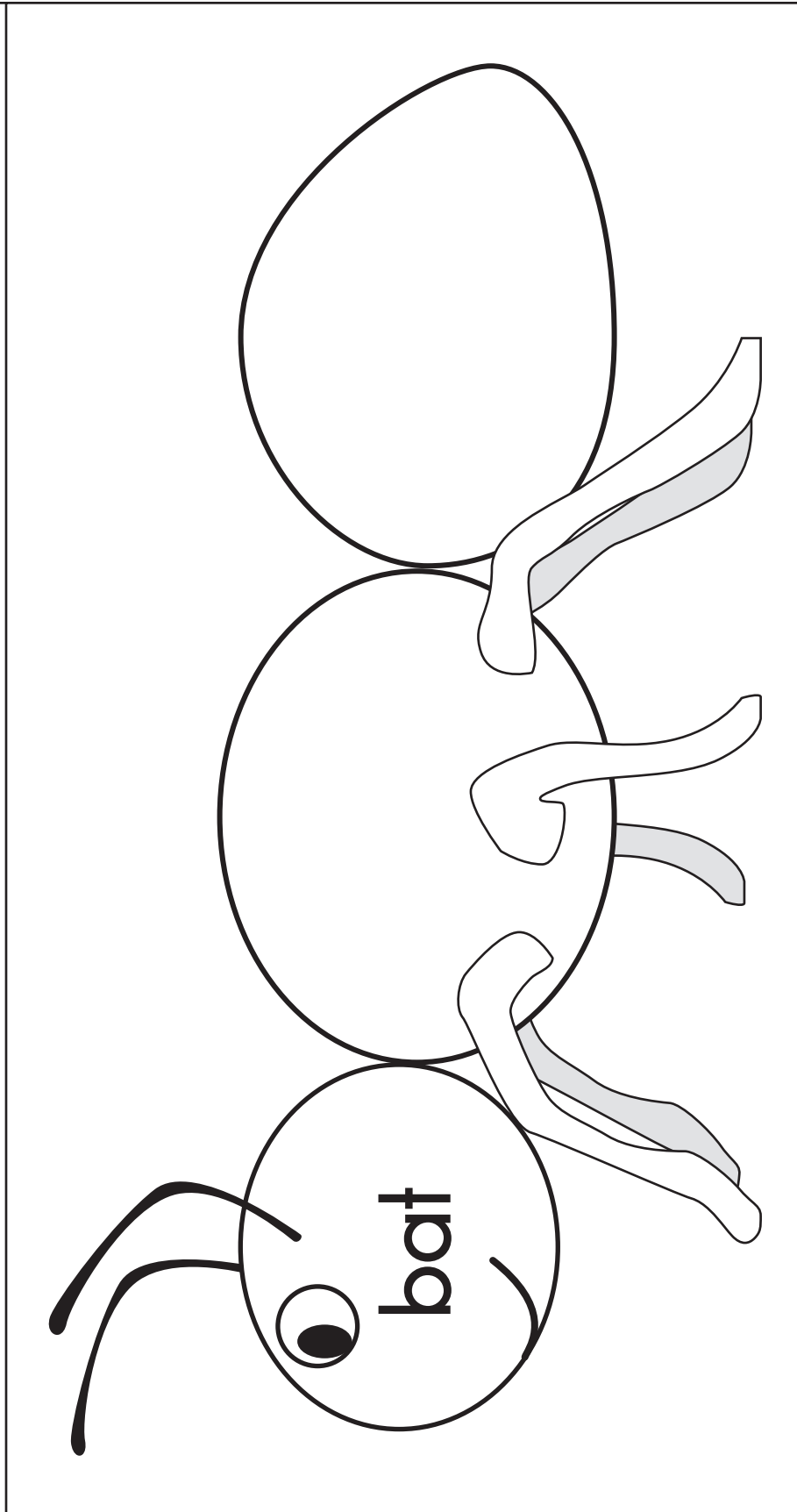
Multiple Meaning Bugs

V.012.AM1b



multiple meaning bugs work board





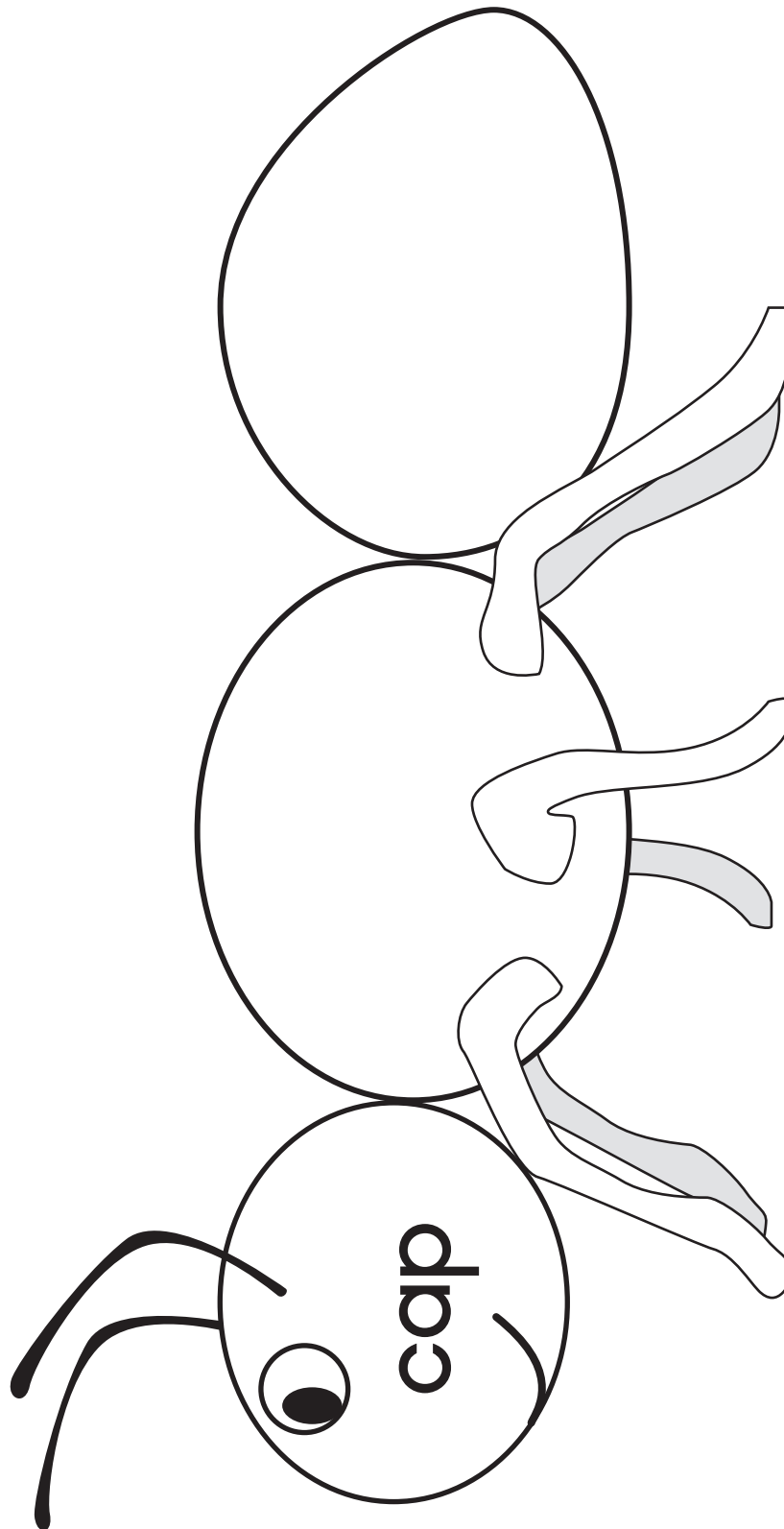
multiple meaning bugs work board



Vocabulary

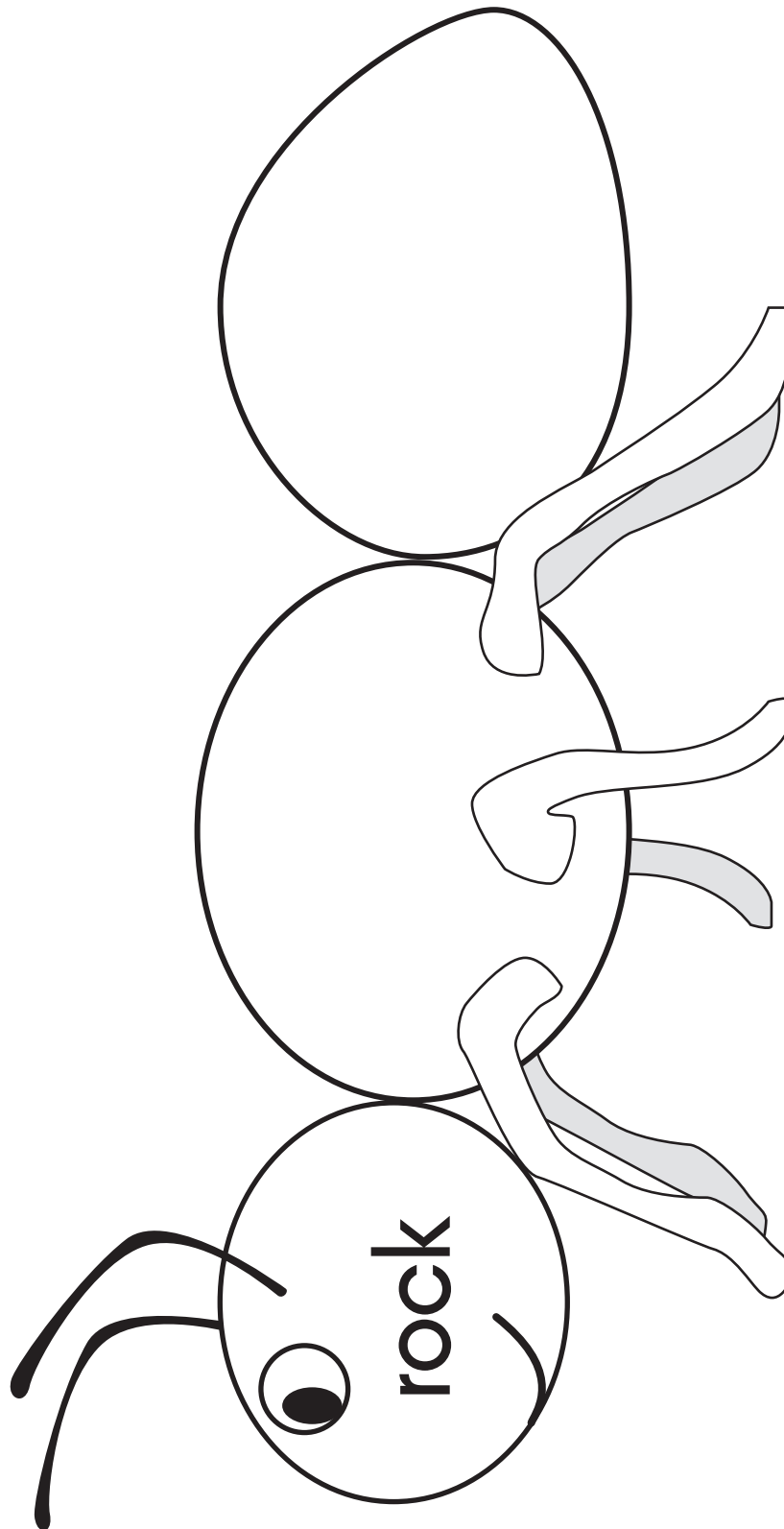
Multiple Meaning Bugs

V.012.AM1d



multiple meaning bugs work board





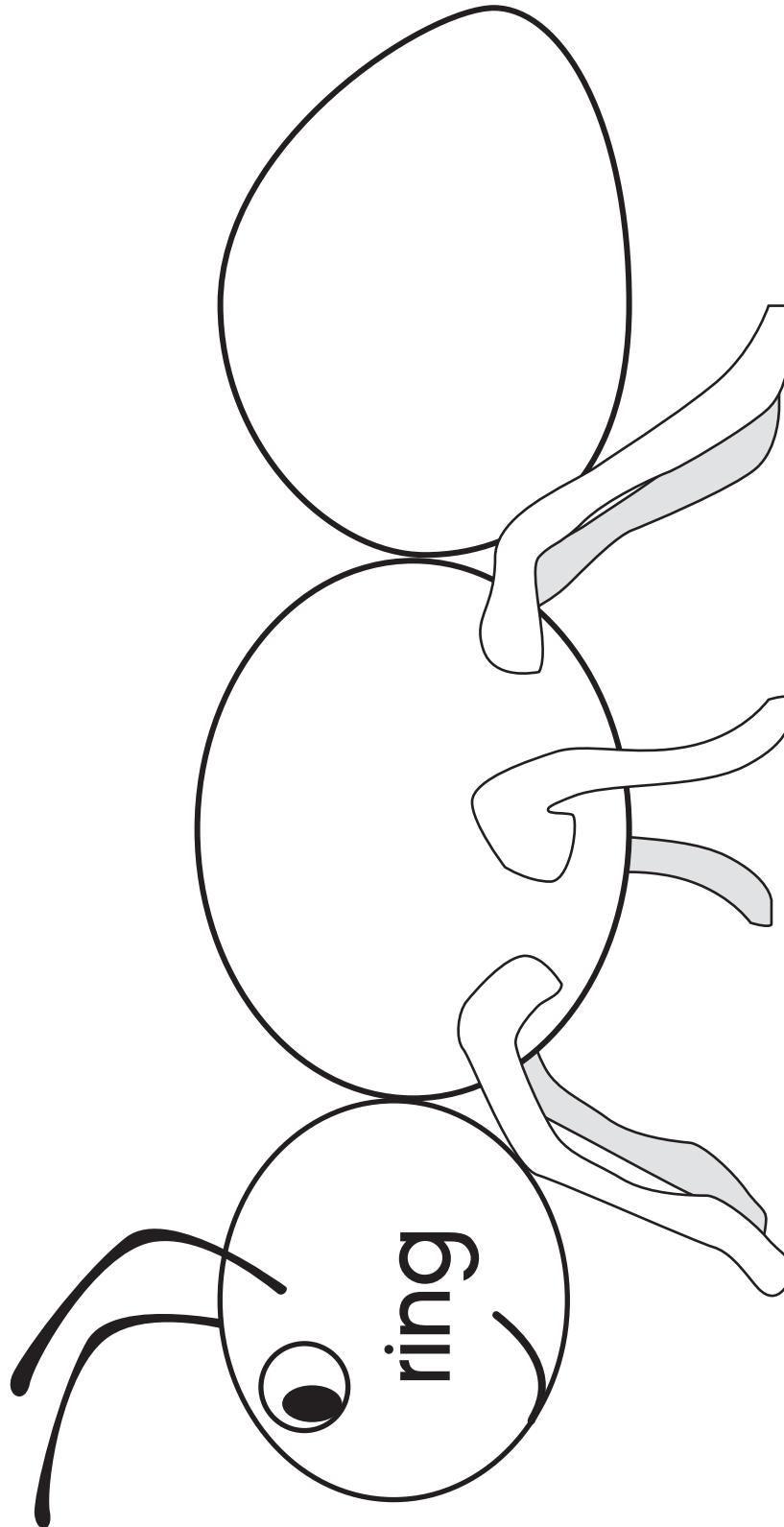
multiple meaning bugs work board



Vocabulary

Multiple Meaning Bugs

V.012.AM1f



multiple meaning bugs work board



insect

to annoy
someone

sound a
dog makes

outside
covering
of a tree

a flying
mammal

a big stick
used to
hit a ball



Vocabulary

Multiple Meaning Bugs

V.012.AM2b

a covering
for a head

a lid for a
bottle

a stone

sway

band
worn on
finger

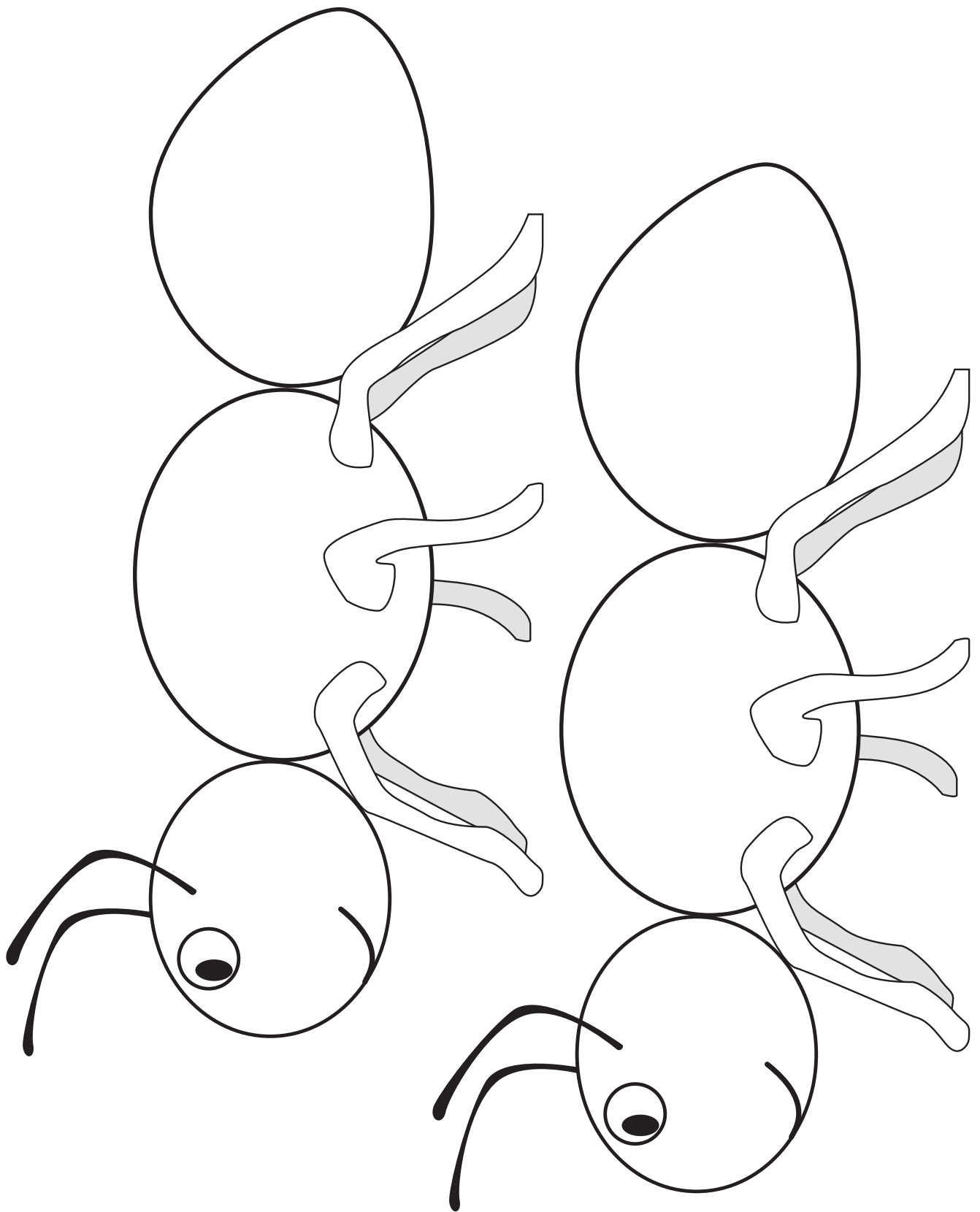
sound
a bell
makes



Name _____

V.012.SS

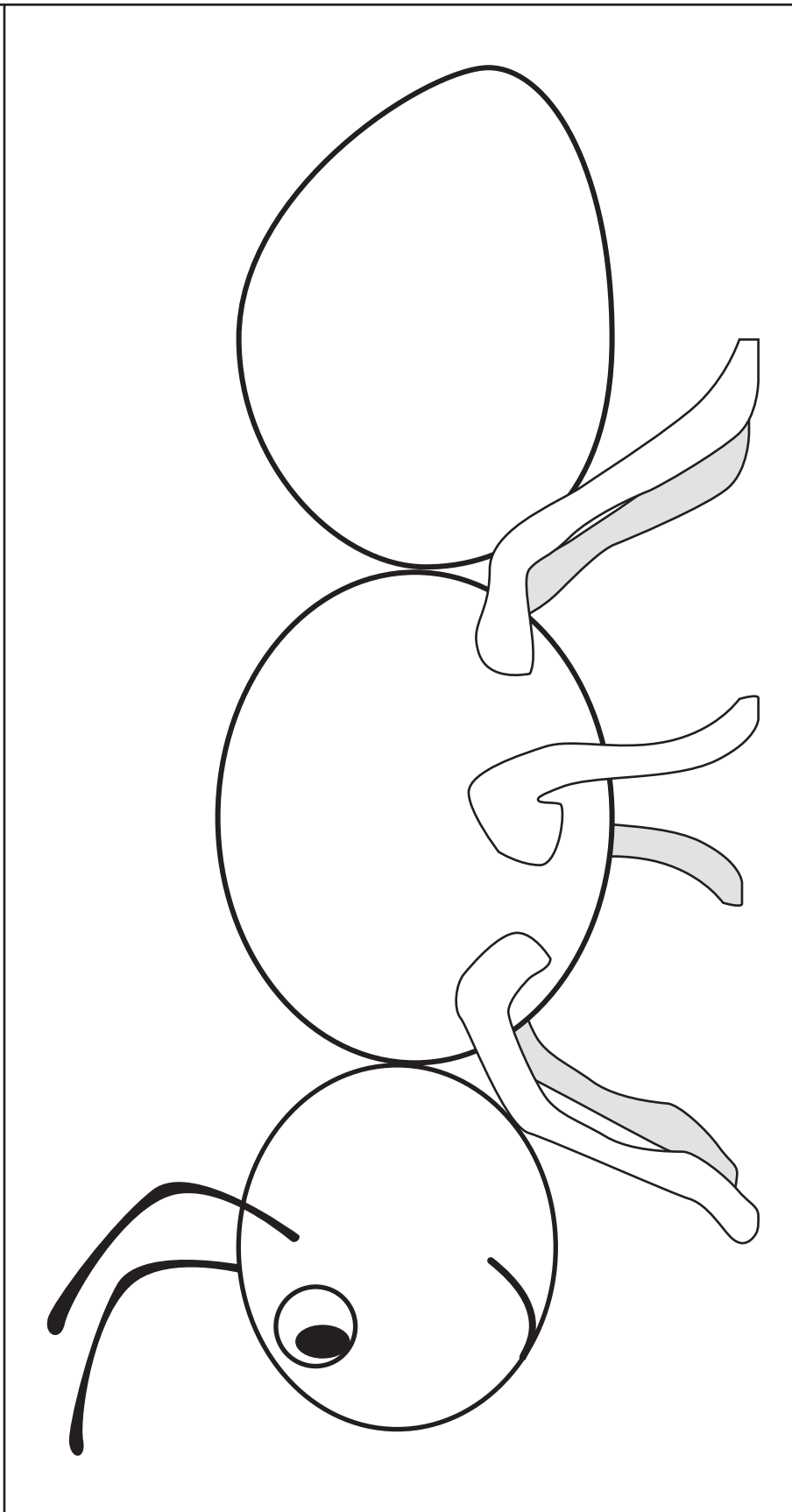
Multiple Meaning Bugs



Vocabulary

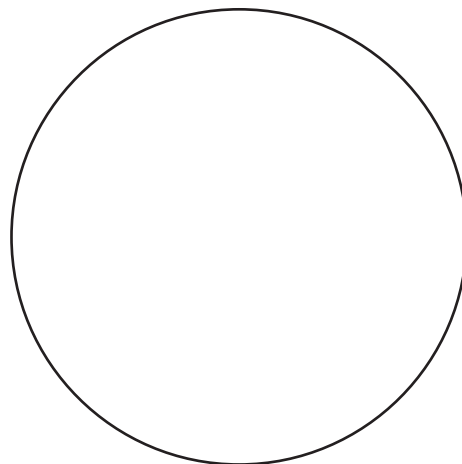
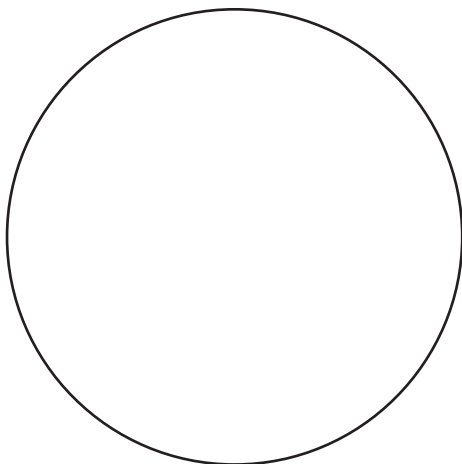
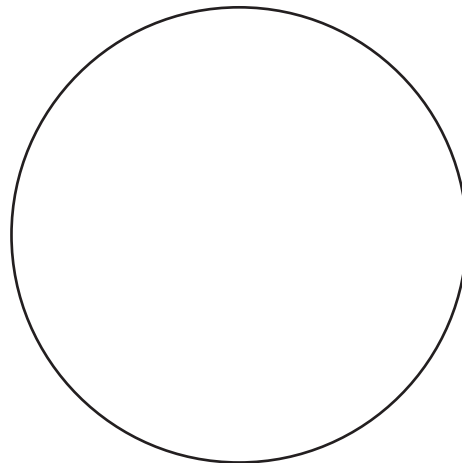
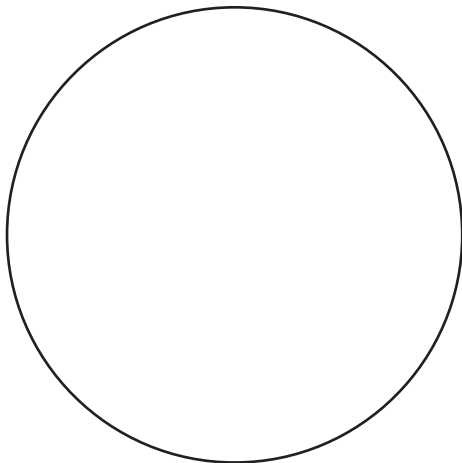
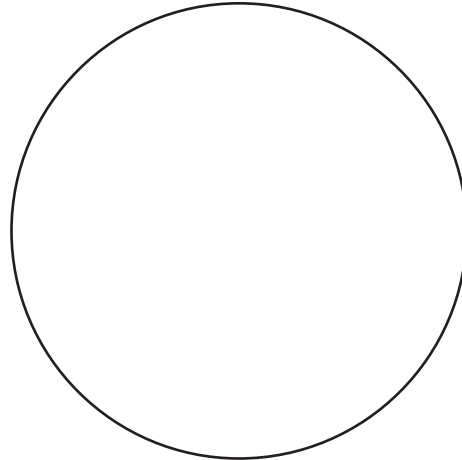
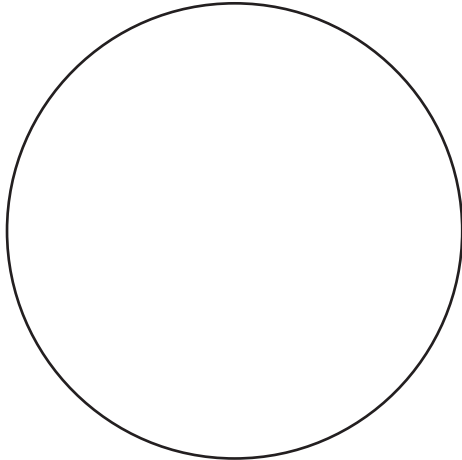
Multiple Meaning Bugs

V.012.AM3



blank multiple meaning bugs work board





Questions to Ask Before, During, and After Reading

These are questions to help engage students in discussions and conversations about reading. These questions are just suggestions and other questions can be added to this list based upon the type of reading students are involved in.

Before Reading

- What is the title of the book or text?
- What does this title make you think about?
- What do you think you are going to read about? (Make a Prediction)
- Does this remind you of anything?
- Are you wondering about the text or do you have any questions before reading?
- Skim through the article. Do any pictures, key words, and/or text features stand out to you?

During Reading

- What is happening so far?
- What does the word _____ mean on this page?
- What do you think the author is trying to communicate in this part?
- What do you think was important in this section? Why do you think it was important?
- What can you infer from this part of the text?
- Where is the story taking place?
- Who are the characters so far?
- What do you think will happen next?
- What does this part make you think about?
- What questions do you have?
- What words help you visualize what the author is saying?
- Is there a word that you struggled with? What is the word? Let's break the word into parts and look at context clues.

After Reading

- What was this text about?
- What was the main idea? What details from the text helped you determine the main idea?
- What did you learn from this text?
- How did the author communicate his/her ideas?
- What does this text remind you of?
- What was your favorite part and why?
- Did this text have a problem? If so, what was the problem and what was the solution?
- What is your opinion about this text? What are some parts that helped you make that opinion?
- What are some questions you still have about the text?
- Does this text remind you of other texts you have read? How are they alike and/or different?
- What is a cause and effect from the text you read?

Happy Notebook



By Clark Ness

Visit www.clarkness.com and www.readinghawk.com
for more free ebooks and stories.

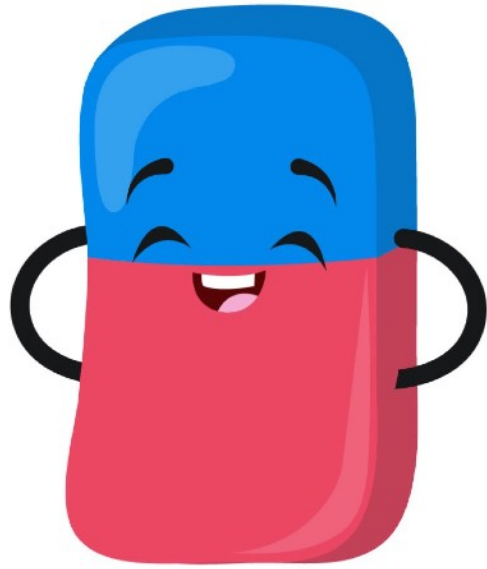
Reading Level: Flesch-Kincaid Grade Level 2.7
Fiction



I am a notebook. I
am happy. I am a
happy notebook.



I am a pencil. I
am happy. I am a
happy pencil.



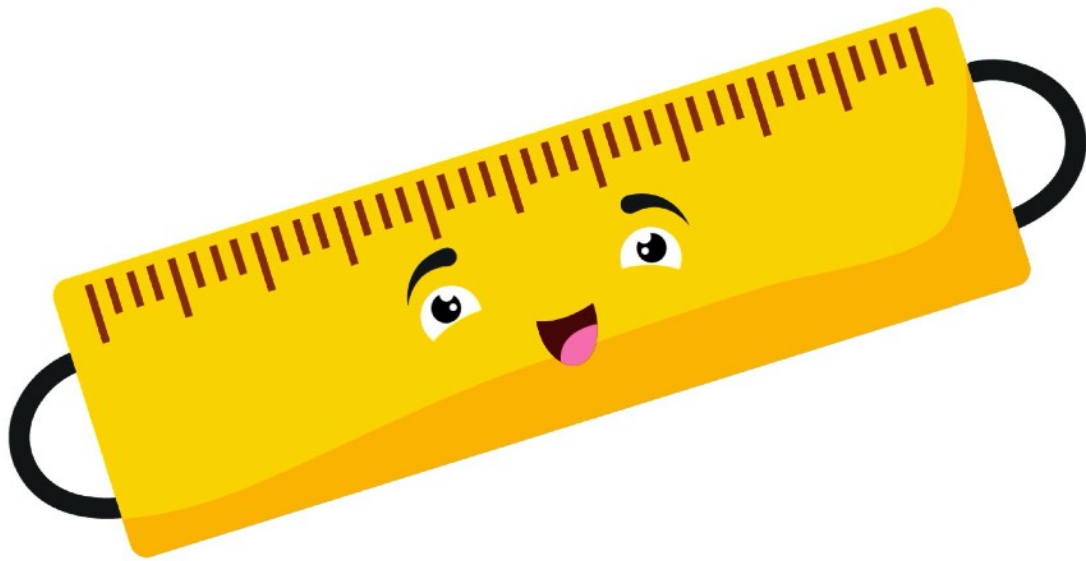
I am an eraser. I
am happy. I am a
happy eraser.



I am a colored
pencil. I am happy. I
am a happy colored
pencil.



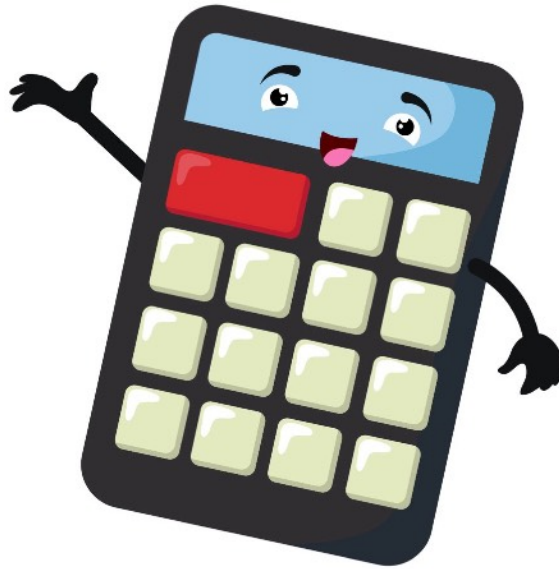
I am a marker. I
am happy. I am a
happy marker.



I am a ruler. I am
happy. I am a
happy ruler.



I am a pair of
scissors. I am
happy. I am a happy
pair of scissors.



I am a calculator.
I am happy. I am a
happy calculator.

Flesch-Kincaid Grade Level 2.7

More free ebooks and stories are available at www.clarkness.com and www.readinghawk.com.
Text Copyright © 2020 by Clark Ness. Images designed by Freepik.com with some modification by Clark Ness.
Permission is granted for printing, photocopying, emailing, recording, storing in a retrieval system, and transmitting this story in any form, or by any means, mechanical and/or electronic. Sale of this story and/or uploading to a commercial bookstore or commercial website is strictly forbidden without prior written permission.

Dan the Cat

By Clark Ness

www.clarkness.com



One day Mr. Ness was in the classroom.
A cat walked into the room. "Hello, Mr. Ness,"
said the cat.

Mr. Ness looked at the cat. He was
surprised. "Who are you?" asked Mr.
Ness.

"I am Dan," said the cat.

"You can't be Dan. Dan is a boy," said Mr. Ness.

"But I am Dan," said the cat. "I just know how to
turn myself into all kinds of animals."

"Well then prove it and turn into a lion," said Mr.
Ness.

Poof! Dan was a lion.

"Don't eat me," said Mr. Ness
when the lion looked at him.



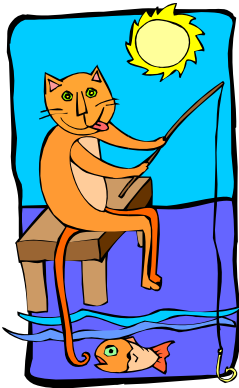
"I am not going to eat you," said Dan the lion with a laugh.

Poof! Dan was a cat again.

"What do you do when you are a cat?" asked Mr. Ness.



"I do all kinds of things," said Dan.



"I like to go fishing. Fish are fun to catch."

"Sometimes I climb up in trees."

"How do you get down?" asked Mr. Ness.

"Most of the time I just jump," said the cat. "One time a fire fighter came and got me down."



"I also like to play with string when I am a cat," said Dan.

"I sometimes even like to drink milk."





"One time I was a space cat," he said.

"I went out into space. After that
I got a lot of mail."

"I read my mail
everyday," said the cat.



"I even got a letter from President
Bush."

"I am glad you like being a cat," said Mr. Ness.

"It is a lot of fun," said Dan.

Poof! Dan was a boy again. He liked
being a cat and liked being a boy.



Flesch-Kincaid Grade Level 0.8
Flesch Reading Ease 100.0

Text Copyright © 2008 by Clark Ness. Clip art from Microsoft Clip Art.
Permission granted for reprinting and photocopying.
Sale of this story and clip art is prohibited.

For more free stories and books are available at www.clarkness.com.

The Thin Pin Can Spin

Focus: Words in the -in family



This is a pin.

The pin is thin.

It is made of tin.

What can the pin do?

The pin can spin.

I like to win.

My fast car has fins.

The fins are made of tin.

I win in my car with tin fins.



The pin and the fins are made of tin.

The pin is thin. The fins are not thin.

The pin spins. The fins win.

Name: _____

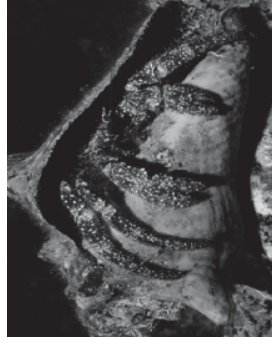
1) What is the pin made of?

2) What does the fast car have?

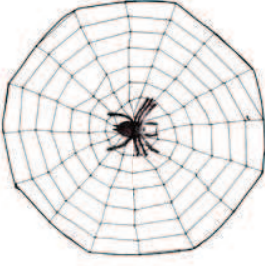
3) What can the thin pin do?

She Needs Less Shell

Focus: Short "e" Words



The crab has a big shell.
The shell does not fit well.
I can tell she needs
less shell.



She fell when she tried
to carry this shell.

The spider has a web.
She made the web to get bugs.
She goes to bed on the web
and waits for them to come.
They may come on part of the web.
She will get them and fix her web.
More bugs may come to her web.
She sets her web like a trap and waits.
She waits well.

Name: _____

1) Why does she need less shell?

2) Why did she make the web?

3) What does she do well?



After coloring Shrinky Dinks, they go in the oven, then the "magical" science begins. (Yumi Barak-Vong/Nancy Dorsner/Flickr)

The science behind Shrinky Dinks



By Jesse Rhodes *Smithsonian Magazine* | March 06, 2020 |

Shrinky Dinks were introduced in 1973. They had kids creating artwork. The art was on flexible sheets of plastic. You then popped them into the oven. They would magically shrink. They shrunk down to about 1/3 their original size. You could then play with what you made. But the entertainment value was all in coloring pictures. They were of your favorite cartoon characters. Then you watched them crinkle up in the oven. And then they mysteriously lie down flat again.

But magic isn't behind the toy's odd properties. The sheets of plastic you get in a Shrinky Dinks kit is polystyrene. It's the same stuff as recycled plastic #6. It is used for those clear clamshell containers. You often see them in cafeterias. Raw polystyrene is heated. This happens when it is made. It is rolled out into thin sheets. Then it is rapidly cooled. This helps it keep its shape.

The polymer chains within the polystyrene are bunched up by nature. They are randomly clumped together. They are heated. They are rolled. They are cooled. This process forces them to straighten out. They get into a more orderly shape. The polymers just want to bounce back. They want to go back to their disorderly shape. They are able to do this when the polystyrene is heated again. It's like when you pop a cookie sheet full of Shrinky Dinks into the oven. The term "magic" works pretty darn well. That is when it comes to marketing purposes.

Shrinky Dinks are moving beyond their status as a kid's toy. Scientists are finding practical applications for the fun sheets of plastic. That's according to a study. It's from Northwestern University. They are being used in the world of nanotechnology. It's a branch of science. It looks at the properties of materials. It looks at them on very small scales. Take glass as an example. It is usually used to insulate electronic material. It conducts electricity. That's on the nano scale. Metals like gold can appear red. They

usually used to insulate electronic material, it conducts electricity. That's on the nano scale. Metals like gold can appear red. They can also be blue. This branch of science is being used in the real world. It is used to make solar cells. It's used to make high-density displays. And it is used to make chemical sensors.

Scientists who want change the properties of certain materials work with nano-scale patterns. They are printed with those materials. The printing process takes time. It is very pricey. New printing technology can print those patterns. It prints them on Shrinky Dink plastic. Scientists can then shrink the plastic. They can further their nano-scale investigations. The technology is cost effective. Laboratories can independently produce as many copies of these test patterns as they need. That's pretty crafty. There really is a Shrinky Dinks kit for everyone.

The science behind making bread

By How Stuff Works, adapted by Newsela staff on 08.18.19

Word Count **577**

Level **540L**



A woman kneads dough to make bread. Photo by: Karin Dreyer/Getty Images

You probably eat bread every day. Maybe you can even make your own. Have you ever thought about the science behind your favorite loaf?

Why do we have bread in the first place? That is a good place to start. We could easily munch on dry wheat kernels instead. We could grind the wheat into flour. Then we could mix it with water. We could eat it as a wet mush. Or, we could dry the mush into hard sheets.

We do not do that, though. Bread tastes a lot better. It also works a lot better for sandwiches! Bread is moist. It is soft, unlike wheat kernels. It is spongy and delicious. Bread is a bio-chemical technology. It turns wheat flour into something tasty!

Let's look at the science behind bread.

Bread Basics

Pick up a slice of bread. Take a close look. You should see that it is full of air holes. This makes it spongy and soft. You will also see that bread is moist. Let a slice of bread sit out on the counter for a day. It will become hard and stale. That should show you just how moist fresh bread is!

Bakers use chemistry to create soft, spongy, moist bread.

Yeast is a key ingredient in most breads. Yeast is a living thing. It is a type of single-cell fungi. Yeast eats sugar. It also creates waste products. These waste products are alcohol and carbon dioxide gas. The carbon dioxide gas gives bread its airy feel. The alcohol burns off during baking. Still, it gives the bread a lot of flavor.

Do Not Skip Kneading

Wheat flour becomes very stretchy when mixed with water. This is because of gluten. Gluten is a protein in wheat. It forms in thread-like chains. These chains can stretch like a balloon. They let the bread dough capture the carbon dioxide from the yeast. Kneading is a way of working dough with your hands. It is a better way to mix the bread. It helps the gluten chains develop. That is because kneading is gentle. It does not cut the chains up. Do not skip kneading. Your bread will not rise very well. The carbon dioxide would not be captured inside the dough. Instead, it would bubble up to the top and escape.

Most bread recipes also call for sugar. This helps the bread dough rise. White sugar contains glucose. Yeast cells eat the glucose. Then, they create carbon dioxide.

A yeast cell can process roughly its own weight of glucose per hour. The yeast produces two molecules of carbon dioxide (CO₂). It also produces two molecules of ethanol. Ethanol is a simple alcohol.

You do not need to add a lot of sugar to make bread. Flour naturally contains starch. Starch is a more complex kind of sugar. Enzymes in the dough break the starch down into maltose, a simpler sugar. The yeast uses maltose like it uses glucose.

Stretchy Flour Balloons

It takes time for the enzymes to change starch to maltose. But the yeast can still create some carbon dioxide. The gas becomes trapped in the tiny, stretchy flour balloons. These begin to expand. Then the dough begins to rise. That is how you know the enzymes are working. The flour-to-maltose reaction drives most of the rising of the bread. The yeast uses the sugar in the dough fairly quickly.

Now, you understand more about the technology of bread!

Quiz

- 1 According to the section "Bread Basics," why does yeast make bread airy?
- (A) Yeast makes carbon dioxide, which gets trapped in the dough and expands.
 - (B) Yeast makes chains in the bread and keeps air from escaping the dough.
 - (C) Glucose and yeast burn off alcohol and sugar to give bread more flavor.
 - (D) Glucose eats the yeast in bread, which produces carbon dioxide to make it rise.

- 2 Why does bread dough need to be kneaded?
- (A) Kneading mixes the ingredients together.
 - (B) Kneading adds flavor to the dough.
 - (C) Kneading allows carbon dioxide to escape.
 - (D) Kneading helps the dough rise.

- 3 Read the following selection from the section "Stretchy Flour Balloons."

It takes time for the enzymes to change starch to maltose. But the yeast can still create some carbon dioxide. The gas becomes trapped in the tiny, stretchy flour balloons. These begin to expand.

Which word could replace "expand" WITHOUT changing the meaning of the sentence?

- (A) fill
- (B) shrink
- (C) multiply
- (D) grow

- 4 Read the selection from the section "Bread Basics."

Take a close look. You should see that it is full of air holes. This makes it spongy and soft. You will also see that bread is moist. Let a slice of bread sit out on the counter for a day. It will become hard and stale.

What is the definition of "spongy" based on the context clues?

- (A) something that is fresh
- (B) soft and full of holes
- (C) old and dry
- (D) easy to eat

English Language Learner Supplement K-1

Play

By Lill Pluta

I jump. I shake.
I dance. I hop.
I like to move.
I cannot stop.

I scoot and roll
across the floor.
I spin in circles
out the door.

I run outside.
I leap. I skip.
I bounce. I slide.
I swing. I flip.
But I'm still careful!
I don't trip!

Reading: Read the poem with help.

Listening: Listen as someone reads the poem to you.
Make pictures in your mind of what is happening in the poem.

Speaking: Tell someone in English what you like to do when you play.

Writing: Write the rhyming words from the poem.

hop and _____

floor and _____

skip and _____ and _____

Writing: Draw a picture of what is happening in the poem.

Suplemento para

Estudiantes que Aprenden Inglés K-1

Se recomienda que los niños completen la página en inglés para practicar las habilidades en inglés.

Jugar

de Lill Pluta

Yo brinco. Yo tiemblo.
Yo bailo. Yo salto.
Me gusta moverme.
No pudeo parar.

Me deslizo y ruedo
a través del piso.
Giro en círculos
afuera de la puerta.

Corro afuera
Yo salto.
Yo reboto. Me deslizo
Me balanceo. Me volteo.
¡Pero todavía tengo
cuidado!
¡No me tropiezo!

Lectura: lee el poema con ayuda.

Escucha: escucha mientras alguien te lee el poema. Haz fotos en tu mente de lo que está sucediendo en el poema.

Hablando: dile a alguien en inglés lo que te gusta hacer cuando juegas.

Escritura: Escribe las palabras que riman de la versión inglesa del poema.

hop y _____

floor y _____

skip y _____ y _____

Escritura: Haz un dibujo de lo que está sucediendo en el poema.

Writing Ideas K-1 Elementary Week #7

Students can draw pictures and/or compose sentences and/or paragraphs to respond to the prompts and ideas below. This will vary depending on their grade level.

Narrative

- Write your own animal story! You can add characters and a setting! Be sure to include details and have a beginning, middle, and end.

Opinion/Argument

- What is your favorite movie? Write an opinion piece on your favorite movie. Why is this movie your favorite? Add reasons, examples, and/or details to support your opinion.

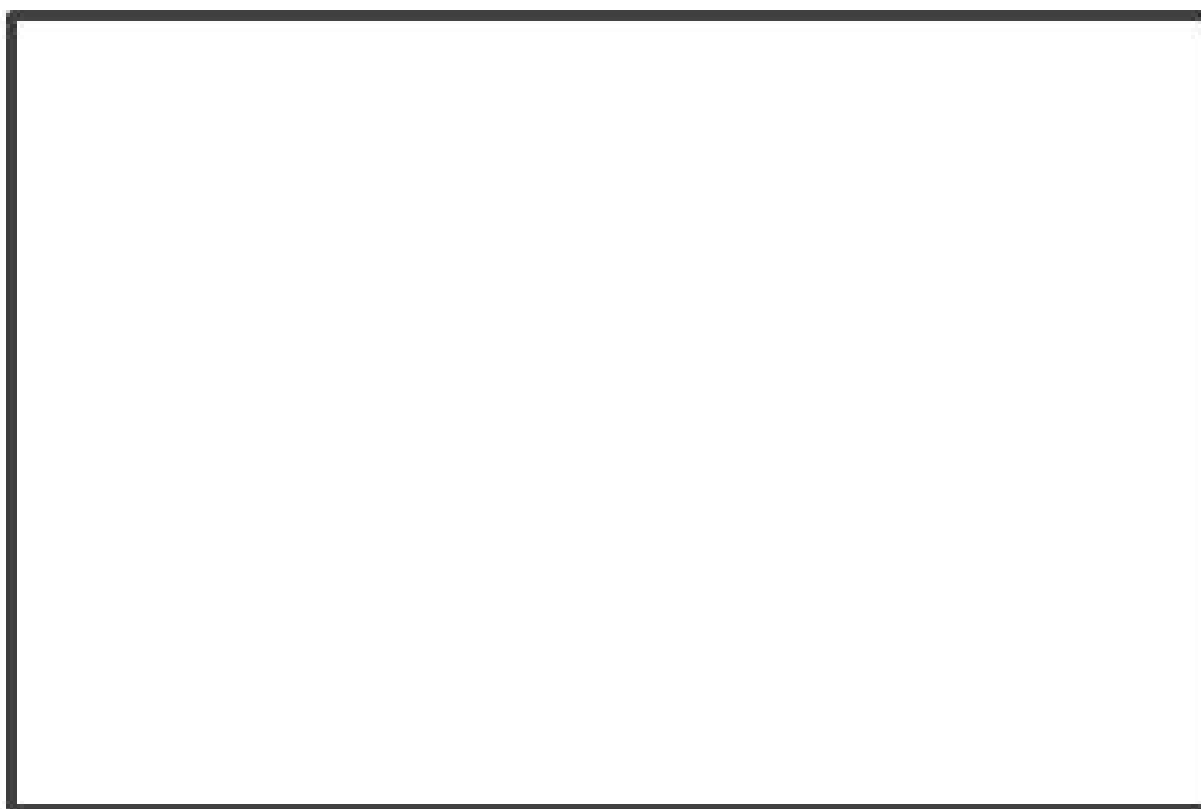
Informational/Explanatory

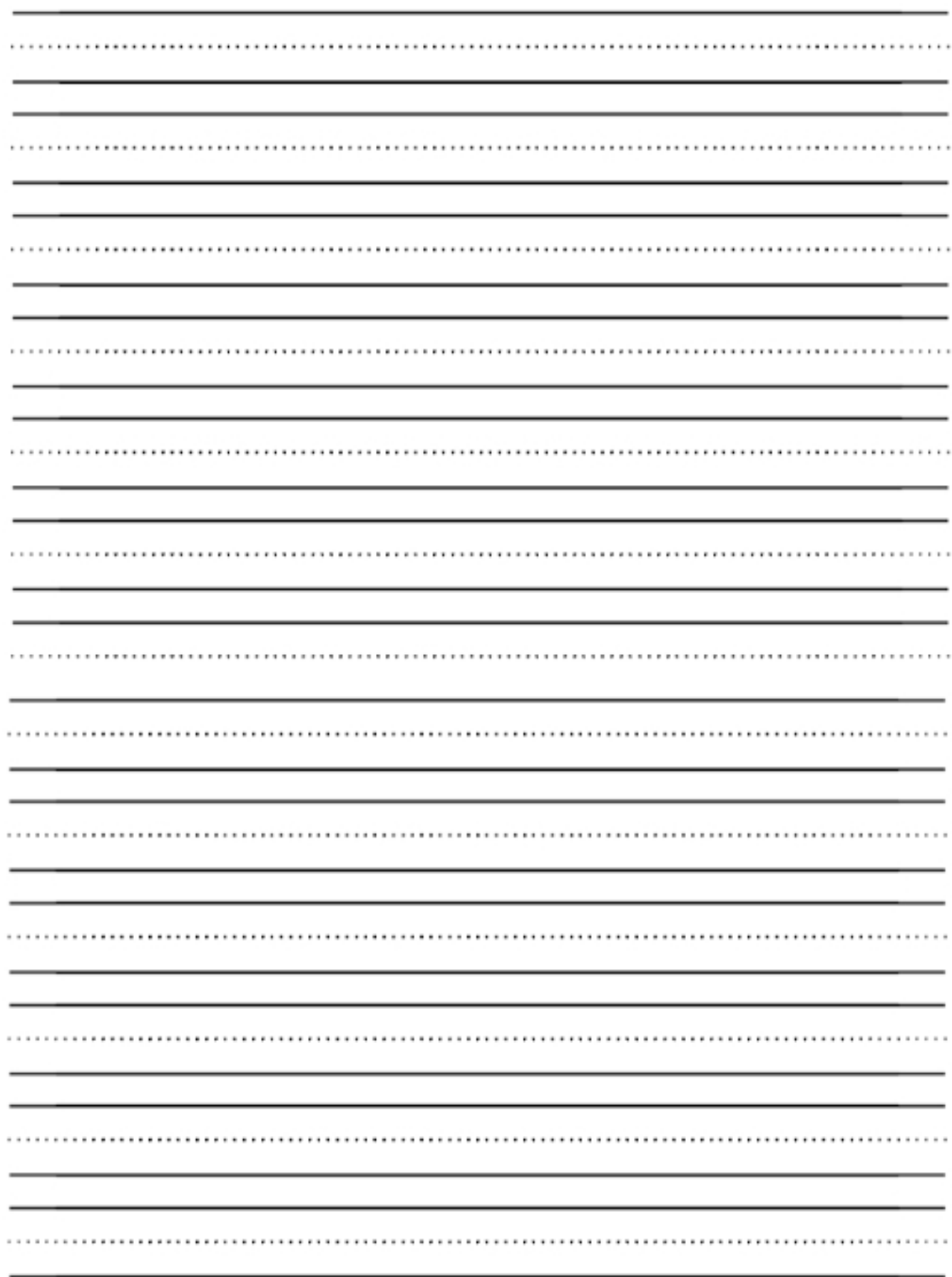
- Pick an object and learn about how it is made! It can be anything you use in your daily life. Some ideas might be a pencil, crayon, toothbrush, cup, baseball, or a shoe. Write an informational piece on how that item is made. Introduce the item and add facts, information, and/or details.

Writing in Response to Reading Bingo

Complete the Bingo board by engaging in various writing ideas from this week's reading selections. Try to get 3-in-a row!

What is your favorite kind of bread? Write an opinion piece about your favorite bread or why it is your favorite.	Rhyming words is fun! Write your own rhyming sentences, paragraphs, poem, song, or story that has words that end with -in and/or -ell!	Vocabulary words are fun! Write a poem or song with some of the words from this week's readings! You can also create a bingo board with the words or draw pictures to go with each word and make your own word/picture memory game!
Write your own "I am happy" book just like Happy Notebook! You can write it about objects in your house, animals, types of flowers, types of cars, or any other ideas you have!	WRITER'S CHOICE	Just like Dan the Cat , you can write your own silly story about turning into an animal. Write your silly story and read it to someone. You can even turn it into a play or a song!
Write about how the two reading selections The science behind Shrinky Dinks and The science behind making bread are similar and/or different	What else can you find out about spiders or crabs? Try drawing a picture of one or both and label the parts. Write an informational piece about one or both of them.	What do you know about bread or Shrinky Dinks? Do some research to learn about one or both! Write a play, poem, song or story about Shrinky Dinks and/or bread!

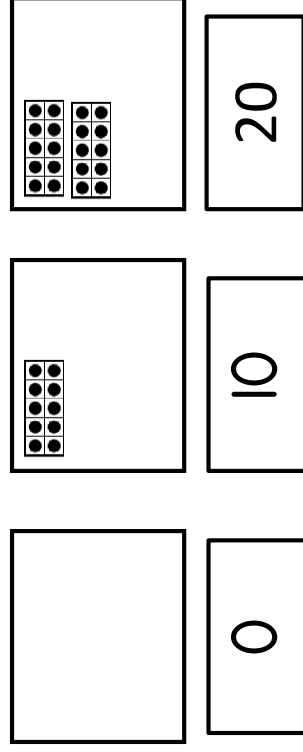




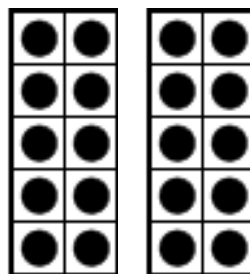
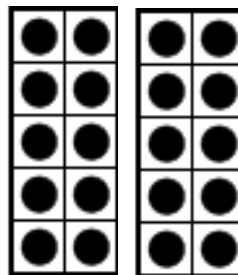
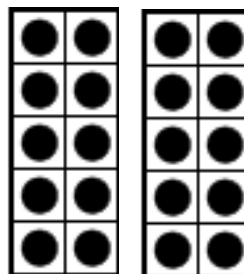
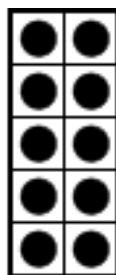
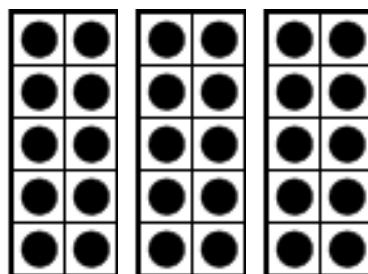
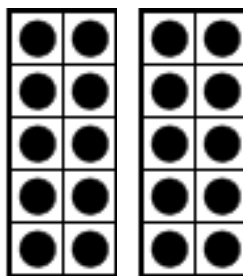
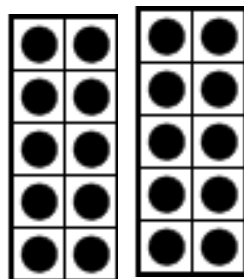
Count by Tens to 100

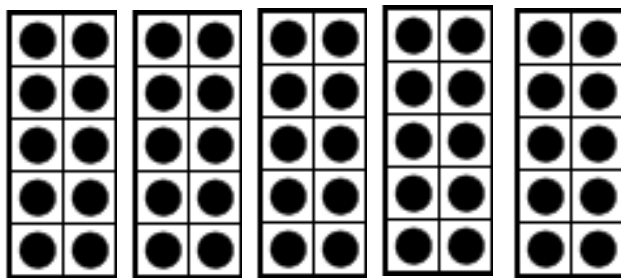
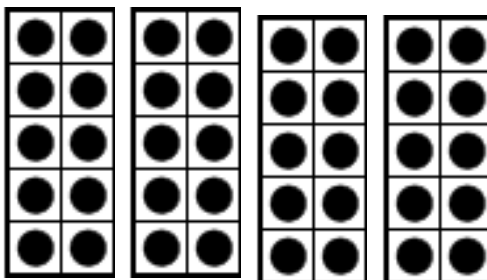
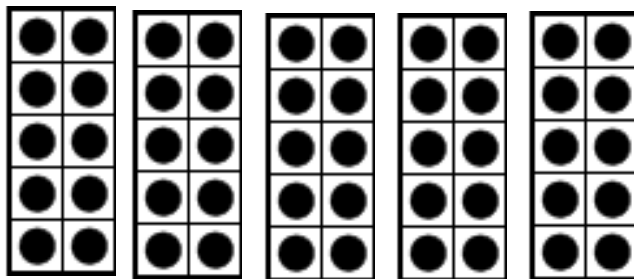
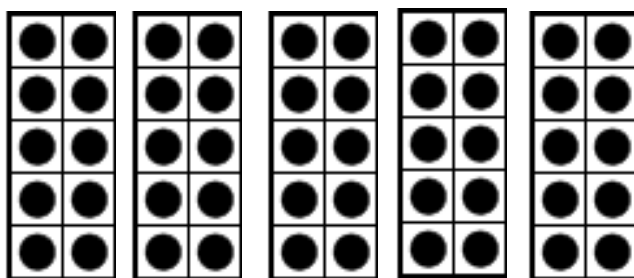
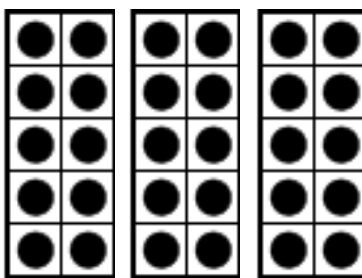
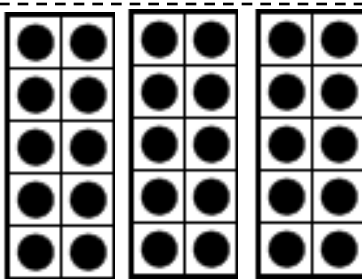
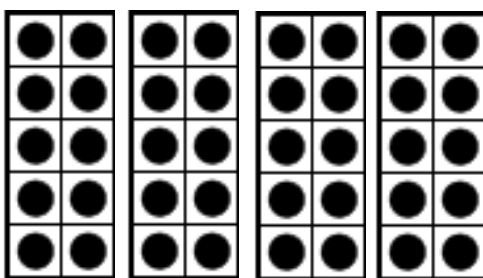
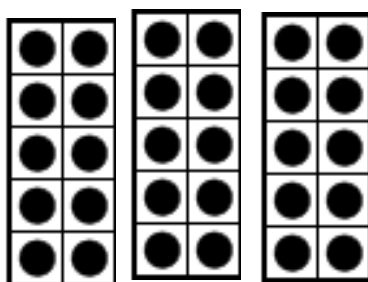
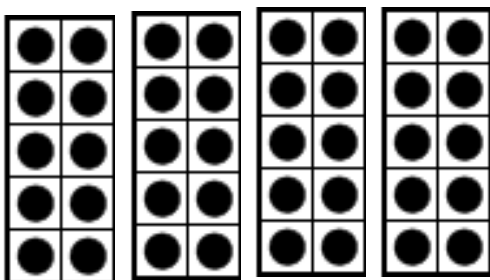
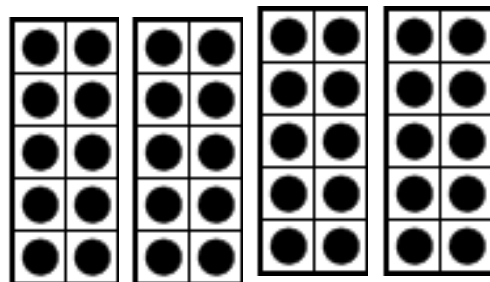
Materials: Count by Tens to 100 cards

1. Work with a partner. Match the picture and numeral cards.
2. Place the cards in order. Count forwards from 0 to 100.
Count backwards from 100 to 0.



3. Take turns to remove a matching picture and numeral card from the sequence while your partner is not looking. Ask your partner, “Which number is missing? How do you know?”





0

10

20

30

40

50

60

70

80

90

100

Find Three Cards

Materials: numeral cards (1-9)

1. Collect a set of cards numbered 1 – 9.
2. Find three cards that have a sum of 12.
3. How many different ways can you make a sum of 12 using three cards?
4. Record your work.



□□□ r□□□ rd□□

1

2

3

4

5

6

7

8

9

10

11

12

Lesson 3: Happy Maps

Flurb

This unplugged lesson brings together teams with a simple task: get the "flurb" to the fruit. Students will practice writing precise instructions as they work to translate instructions into the symbols provided. If problems arise in the code, students should also work together to recognize bugs and build solutions.

Flurb

The bridge from algorithms to programming can be a short one if students understand the difference between planning out a sequence and encoding that sequence into the appropriate language. This activity will help students gain experience reading and writing in shorthand code.

Flurb

- Flurb 5
• Flurb
- Flurb 40
• Flurb M Flurb r r
• Flurb d r
- Flurb 8
• Flurb
• Flurb r
- Flurb d d r

Flurb 40

Flurb M Flurb r r

In this exercise, the class will get map cards that have a pre-defined start space (Flurb) and end space (fruit). Students will need to get the Flurbs to the fruit on each card, using the arrows provided.

M Select one of the intermediate maps from the Happy Maps Cards worksheet (e.g., #3). Display it for the class and work through the puzzle together.


Have students look at the puzzle, then think-pair-share their solution for how they would get the Flurb to the fruit.

This Flurb needs to take two steps to get to the fruit. Work with your elbow partner to decide what you think those two steps are.

Have students discuss with neighbors for about 90 seconds.

Ask a few students to describe their algorithm to the class. Move your finger along the displayed map as the students read their steps. Once you have a solution, ask if anyone else came up with a different idea that also works.

Now, share with the students that the magic step of changing an algorithm into a "program" happens when the code is written down using symbols. Do the students see any symbols on the display?

- ☐ What was today's lesson about?
- ☐ Draw one of the  that shows how you felt about today's lesson in the corner of your journal page.
- ☐ Can you draw your own Flurb map?
- ☐ What would the code be to solve your map?

□ □ □ □ □ d □ d □ □ □ □ r □ □ □ □ □

Use these activities to enhance student learning. They can be used as outside of class activities or other enrichment.

□ □ □ □ □ M □ □ □

- □ Create a life-size grid on the rug with tape and have student bring stuffed animals to school.
- □ Now students can program friends to move their actual stuffies as directed in the programs.

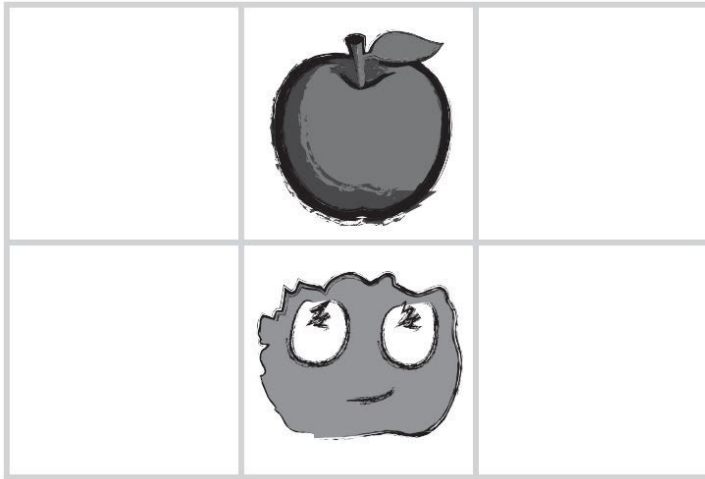
□ r □ □ □ □ □ □ □ r □ □ □ □

- □ Have students create their own maps.
- □ Have other students solve them using programs.

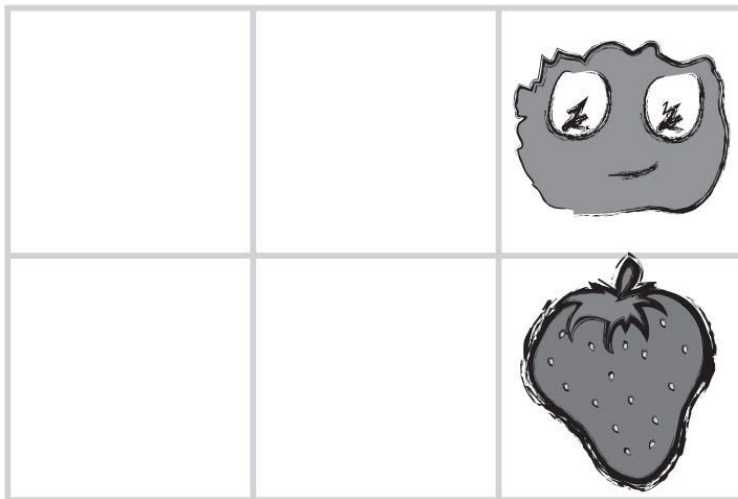
Happy Maps



1. Which way should the Flurb step to get to the fruit?



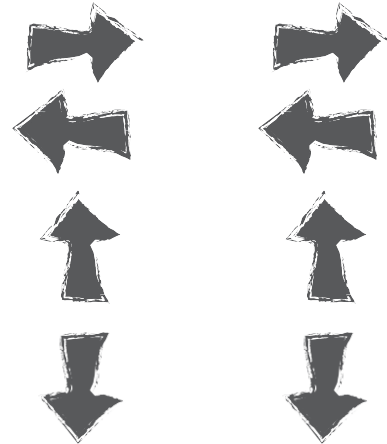
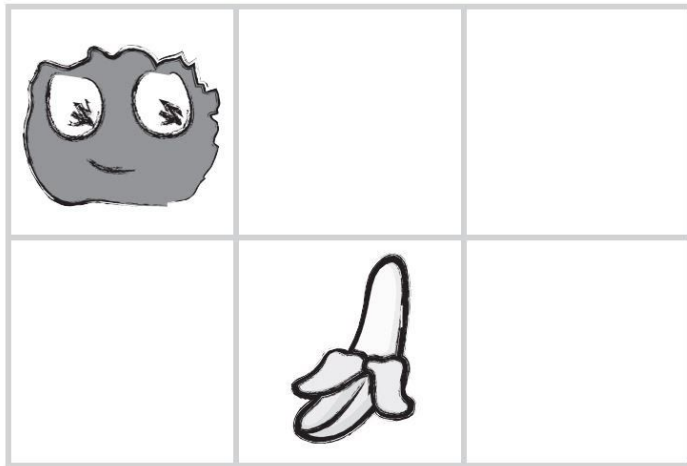
2. Which way should the Flurb step to get to the fruit?



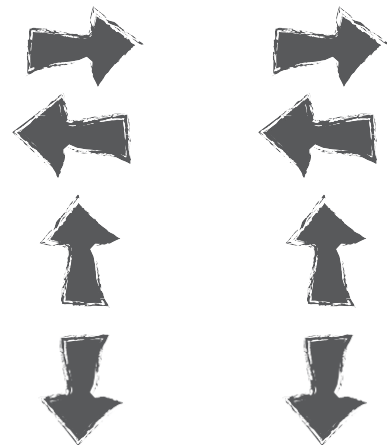
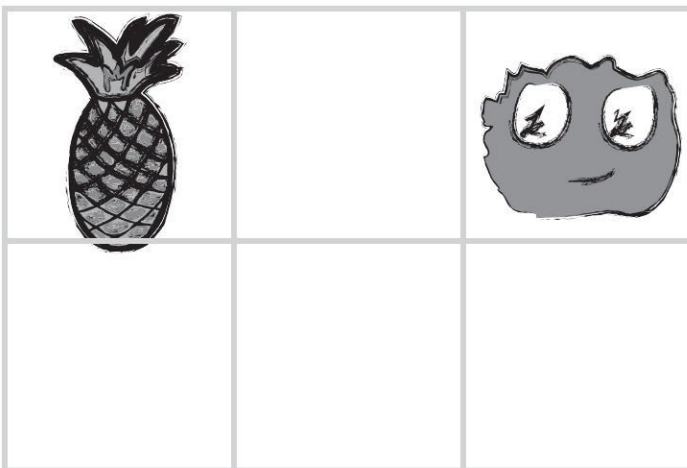
Happy Maps



3. Which two ways should the Flurb step to get to the fruit?



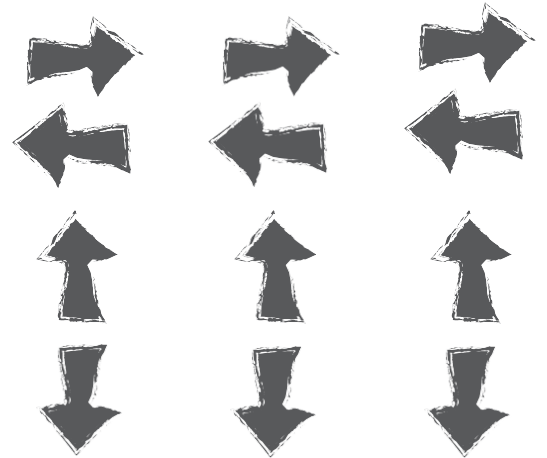
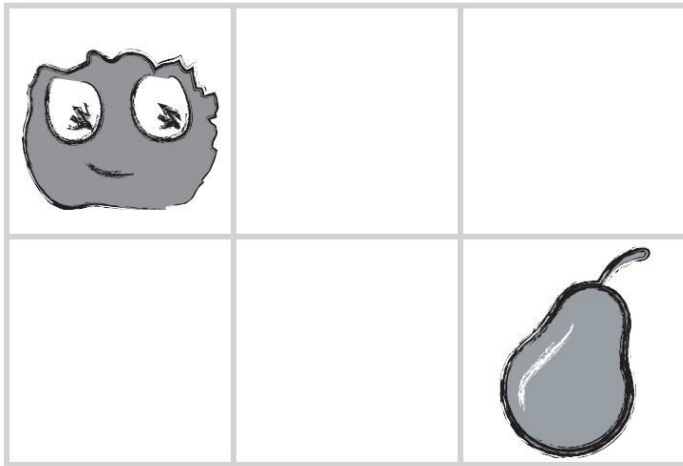
4. Which two ways should the Flurb step to get to the fruit?



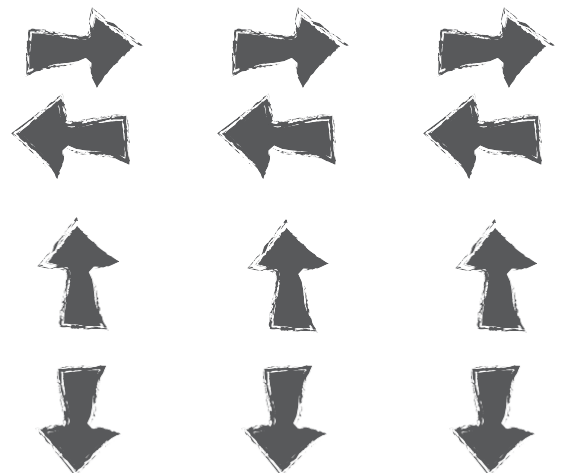
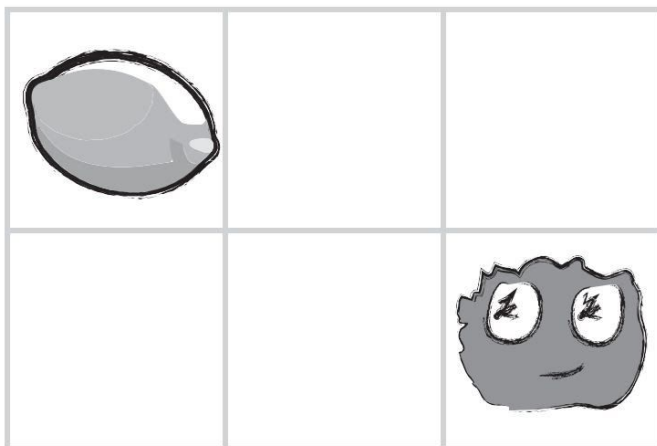
Happy Maps



5. What should the Flurb do to get to the fruit?



6. What should the Flurb do to get to the fruit?



Name(s) _____ Period _____ Date _____

Happy Maps



Happy Maps Game Pieces

