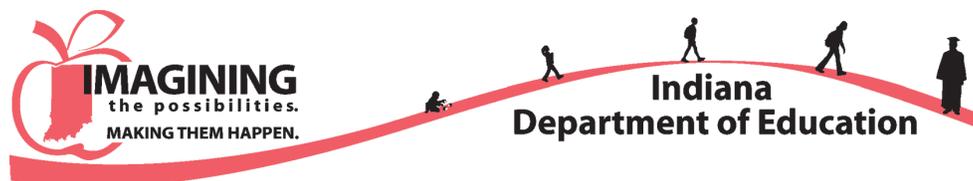


***ISTEP+* Spring 2014**

Indiana Statewide Testing for Educational Progress Plus

Mathematics • English/Language Arts • Science
Grade 4

Web Version



Use only a Number 2 pencil to respond to the questions in this book. Responses written in pen CANNOT be scored.

Acknowledgments: CTB is indebted to the following for permission to use material in this book.

Adaptation of "Cats vs. Dogs" by Justin O'Neill from Scholastic *Storyworks* Magazine, February 2012, text copyright © 2012 by Scholastic Inc. Used by permission. Photograph of pointer looking down at cat (Image No. 42-20300669) by Tim Macpherson, photo copyright © Tim Macpherson/Cultura/Corbis. Used by permission.

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**DO
NOT
MARK
ON THIS
PAGE**

**DO
NOT
MARK
ON THIS
PAGE**

NOTE: A correct answer **CANNOT** receive full credit if no work is shown.

Since you may receive partial credit for all problems in this test, it is important to show ALL work in the spaces provided in this book. When you see the words **Show All Work**, be sure to

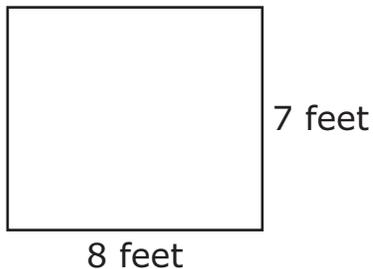
- **show all the steps needed to solve the problem**
- **make your handwriting clear and easy to read**
- **write the answer on the answer line**

As you complete each problem, remember to

- READ** the problem carefully
- PLAN** how to solve the problem
- SOLVE** the problem showing all steps
- CHECK** your work

Session 1: Mathematics

- 1** Daniel is building a model of a small city on a rectangular tabletop. A diagram of the tabletop is shown below.



Daniel plans on putting a wood border around the perimeter of the tabletop. The height of the table is 3 feet.

If he has 20 feet of wood for the border, how much MORE wood, in feet, will he need?

Show All Work

Answer _____ feet

What information is NOT needed to solve the problem?

Go On

Session 1

- 2 The diagram below shows one of the banners 3 friends are making for the school teams.



The 3 friends EACH make 2 banners.

What is the total area, in square feet, of ALL the banners?

$$\begin{aligned}\text{Area of rectangle} &= lw \\ &= \text{length} \times \text{width}\end{aligned}$$

Show All Work

Answer _____ square feet

- 3** On Monday, 64 students went on a field trip to an art museum. At the museum, they were divided into 4 equal groups.

How many students were in each group?

Show All Work

Answer _____ students

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Go On

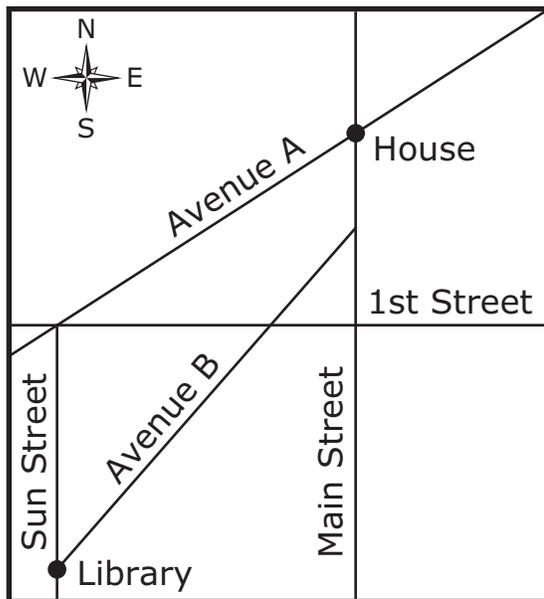


Session 1

The students in one of the groups each made 6 bookmarks to share equally among the 4 kindergarten classes at their school. There are 28 students in each kindergarten class.

On the lines below, use words, pictures, or numbers to explain whether the students made enough bookmarks for each kindergarten student to receive one bookmark.

- 4** On the map below, 1st Street is perpendicular to both Sun Street and Main Street.



Mike walks from his house to the library. To get there, he first walks southwest down Avenue A and then turns south onto Sun Street. What type of angle is made by this turn on the map?

Answer _____ angle

Session 1

On the lines below, describe a path Mike could walk home from the library to his house that would include ONLY right angles.

Name two streets that make two obtuse angles and two acute angles when they cross each other.

Answer _____



ATTENTION! Please do not leave your punchouts in this book.



ATTENTION!

**Do NOT go on
until you are
told to do so.**



ATTENTION!

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until you are
told to do so.**





Whenever you see this picture, you will be doing a writing activity. Your writing will be scored on how clearly you write and how well you get your ideas across. Your writing will not be scored on your personal opinions. Be sure to check your writing for correct grammar, spelling, punctuation, and capitalization.

DO NOT WRITE HERE ↑

DO NOT WRITE HERE ↓

Go On



Session 2: English/Language Arts

1

A New Ability

Read the writing prompt below and complete the writing activity.

Imagine that you wake up one morning to find that you can do something you have never been able to do before. It might be something you have always wanted to be able to do, or it might be something completely new. It might be a musical talent, a privilege, or something related to school, home, or friends.

Write a story about your discovery.

Be sure to include

- what you suddenly discover you are able to do
- how you feel about the discovery
- what is interesting or exciting about the new ability
- clear, strong details to make your story more interesting
- a beginning, a middle, and an end to your story

Session 2

Use the blank Prewriting/Planning space below for notes, lists, webs, outlines, or anything else that might help you plan your writing. If you need additional paper for planning, raise your hand and your teacher will give you more paper. **You must write your final draft on the lines beginning at the top of the next page.**

Prewriting/Planning

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Go On



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told to do so.**



Session 3: English/Language Arts



Whenever you see this picture, you will be doing a writing activity. Your writing will be scored on how clearly you write and how well you get your ideas across. Your writing will not be scored on your personal opinions. Be sure to check your writing for correct grammar, spelling, punctuation, and capitalization.

Directions

Now you will read an article called "Cats vs. Dogs" and complete Numbers 1 through 3. You may look back at the article as often as you like. Then you will complete a writing activity.

Go On



Cats vs. Dogs

by Justin O’Neill



It’s on: the ultimate pet showdown, a battle between dogs and cats. Sure, they’re both adorable. Yes, they’re both cuddly. But which one makes the best pet?

Puppy Love

More than half of American families have one or the other, but dogs win when it comes to popularity. Dog lovers outnumber cat fans by almost two to one.

All this doggy talk about dogs may have something to do with dogs’ big brainpower. “The average dog can learn 165 words; that’s equivalent to the vocabulary of a 2-year-old child,” says Stanley Coren, an animal behavior expert, in *Parade* magazine. Dog lovers say this makes dogs especially aware of what’s going on in the human world. Cats’ vocabularies can’t compete—they can learn about 35 words.

Another reason to love dogs? They work hard. Dogs have helped people herd cows and sheep for ages, but now these four-legged friends do more than ever. They guide the blind, hunt criminals, detect termites and gas leaks, and can even smell cancer in medical patients.

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Cats are good hunters, but they are way less energetic. In fact, the average house cat spends 80 percent of the day lounging and sleeping.

Purrfect Pals

For such snoozy animals, cats are surprisingly independent creatures. Most dogs rely on humans for food, exercise, bathing, and constant affection. Put out food and a litter box, and most cats are happy just to hang out.

Not to mention, kitties are a real bargain. Including food, toys, and vet visits over a lifetime, the cost of caring for a cat is about one-sixth of usual dog expenses.

And when cats do get moving, these little acrobats are amazingly agile¹. "Cats are very nimble, with great balance," says veterinarian Michael Garvey in *Parade*. "I've seen cats that have fallen more than 32 stories and didn't have serious fractures." It's part of why cats are said to have nine lives. (They typically live about three or four years longer than dogs.)

The Fight Rages On

The battle may never have a winner. Some people love both cats and dogs, and others seem to have an "animal" instinct for one or the other.

Not sure if you're a cat or a dog person? That's okay; there's a right pet for everyone.

¹**agile:** describes a person or thing that moves quickly and easily

1 What is the MAIN idea of the article? Support your answer with details from the article.

Go On 

DO NOT WRITE HERE

2

The author compares and contrasts information about cats and dogs. Explain why this is a helpful way to present the information. Support your answer with details from the article.

Handwriting lines for question 2.

3

According to the article, why do more people choose dogs instead of cats as pets? Support your answer with details from the article.

Handwriting lines for question 3.

- 4 Read this story. Then complete the writing activity that follows.

The Jungle

Tyler and Logan had been walking for what felt like miles. The trees seemed to be growing closer together, allowing only a little bit of light to come in. Large leaves rustled against their faces. Every once in a while, the sound of an animal would startle them. Once, Tyler lost his footing on some slippery leaves.

As the path curved ahead, a clearing opened up. It was filled with beautiful flowers and a brook. They both stopped to drink the water.

On the other side of the clearing, leaves filled the path again. Tyler wondered what they would find on the other side.

Write an ending for this story. Describe what happens after Logan and Tyler follow the path on the other side of the clearing. Be sure to include details to support your writing. You do NOT need to rewrite the beginning of the story.

Go On



Use the blank Prewriting/Planning space below for notes, lists, webs, outlines, or anything else that might help you plan your writing. If you need additional paper for planning, raise your hand and your teacher will give you more paper. **You must write your final draft on the lines beginning at the top of the next page.**

Prewriting/Planning





Use the Editing Checklist on page 29. Check your story for correct grammar, spelling, punctuation, and capitalization. **Remember, your story should be well organized.**

DO NOT WRITE HERE ↑

DO NOT WRITE HERE ↓

Lined writing area with 20 horizontal lines.

Go On

Handwriting practice lines consisting of 12 horizontal lines.

Now check your writing using this Editing Checklist.

Editing Checklist

- 1 Have you started each sentence with a capital letter?
- 2 Have you capitalized names of people and places?
- 3 Have you used correct punctuation?
- 4 Have you spelled all words correctly?
- 5 Does the action word (verb) of your sentence agree with the subject?

Examples: Tom plays at the park.

They play at the park.

- 6 Have you used the correct form of your action words (verbs)?

Examples: Jan plays today.

Jan played yesterday.

Jan will play tomorrow.

- 7 Have you written complete sentences?

STOP! _____ STOP! _____ STOP! _____ STOP! _____ STOP! _____



ATTENTION!

**Do NOT go on
until you are
told to do so.**



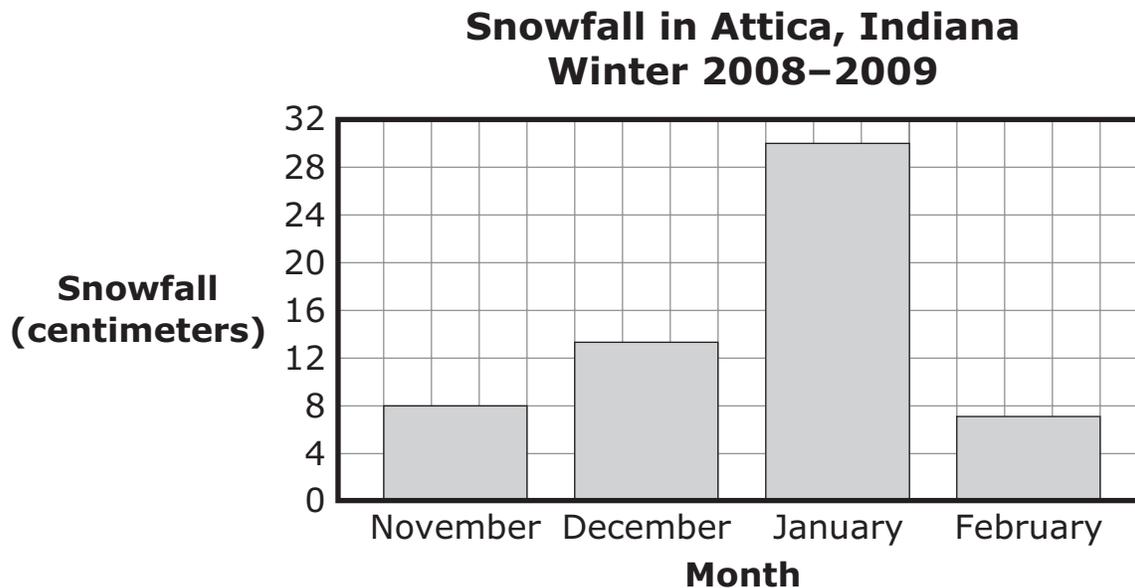
ATTENTION!

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until you are
told to do so.**



Session 4: Science

- 1** The graph below shows the amount of snowfall in Attica, Indiana, during four months of winter in 2008–2009.



Compare the amount of snowfall in December with the amount of snowfall in February.

Describe the trend in the amount of snowfall each month between November and February.

Go On 

2

A student would like to identify an unknown mineral. She knows this mineral is one of the minerals in Moh’s Scale of Mineral Hardness, which is shown below.

Moh’s Scale of Mineral Hardness

Hardness	Mineral
1	Talc
2	Gypsum
3	Calcite
4	Fluorite
5	Apatite
6	Orthoclase
7	Quartz
8	Topaz
9	Corundum
10	Diamond

The unknown mineral can scratch talc and calcite. Apatite can scratch the unknown mineral.

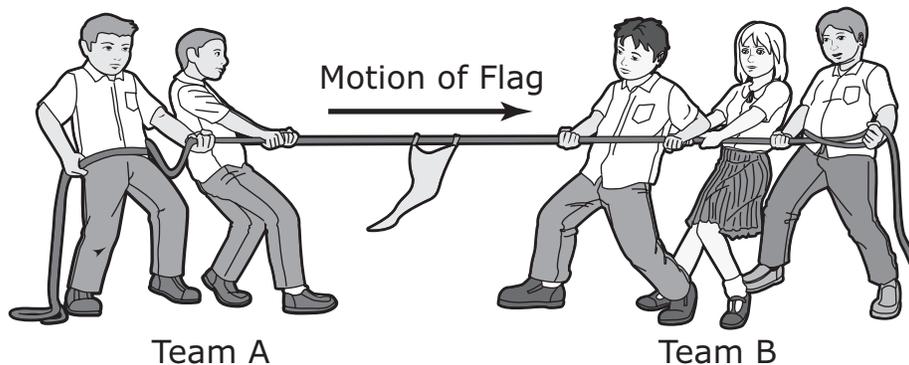
According to Moh’s scale, what is the unknown mineral?

Answer _____

Using the names of minerals in Moh’s scale, explain how you know what the unknown mineral is.

Session 4

- 3 A group of students is playing tug-of-war. A flag is tied to the center of the rope. The diagram below shows the direction in which the flag is moving.



Describe how the speed of the flag will be affected if a fourth student pulls on the rope with Team B.

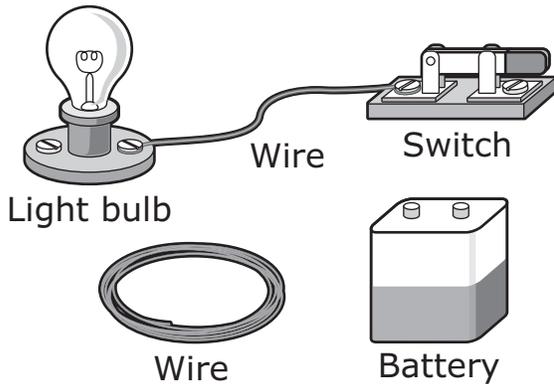
Explain why the flag will be affected in the way you described if a fourth student pulls on the rope with Team B. Be sure to use the word *force* in your explanation.

As the teams continue to pull on the rope, explain what each team would need to do to stop the motion of the flag. Be sure to use the word *force* in your explanation.

Go On 

Session 4

- 4 The diagram below shows a light bulb, a switch, a battery, and some wire.



Using all the parts shown in the diagram, describe all the places where the wire must be added to make a complete circuit.

Another light bulb and wire are added to the circuit between the first light bulb and the switch.

Predict what change will happen to each light bulb after the second light bulb is added to the complete circuit.

First light bulb _____

Second light bulb _____



STOP! ----- STOP! ----- STOP! ----- STOP! ----- STOP! -----

Applied Skills Assessment

Mathematics • English/Language Arts • Science

Grade 4

