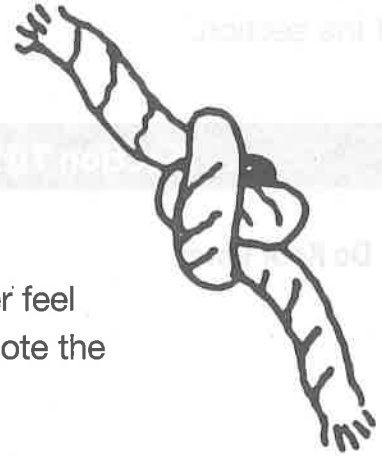


Name _____ Date _____



**“Do Knot Enter” from
Math Trek: Adventures
in the MathZone**
Independent Reading

“Do Knot Enter” from *Math Trek: Adventures in the MathZone*



Examine the Knots

Sometimes authors use figurative language to help the reader feel certain emotions. Reread page 198 of “Do Knot Enter” and note the figurative language. Identify the feeling it creates.

Figurative Language	What It Really Means	Feeling It Causes
It twists under and over itself again ...	_____ _____ _____	_____ _____ _____
Kids are spinning around on a crazy-looking flying saucer ...	_____ _____ _____	_____ _____ _____
Hold your horses ...	_____ _____ _____	_____ _____ _____
the naughty knotty gate ...	_____ _____ _____	_____ _____ _____

Name _____ Date _____

**“Do Knot Enter” from
Math Trek: Adventures
in the MathZone**
Independent Reading

The author created clever section titles using the word *knot*. Look again at the section titles. Then write the meaning of each title based on its title and the contents of the section.

Section Title	Meaning
<p>Do Knot Enter</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>Knots and Unknots</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>To Be or Knot to Be</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>Lord Kelvin's Knots</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>Knots in Your Body</p>	<p>_____</p> <p>_____</p> <p>_____</p>

Name _____ Date _____

Word Relationships

Do Knot Enter
Vocabulary Strategies:
 Word Relationships

Read each pair below. Use the relationship in parentheses to predict the meaning of the boldface word. Write your predicted meaning on the line.

1. fox / **kit** (adult to baby)

Meaning: _____

2. insect / **antennae** (whole to part)

Meaning: _____

3. **racquet** / tennis (equipment to sport)

Meaning: _____

4. plain / **embellished** (antonyms)

Meaning: _____

5. **quill** / pen (item to category)

Meaning: _____

6. **sulfur** / smell (cause to effect)

Meaning: _____

7. stamen / **flower** (part to whole)

Meaning: _____

8. **milliner** / hat shop (person to location)

Meaning: _____

9. **velociraptor** / dinosaur (item to category)

Meaning: _____

10. **sorrow** / tears (cause to effect)

Meaning: _____

Proofreading for Spelling

Do Not Enter
Spelling: Final /ər/ Sound

Find the misspelled words and circle them. Write them correctly on the lines below.

After math class, Rich walked to the auditorium. Usually, he would never consider auditioning for a school play, but the director was his favorite teacher. Plus, Rich was a senior this year. It would be his last chance. He walked into a crowd of familiar faces and took a seat.

"The rumor is that we are doing *The Wizard of Oz* this year," whispered a junior girl. "I want to play the character of Dorothy!"

Rich was quite a scholar when it came to the theater, even though he had never been on stage before. Rich was confident in math, science, and grammar. He didn't feel similar about acting, though. For most of these students, acting was a regular occurrence. Their auditions would probably be superior to his.

Finally, Rich took a deep breath and stood up. He walked slowly to the stage and signed up for his first audition.

Spelling Words

1. fiber
2. similar
3. regular
4. barrier
5. superior
6. grammar
7. rumor
8. character
9. director
10. acre
11. consider
12. junior
13. senior
14. solar
15. scholar
16. razor
17. surrender
18. particular
19. familiar
20. laser

- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |

Name _____ Date _____

Direct Objects and Compound Direct Objects

Do Knot Enter
Grammar: Verbs and Objects

A **direct object** is a noun or pronoun that receives the action of a verb. To find the direct object in a sentence, say the subject, then say the verb, and then ask *what* or *whom*. Sometimes a sentence may have two direct objects. This is called a **compound direct object**.

direct object

Edward added two items to my list.

compound direct object

Edward divided the drinks and snacks between us.

Thinking Question

What receives the action of the verb?

Activity Underline the direct objects and compound direct objects.

1. Joe measured the distance from his house to mine.
2. I determined the length and width to calculate the area of the box.
3. I measured two cups of sugar for the recipe.
4. Ms. Santos added the vinegar and baking soda to cause a reaction.
5. The new plan increased sales by twenty percent.
6. Richie subtracted the tax from our total.
7. Reese added three more employees to the staff.
8. Sheila ate three cupcakes, leaving only nine for the rest of us.

Indirect Objects

Do Knot Enter
Grammar: Verbs and Objects

A **direct object** is a noun or pronoun that receives the action of a verb. An **indirect object** is a noun or pronoun that tells to whom or for whom the action is done. An indirect object usually comes right before a direct object in a sentence. To find the indirect object, say the subject, say the verb, then ask *to whom* or *for whom*.

Liz brought me dozens of flowers.

Thinking Question

To whom or for whom is the action done?

Activity Underline the indirect objects.

1. The teacher gave us ten more math problems.
2. My mother gave me half a dozen chores to finish.
3. Will showed Monica her test score.
4. They asked Mr. Wilson the hardest question.
5. I found Rafael five scarves to add to the costume closet.
6. He bought us four additional tickets for the show.
7. Dion paid me ten dollars.
8. They gave us 100 percent of the proceeds.

Name _____ Date _____

Transitive and Intransitive Verbs

Do Not Enter
Grammar: Verbs and Objects

A **transitive verb** is a verb that is followed by a direct object.

An **intransitive verb** cannot be followed by a direct object. Intransitive verbs would not make sense with a direct object.

Some verbs have both transitive and intransitive forms, but their meanings are different.

transitive

She runs six companies.

intransitive

She runs through the park each day.

Thinking Question

Is the verb followed by a direct object?

Activity Tell whether the underlined verb is transitive or intransitive. Write *T* for transitive and *I* for intransitive. If the verb is transitive, circle the direct object.

1. She saw a tutor for algebra classes. _____
2. Use a calculator for those problems. _____
3. I worried about the math test. _____
4. I reviewed two algebra chapters and one geometry lesson. _____
5. I waited patiently for my math test score. _____
6. I became nervous while totaling my purchases. _____
7. After the last lesson, I finally understood fractions. _____
8. I sneezed violently at the smell of the dusty rope. _____

Simple Sentences

Do Knot Enter
Grammar: Spiral Review

Kind of Sentence	End Mark	Example
Declarative	period (.)	I will give you this calculator.
Interrogative	question mark (?)	Are you ready to add it all?
Imperative	period (.)	Please check your totals.
Exclamatory	exclamation mark (!)	You gave 100 percent!

1–6. Add the correct end mark to each sentence. Then write what kind of sentence it is.

1. This is a complicated calculation _____
2. Did I double the recipe correctly _____
3. Wait until the sixth measure of the song _____
4. That equation is impossible to solve _____
5. Let's keep measuring the fabric _____
6. Did you subtract the extra time from your work log _____

7–12. Rewrite the paragraph below, correcting any punctuation errors.

I really love this recipe? This cake is delicious? Do you know if we have enough eggs. Well, I suppose I could ask my mom! Please measure the flour. Can you pour a cup of milk! I can't find the measuring spoons?

Name _____ Date _____

Connect to Writing

Do Knot Enter
Grammar: Connect to Writing

Short, Choppy Sentences

She counted the jars. She counted the glasses. She also counted the ceramic bowls.

Combined Sentence

She counted the jars, the glasses, and the ceramic bowls.

Combine these sentences by forming compound direct objects. Write the new sentence on the line.

1. We need to add eggs. We need to add butter. We need to add the sifted flour.

2. She measured the hem. She measured the inseam. She measured the length.

3. Jonah calculated the area. Jonah calculated the density. Jonah calculated the volume.

4. I paid the check. I paid the tip. I paid the parking fee.

5. David counted the pencils in the drawer. David counted the pens in the drawer.
David counted the paper clips in the drawer.

Name _____ Date _____

Focus Trait: Organization

Connecting Ideas in a Logical Order

Do Not Enter
Writing: Argument Writing

Good writers organize their argument paragraphs by introducing a claim and following it with reasons and evidence that support the claim. They also use specific words, phrases, and clauses to show how the claim, reasons, and evidence are connected.

Read the argument paragraph. Then use the lines below to revise the paragraph. Begin by reorganizing the first three sentences so that the claim is introduced first. Then find places where you can add specific words, phrases, or clauses to connect ideas.

Here is the proof that math riddles make you think. You can make an ordinary riddle more challenging by adding the element of math. I know this because I discovered a math riddle that requires a little critical thinking. Four magicians meet at a party. Each magician must shake hands with one another one time. What is the total number of times they will shake hands? You may have figured out the answer right away. Maybe you gathered your friends to act it out. But just figuring out that the answer is six made you think, right? Math challenges people to use critical thinking skills.
