

Explicitly Teaching Inferences

1. Based on the facts on page ____, what conclusion can you make?
2. Why is it important that _____?
- 3 After looking at the picture on page ____, what can you know about a _____?

Explicitly Teaching Critical Literacy

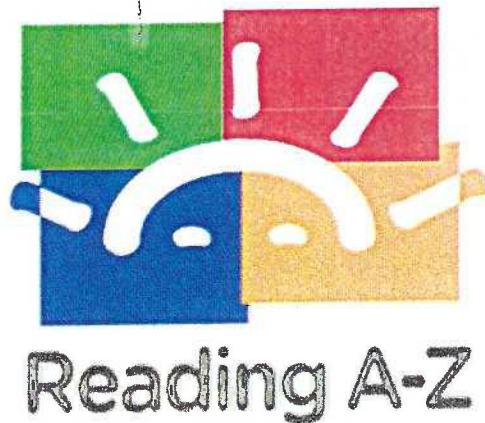
1. What was the author's purpose in writing this story?
2. Where can you find the author's purpose? (It is always the main idea in the first paragraph on the first page)
3. Why is writing about this topic important?
4. Was the story difficult to understand? Why or why not?

Explicitly Teaching Creative Literacy

1. Can you tell me about a time when _____?
2. Can you tell me about a _____ you have seen?
3. If you were going to write this story how would you chose to end it?
Why would you chose that ending?
4. What other information could the author have given the audience? Why would that information be important to know?

Teaching Visual Literacy Skills

Visual literacy is the ability to evaluate, apply, or create conceptual visual representations. Skills include the evaluation of advantages and disadvantages of visual representations, to improve shortcomings, to use them to create and communicate knowledge, or to devise new ways of representing insights.



FLUENCY STANDARDS TABLE

Recommended reading rates, or words read per minute, for grades one through six were examined from three separate research studies. The findings of these studies were used by Reading A-Z to establish an average early and end reading rate per grade level. Your student's reading rates can be compared to these average rates as a way to determine whether they are making progress in their ability to recognize words automatically. The comparison can also be used to determine whether a student's reading rate is near the grade level standard. For example, a beginning third grade student with a reading rate of 110 WPM can be considered on level. However, a third grade student with a reading rate of 60 WPM is recognizing words at a rate similar to a first grader and will likely need additional instructional support to increase his or her reading rate.

READING A-Z RECOMMENDATIONS WORDS PER MINUTE (WPM)

GRADE	BEGINNING RATE	MID-YEAR RATE	END RATE
1	50	60	70
2	70	80	100
3	100	120	130
4	130	135	140
5	140	150	160
6	160	165	170

Grade 3

Personal and Formal Letter

Definition of Personal and Formal Letter

Personal and formal letters include correspondence such as pen-pal letters, thank-you notes and invitations. This type of writing shows awareness of the knowledge and interests of the audience and establishes a purpose and context. It includes the date, salutation, body, closing and signature.

Importance

Personal and formal letters allow students to use writing in practical and purposeful ways: to maintain long distant friendships, to share experiences, to request items, to persuade.

Focus of This Assessment Document

This assessment document will focus on personal letters.

Prior Instruction for Writing Narratives

The prior instruction necessary for students to meet the grade-level standards in writing requires the implementation of a balanced writing program. This includes daily whole-class demonstrations and instruction (writing aloud and shared writing), frequent individual instruction (guided writing), and daily opportunities to write independently.

Below are suggestions for classroom activities designed to prepare students to meet the standards related to writing personal letters.

Identify the Purpose and Audience of a Friendly Letter

Share personal experiences (e.g., parties attended, dinners hosted, trips arranged) in which a personal letter was appropriate. Invite students to identify an event that might require a friendly letter. With the students, determine the purpose (to invite, to thank, to explain) and the audience for the letter. Discuss what information is needed for each purpose through brainstorming, cluster maps, and/or graphic organizers.

Model Format and Content

Use writing aloud and shared writing to model conventional format of a friendly letter and possible content.

Use Checklists to Reinforce Learning

As skills are introduced, develop writing checklists with the students. Have students use checklists throughout the year to support revision and editing.

Opportunities for Feedback

Provide abundant opportunities for students to receive feedback: individual conferences, partner conferences, whole group sharing.

Publish and Mail Final Draft

Have students write authentic letters frequently. Appropriate occasions at school and at home may include the following:

- Thanking the hosts of field trips.
- Thanking parents who helped with class projects/parties.
- Writing to friends about summer plans.
- Requesting catalogs of toys.

Directions for the Writing Assessment: “A New Student”

To the Teacher

You are encouraged to treat this prompt as a series of class lessons, even though the student work produced may be used to determine if the student has met state standards. These directions provide guidelines, but please use your discretion in walking students through the prompt. If you plan to use the student writing to determine whether the student has met, in part, the grade-level standards in writing, then you should conduct the following as consistently as possible throughout your school.

This assessment has three parts: prewriting, writing, and editing. You may administer all parts on one or divide the three parts among two consecutive days.

General Guidelines for Assessing Students

In order to maintain consistency so that you are better able to assess whether or not students meet the standards, please observe the following:

- Use the same prewriting activities for each trial.
- Read the directions at every step.
- Do not provide answers to student questions that would directly meet the standards.
- Students may use spelling resources which are regularly available in the classroom (e.g., wall charts, word lists). Students may not use computers or spell checks.

You may adjust the following to the needs of your students:

- Rephrase the directions for better student understanding.
- If another language will assist the student in understanding the task, then allow that student access to his/her primary language.

Part I. Prewriting (60 minutes)

The purpose of the prewriting activity is to introduce the assessment task, to activate prior knowledge and to generate ideas that the students might use in writing to the prompt. There are three basic components of the prewriting activity: (1) **Introduce the Assessment Task**, (2) **Building Prior Knowledge**, (3) **Class Brainstorming** and (4) **Student Prewriting**.

Introduce the Assessment Task

The teacher says:

During the next couple of days, you will participate in a series of activities that will show that you have met the state standards in writing.

First, we will look at the writing prompt together. Next you will plan out what you want to write about. Then you will write a rough draft.

After you write your draft, you'll use a writing checklist to help you remember the writing standards for the assignment. You will have plenty of time in class to make sure you have done everything correctly.

When your writing is ready to be scored, I will use a scoring rubric to determine if you have met the standards.

Building Prior Knowledge

Read at least one book to the students about children moving and/or having to go to a new school (or similar experience). The following are books that address the topic:

- Alexander, Who's Not (Do you hear me ?I mean it) Going to Move* by Judith Viorst
- I Don't Live Here!* by Pam Conrad
- Ira Says Goodbye* by Bernard Waber
- Leaving Home with a Pickle Jar* by Barbara Dugan
- Moving Days* by Mark Harshman
- Moving Molly* by Shirley Hughes

Discuss the challenges of moving to a new place, including the difficulties of being the "new kid" in class.

Class Brainstorming

Solicit and record ideas about the classroom:

- What would a new student need to know to feel at home?
- What class rules and procedures would a new student need to know?

Divide the class into small groups to extend the "Need to Know" list. After the small group discussion, record new ideas on the class brainstorming chart.

At the end of the prewriting session, collect the brainstorming charts. The students will use them during Part II: Writing.

Part II. Writing (60 minutes maximum)

Distribute the Student Prompt (sample below and blackline master in the Grade 3 Appendix). Read the Writing Situation and the Writing Directions from the Student Prompt aloud.

**Grade 3 Student Prompt
"A New Student"****Writing Situation**

Suppose that a new student is coming to your class.

Your teacher knows that it can be difficult to be the new kid in class. She (or he) has asked you to help the new student become familiar with your classroom.

Writing Directions

Write a personal letter to the new student.

In your letter explain at least three things that the new student should know about your classroom.

Give each student a copy of the "Grade 3 Writing Checklist" (sample below and blackline master in Grade 3 Appendix). This checklist will be easier for students to use if they have been using checklists to help them with their writing throughout the year. Provide whatever explanation is necessary to enable students to use the checklist.

When writing to the prompt, you may want to have students skip lines to make their writing easier to edit. Students may use classroom resources such as word walls, word lists, dictionaries, thesauruses, etc. Students may not use computers or spell checkers.

At the end of the writing session, collect all student writing and checklists.

Part III. Editing (120 minutes maximum)

Return first drafts and checklists to the students. Have each student use the checklist to revise/edit for content, spelling, capitalization, and punctuation. Each student completes the checklist independently, without assistance from others.

Students rewrite their letters, creating a clean copy, after self-editing.

Grade 3 Student Checklist








This is a sample of the Grade 3 Student Checklist. The blackline master is in the Grade 3 Appendix.

Grade 3 Writing Checklist

What did I write?	Yes	No	Comments
I wrote one or more paragraphs.			
I introduced myself to the new student.			
I explained at least three things that a new student should know about our classroom.			
How well did I write it?	Yes	No	Comments
I wrote complete sentences.			
I used correct punctuation and capitalization.			
I checked my spelling.			
I used correct letter form which includes:			
• today's date			
• salutation			
• body			
• closing			
• signature			
I asked questions in my letter.			
I used correct margins.			
My writing is neat and legible.			
I revised and edited my letter.			

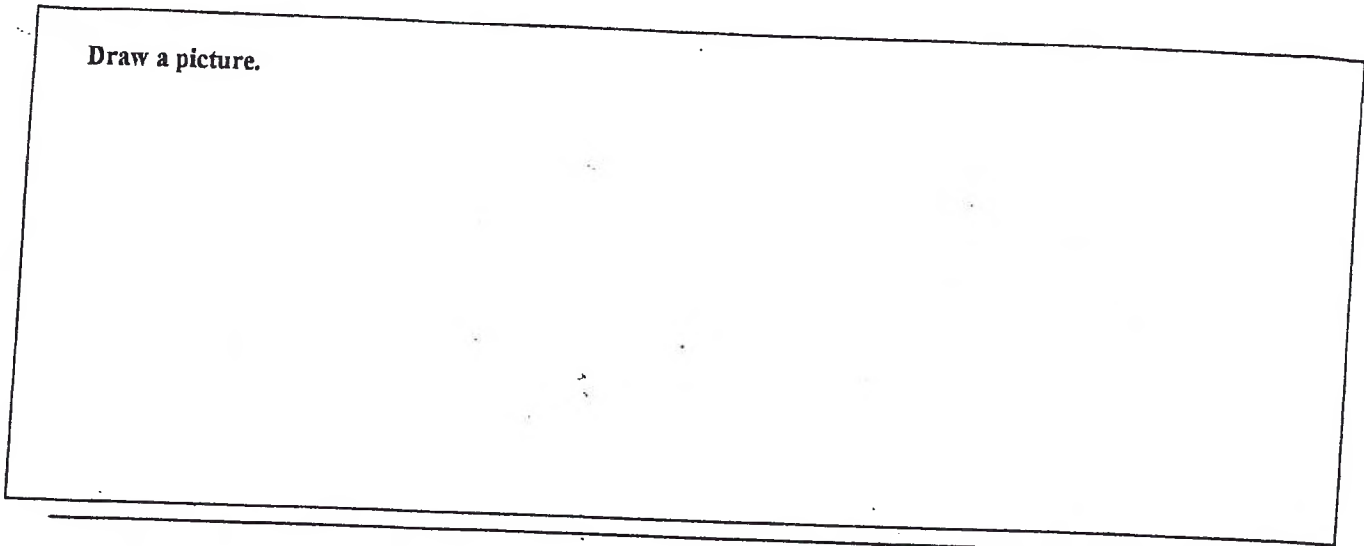
T2

6+1
Trait[™]
Writing

TRAIT	SCORE	TRAIT	SCORE
 Ideas/Content		 Organization	
 Voice		 Word Choice	
 Fluency		 Conventions	
 Presentation		COMMENTS:	

Handwriting practice lines consisting of solid top and bottom lines with a dashed midline, repeated multiple times down the page.

Draw a picture.

A series of horizontal lines for handwriting practice. Each row consists of a solid top line, a dashed middle line, and a solid bottom line. There are 12 such rows, filling the bottom two-thirds of the page.



LIGHTING THE PATHWAYS TO LEARNING

6+1 Trait[®] Writing

Grades 3-8

Writing Assessment Portal Program



Osceola Adventist Christian School

Name _____

Date _____

T₁ T₂ T₃

Organization	Support
Fluency	Word Choice
Mechanics	Presentation
Overall Development	Mode of Cumulative Record

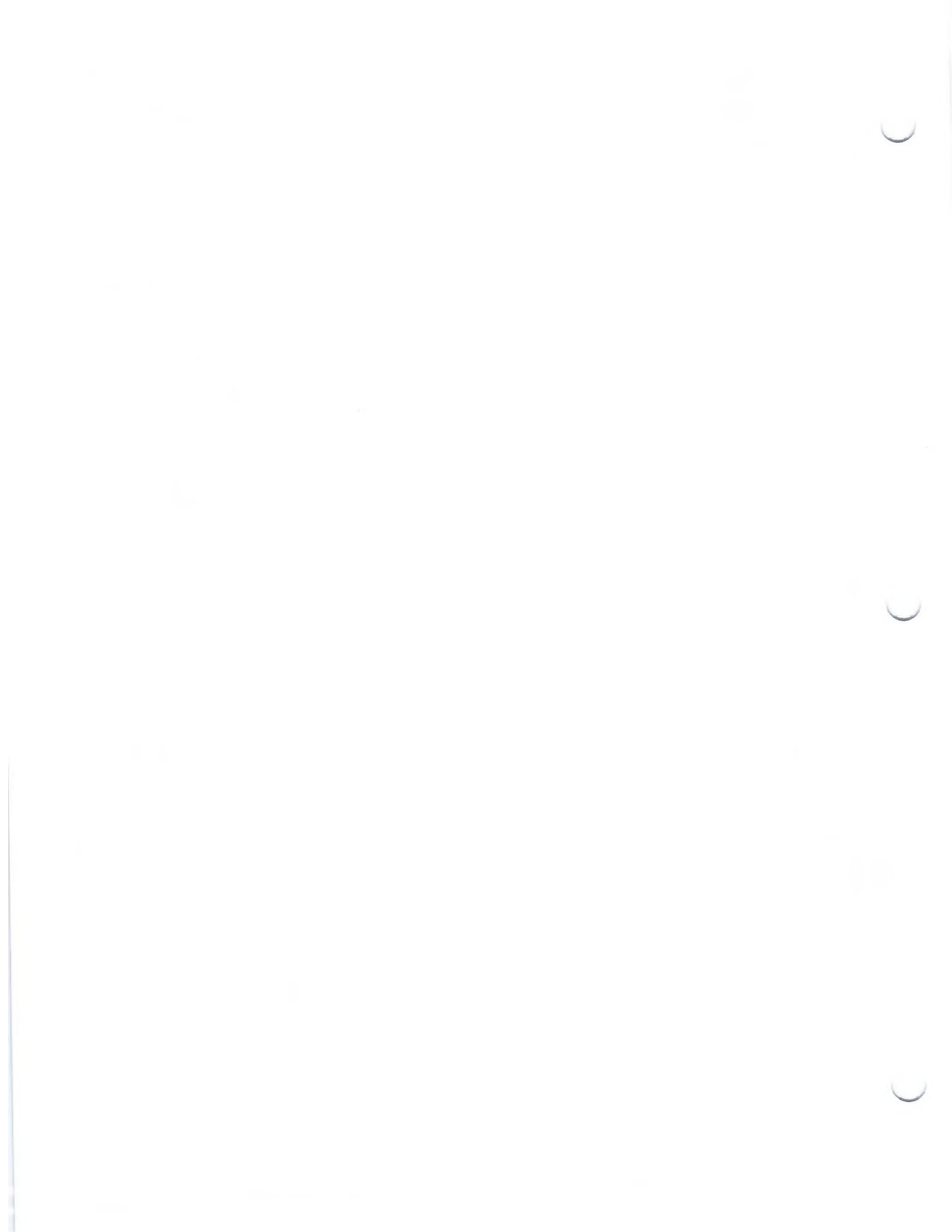
WRAP Score OACS Score	Organization	Support	Sentence Fluency	Word Choice	Mechanics	Presentation	Overall Development
6 Paper 4	Plan is developed and well followed including the topic, audience, and purpose and an appropriate plan-type. Carefully but subtly organized from beginning to end. Logical order (well sequenced*); Elegant flow of ideas; Provides closure	Supporting details are rich, interesting, and informative throughout; fully developed; Details are relevant and appropriate for the focus	Sentence structures enhance style and effect; Virtually no errors in structure or usage; Successfully uses more sophisticated, varied sentence patterns	Rich, effective vocabulary throughout; Vivid language; May use figurative language and imagery	Very few or no mechanical errors relative to length or complexity	Presentation shows a pride in the quality of work, all letters are formed correctly with even spacing, correct slant, and the written presentation is attractive and helps readers understand and remember the information.	Fluent, richly developed; Clear awareness of audience and purpose; Distinctive, engaging voice; Original, insightful, or imaginative
5 Paper 3	Organized from beginning to end including a plan that is developed with topic, audience, purpose, and plan-type; Logical order (sequenced*); Subtle transitions; Provides closure	Details are strong and varied throughout; Details are relevant and appropriate for the focus	Sentence structures are appropriate to style and effect; Few errors in structure or usage; Moderately successful in using more sophisticated sentence patterns	Effective vocabulary; Generally successful in using rich language	Few mechanical errors relative to length or complexity	Presentation shows basic neatness with no more than two letters formed and spaced incorrectly, and overall design of the written presentation helps readers understand the information.	Fluent, fully developed; Clear awareness of audience and purpose; Evidence of voice, compositional risks attempted; Cohesive
4 Paper 3	Topic, audience, purpose and plan-type is developed by may not be followed causing minor lapses in order or structure (some breaks in sequencing*); Meaning is subordinate to organizational devices; Contrived transitions; Provides closure	Details are adequate to support the focus; Details are generally relevant to the focus	Some sentence variety; Generally correct structure and usage; Attempts to use more sophisticated sentence patterns	Acceptable vocabulary; Attempts to use rich language; Misuse of bigger grade-level appropriate vocabulary words	Some mechanical errors that do not interfere with communication; Limitedly correct	Presentation is readable and basically neat. There are no more than four words spaced incorrectly per line, or four letters per line written incorrectly.	Moderately fluent, adequately developed; Awareness of audience and purpose; Ideas developed but somewhat limited in depth

Name _____

Date _____

T₁ T₂ T₃

WRAP Score COACS Score	Organization	Support	Sentence Fluency	Word Choice	Mechanics	Presentation	Overall Development
3 Paper 2	Lack of planning evident; Poor transitions; andom sequencing*; Attempts closure*; Shift in focus	Details lack elaboration; Insufficient relevant details; Important details are omitted	Little sentence variety; Errors in structure or usage interfere with meaning; Over-reliance on simple or repetitive constructions; Chaining; Noticeable errors in usage	Simplistic vocabulary with acceptable but limited word choice; Some errors in word choice	Some mechanical errors that do interfere with communication; Errors are disproportionate to the length or complexity of the piece (errors cause major problems for readers)	60-75% of words, letters, slant, or formation are correct. Presentation is readable, but not particularly neat or of good quality.	Somewhat developed; Some awareness of audience and purpose; Repetitive or too general
2 Paper 1	Lack of planning evident; Thought patterns are difficult to follow; Ideas are not clear or sequenced*; Resembles free-writing, rambling; Continual shifts in focus	Supporting details are listed; Repetitious details; Too few details	No sentence variety; Serious errors in structure or usage; Too brief to demonstrate variety	Simplistic vocabulary with inappropriate and/or incorrect word choice	Noticeable mechanical errors that interfere with communication; Errors are disproportionate to the length or complexity of the piece (errors cause major problems for readers)	About half of the presentation has distracting errors in letter formation, slant, or spacing. The quality of the presentation detracts significantly from readability.	Poorly developed; Poor awareness of audience; or purpose; Ideas and details are not clear
1 Paper 1	Little or no planning; So short or muddled that it lacks organization or focus	Virtually no details; Irrelevant details	Lack of sentence sense; Riddled with errors at the sentence level; Riddled with errors in usage; Too brief to evaluate	Extremely limited vocabulary; Riddled with errors in word choice; Too brief to evaluate	Mechanical errors that seriously interfere with communication; Too brief to evaluate	Letter formation, spacing, slant is imbalanced, cluttered, and shows a lack of pride in the quality of work. The presentation quality interferes with readability.	Not developed; Restates topic; No awareness of audience or purpose; Inappropriate response; Too brief to show development



Assessment for Common Core Mathematics Standards Grade 3

Summary Sheet

Name _____ T₁ T₂ T₃

School _____ Year _____

Teacher _____

0 1 2 3 4 _____ % Number Sense

0 1 2 3 4 _____ % Algebraic Functions & Operations

0 1 2 3 4 _____ % Measurement & Geometry

0 1 2 3 4 _____ % Data, Statistics and Probability

Assessment for Common Core Mathematics Standards Grade 3

Introduction: Summary of Goals

GRADE THREE

By the end of grade three, students deepen their understanding of place value and their understanding of and skill with addition, subtraction, multiplication, and division of whole numbers. Students estimate, measure, and describe objects in space. They use patterns to help solve problems. They represent number relationships and conduct simple probability experiments.

Assessment for Common Core Mathematics Standards Grade 3

Number Sense

NS 1.1a

a. Circle the number two thousand, five hundred sixteen:

1,244 1,424 2,651 2,516 216

b. Circle the number one thousand, one:

101 1,001 1,010 1,100

c. Circle the number nine thousand, four hundred:

9,040 940 9,400 9,004

a. Write the following numbers:

1. three thousand, six hundred twenty-four _____

2. six thousand, forty-three _____

3. eight thousand, two _____

b. What is the next counting number after 9,999? _____

NS 1.2 Write these numbers in order, beginning with the smallest:

8,201

8,012

8,102

812

Assessment for Common Core Mathematics Standards Grade 3

NS 1.3

In 6,934 there are:

_____ thousands

_____ ones

_____ tens

_____ hundreds

NS 1.4

a. Round off 3,465 to the nearest hundred: _____

b. Round off 3,465 to the nearest thousand: _____

NS 1.5

a. Write the expanded notation for 8,256:

$$8,256 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

b. Write the number that goes in the blank:

$$2,000 + \underline{\hspace{2cm}} + 30 + 9 = 2,739$$

Assessment for Common Core Mathematics Standards Grade 3

NS 2.1

Solve these problems:

$$\begin{array}{r} \text{a. } 591 \\ + 87 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 1,283 \\ + 6,074 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 3,215 \\ - 2,806 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 300 \\ - 27 \\ \hline \end{array}$$

Assessment for Common Core Mathematics Standards Grade 3

Allow students three minutes to do these problems

NS 2.2

$$\begin{array}{r} 8 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 1 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

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Assessment for Common Core Mathematics Standards Grade 3

NS 2.3 Here is a problem. Use multiplication to see if it is solved correctly. Show your work.

$$\begin{array}{r} 29 \\ 5 \overline{)135} \end{array}$$

NS 2.4 Solve these problems:

a.
$$\begin{array}{r} 465 \\ \times 3 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 1384 \\ \times 4 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 3482 \\ \times 5 \\ \hline \end{array}$$

NS 2.5 Solve these problems:

a.
$$3 \overline{)168}$$

b.
$$4 \overline{)264}$$

c.
$$6 \overline{)546}$$

Assessment for Common Core Mathematics Standards Grade 3

NS 2.6

Check true or false:

- a. $24 \times 0 = 24$ True False
- b. $19 \div 1 = 19$ True False
- c. $63 \times 1 = 63$ True False
- d. $0 \div 0 = 1$ True False

2.7

Jill bought 6 pounds of apples for \$1.38. How much did each pound cost? _____

Assessment for Common Core Mathematics Standards Grade 3

NS 2.8

- a. You put 54 marbles into 6 bags, ending up with the same number of marbles in each bag. How many marbles would be in each bag if there were 6 bags? _____
- b. A tree was planted 54 years before 1961. How old was that tree in 1997? _____

NS 3.1

Fill in parts to show each fraction. Then circle the fractions that are equivalent.



$$\frac{2}{6}$$



$$\frac{1}{4}$$



$$\frac{1}{3}$$



$$\frac{2}{4}$$

Assessment for Common Core Mathematics Standards Grade 3

NS 3.2

$$\frac{3}{8} + \frac{2}{8} = \frac{\square}{\square}$$

MS 3.3

a. $\$3.24 + \$.35 = \underline{\hspace{2cm}}$

b. You have \$8.00. You buy 2 oranges and 3 juices. Each orange costs \$0.35 and each juice costs \$0.90. How much do you have left? $\underline{\hspace{2cm}}$

Assessment for Common Core Mathematics Standards Grade 3

NS 3.4

a. $\frac{1}{2}$ dollar = _____ cents.

b. 75 cents is $\frac{\square}{\square}$ of a dollar.

Algebra and Functions

AF 1.1

Write an equation to solve this problem, and then solve the equation.
An oak tree is 42 feet high. The oak tree is 18 feet taller than the fir tree. How tall is the fir tree?

Assessment for Common Core Mathematics Standards Grade 3

AF 1.2

If $6 + N > 9$, circle all the numbers that "N" could be:

3

2

4

1

0

8

5

AF 1.3

Put +, -, x, or \div in the circle to make the equation true.

a. $12 \bigcirc 3 = 9$

b. $12 \bigcirc 3 = 4$

c. $9 \bigcirc 6 = 15$

d. $4 \bigcirc 8 = 32$

Assessment for Common Core Mathematics Standards Grade 3

AF 1.4

a. Change 8 feet into inches. Show your work.

b. Change 9 feet into yards. Show your work.

Assessment for Common Core Mathematics Standards Grade 3

AF 1.5

- a. Make 2 multiplication and 2 division statements using the numbers 5, 4, and 20 :

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \div \underline{\quad} = \underline{\quad}$$

Assessment for Common Core Mathematics Standards Grade 3

AF 1.5

[CONTINUED]

b. $6 \times 12 = 72$

1. What is $6 \times (4 \times 3)$?

2. What is $(6 \times 4) \times 3$?

AF 2.1

Pencils are 8¢ each. How much would 7 pencils cost? _____

AF 2.2

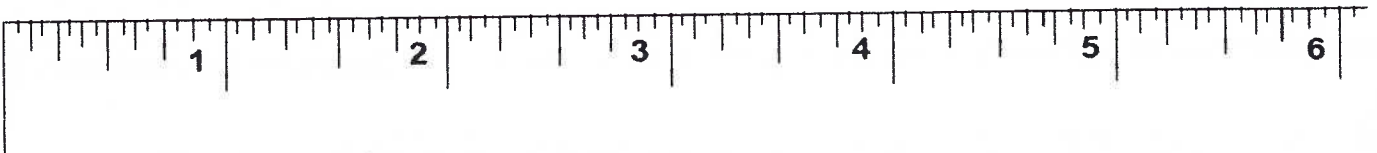
Mr. Brown's class was doing a science experiment. There were 7 groups in the class. Each group got 4 test tubes. How many test tubes did the class use? _____

Assessment for Common Core Mathematics Standards Grade 3

Measurement and Geometry

MG 1.1

- a. What is the length of this piece of wood:
2 inches, $2\frac{1}{2}$ inches, $2\frac{1}{4}$ inches, or $2\frac{1}{8}$ inches?
_____ inches.

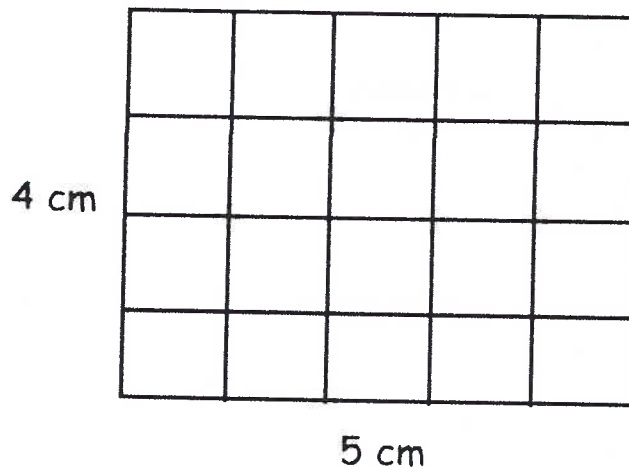


- b. About how tall is an adult man? _____
2 centimeters
2 meters
2 kilometers
- c. About how much milk is in the carton that you get at lunch?
1 gallon
1 pint _____
1 quart
- d. About how much does a newborn baby weigh? _____
7 ounces
7 pounds
7 tons

Assessment for Common Core Mathematics Standards Grade 3

MG 1.2

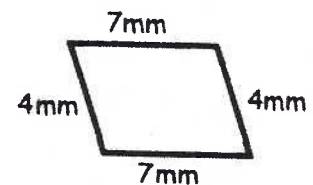
Below is a picture of a rectangle.
What is the area of the figure? _____



MG 1.3

a. What is the perimeter of a square that is 6 inches on one side? _____

b. What is the perimeter this figure? _____



Assessment for Common Core Mathematics Standards Grade 3

MG 1.4

a. 2 hours = _____ minutes.

b. 3 meters = _____ centimeters.

c. 8 yards = _____ feet.

d. 36 inches = _____ feet.

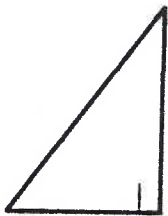
Assessment for Common Core Mathematics Standards Grade 3

MG 2.1

- a. How many vertices does an octagon have? _____
- b. How many sides does a pentagon have? _____

MG 2.2

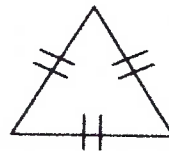
- a. Label each triangle as isosceles, equilateral or right triangle:



1. _____



2. _____



3. _____

Assessment for Common Core Mathematics Standards Grade 3

MG 2.3

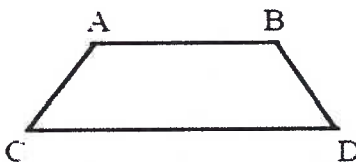
a. Label the parallelogram and the square.



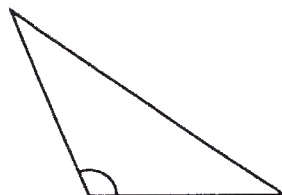
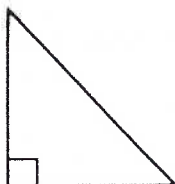
1. _____ 2. _____

b. Tell one way that a parallelogram is different than a square:

c. Circle the two line segments line are parallel in the trapezoid below: AB BD AC CD



MG 2.4



1. _____ 2. _____ 3. _____

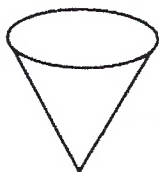
For each figure, write the letter (A, B, or C) that matches the angle.

A. Right angle B. Less than right angle C. Greater than right angle

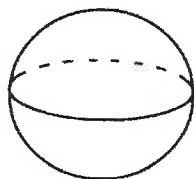
Assessment for Common Core Mathematics Standards Grade 3

Write the label for each object: sphere, cone, pyramid or prism.

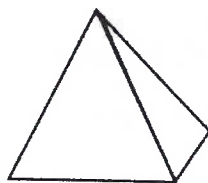
MG 2.5



a. _____



b. _____



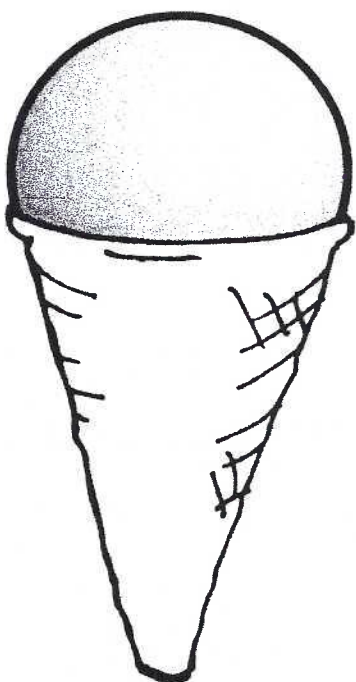
c. _____



d. _____

MG 2.6

What shapes make this picture of an ice cream cone?



- A. A cube and a pyramid
- B. A cone and a sphere
- C. A cone and a circle
- D. A pyramid and a prism

Answer: _____

Assessment for Common Core Mathematics Standards Grade 3

Statistics

S 1.1

Circle the word that describes the likelihood of something happening:

a. The sun will rise tomorrow.

likely certain unlikely impossible

b. You could have an elephant for a house pet.

likely certain unlikely impossible

S 1.2

I dropped a penny on the floor. Here is what happened:

1st time:	tails
2nd time:	tails
3rd time:	heads
4th time:	tails
5th time:	heads
6th time:	tails
7th time:	tails
8th time:	heads

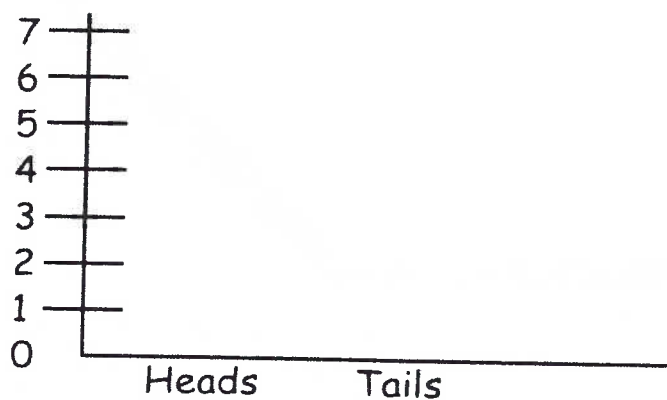
How many more times did tails occur than heads? _____

Assessment for Common Core Mathematics Standards Grade 3

S 1.3 Here are the results of an experiment in which a student flipped a coin:

First flip	Heads
Next flip	Tails
Next flip	Tails
Next flip	Tails
Next flip	Tails
Next flip	Heads
Next flip	Tails
Next flip	Heads
Next flip	Tails

Make a bar graph to show the results:



Assessment for Common Core Mathematics Standards Grade 3

End of Assessment

GRADE THREE

S1.2



Answer Key For The California Mathematics Standards Grade 3

Introduction: Summary of Goals

GRADE THREE

By the end of grade three, students deepen their understanding of place value and their understanding of and skill with addition, subtraction, multiplication, and division of whole numbers. Students estimate, measure, and describe objects in space. They use patterns to help solve problems. They represent number relationships and conduct simple probability experiments.

Answer Key For The California Mathematics Standards Grade 3

Number Sense 1.0: Students understand the place value of whole numbers.

NS 1.1a: Students count, read, and write whole numbers to 10,000

a. Circle the number two thousand, five hundred sixteen:

1,244

1,424

2,651

2,516

216

b. Circle the number one thousand, one:

101

1,001

1,010

1,100

c. Circle the number nine thousand, four hundred:

9,040

940

9,400

9,004

Number Sense 1.0: Students understand the place value of whole numbers.

NS 1.1b: Students count, read, and write whole numbers to 10,000

a. Write the following numbers:

1. three thousand, six hundred twenty-four

3,624

2. six thousand, forty-three

6,043

3. eight thousand, two

8,002

b. What is the next counting number after 9,999?

10,000

Answer Key For The California Mathematics Standards Grade 3

Number Sense 1.0 Students understand the place value of whole numbers.

NS 1.2: Students compare and order whole numbers to 10,000.

Write these numbers in order, beginning with the smallest:

8,201

8,012

8,102

812

812

8,012

8,102

8,201

Number Sense 1.0 Students understand the place value of whole numbers.

NS 1.3: Students identify the place value for each digit in numbers to 10,000.

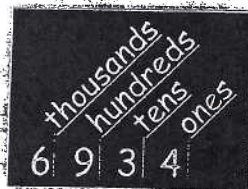
In 6,934 there are:

6 thousands

4 ones

3 tens

9 hundreds



Answer Key For The California Mathematics Standards Grade 3

Number Sense 1.0: Students understand the place value of whole numbers.

NS 1.4: Students round off numbers to 10,000 to the nearest ten, hundred, and thousand.

a. Round off 3,465 to the nearest hundred: **3,500**

b. Round off 3,465 to the nearest thousand: **3,000**

Number Sense 1.0: Students understand the place value of whole numbers.

NS 1.5: Students use expanded notation to represent numbers (e.g., $3,206 = 3,000 + 200 + 6$).

a. Write the expanded notation for 8,256:

$$8,256 = \mathbf{8,000} + \mathbf{200} + \mathbf{50} + \mathbf{6}$$

b. Write the number that goes in the blank:

$$2,000 + \mathbf{700} + 30 + 9 = 2,739$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.1: Students find the sum or difference of two whole numbers between 0 and 10,000.

Solve these problems:

$$\begin{array}{r} \text{a. } 591 \\ + 87 \\ \hline 678 \end{array}$$

$$\begin{array}{r} \text{b. } 1,283 \\ + 6,074 \\ \hline 7,357 \end{array}$$

$$\begin{array}{r} \text{c. } 3,215 \\ - 2,806 \\ \hline 409 \end{array}$$

$$\begin{array}{r} \text{d. } 300 \\ - 27 \\ \hline 273 \end{array}$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.2: Students memorize to automaticity the multiplication tables for numbers between 1 and 10.

Allow students three minutes to do these problems.

$\begin{array}{r} 8 \\ \times 1 \\ \hline 8 \end{array}$	$\begin{array}{r} 2 \\ \times 7 \\ \hline 14 \end{array}$	$\begin{array}{r} 1 \\ \times 6 \\ \hline 6 \end{array}$	$\begin{array}{r} 5 \\ \times 1 \\ \hline 5 \end{array}$	$\begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array}$	$\begin{array}{r} 1 \\ \times 4 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ \times 2 \\ \hline 6 \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array}$	$\begin{array}{r} 7 \\ \times 1 \\ \hline 7 \end{array}$	$\begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array}$
--	---	--	--	--	--	--	--	--	--

$\begin{array}{r} 4 \\ \times 1 \\ \hline 4 \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array}$	$\begin{array}{r} 9 \\ \times 1 \\ \hline 9 \end{array}$	$\begin{array}{r} 6 \\ \times 2 \\ \hline 12 \end{array}$	$\begin{array}{r} 2 \\ \times 2 \\ \hline 4 \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array}$	$\begin{array}{r} 8 \\ \times 1 \\ \hline 8 \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$	$\begin{array}{r} 1 \\ \times 5 \\ \hline 5 \end{array}$	$\begin{array}{r} 2 \\ \times 1 \\ \hline 2 \end{array}$
--	---	--	---	--	--	--	--	--	--

$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$	$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$	$\begin{array}{r} 4 \\ \times 4 \\ \hline 16 \end{array}$	$\begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array}$	$\begin{array}{r} 9 \\ \times 2 \\ \hline 18 \end{array}$	$\begin{array}{r} 3 \\ \times 3 \\ \hline 9 \end{array}$	$\begin{array}{r} 7 \\ \times 2 \\ \hline 14 \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$	$\begin{array}{r} 2 \\ \times 5 \\ \hline 10 \end{array}$	$\begin{array}{r} 1 \\ \times 7 \\ \hline 7 \end{array}$
---	---	---	---	---	--	---	---	---	--

$\begin{array}{r} 2 \\ \times 9 \\ \hline 18 \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline 27 \end{array}$	$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$	$\begin{array}{r} 2 \\ \times 7 \\ \hline 14 \end{array}$	$\begin{array}{r} 2 \\ \times 4 \\ \hline 8 \end{array}$	$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$
---	---	---	---	---	---	--	---	---	---

$\begin{array}{r} 3 \\ \times 8 \\ \hline 24 \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$	$\begin{array}{r} 9 \\ \times 9 \\ \hline 81 \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline 35 \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline 30 \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline 18 \end{array}$	$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline 32 \end{array}$
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$\begin{array}{r} 4 \\ \times 7 \\ \hline 28 \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline 21 \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline 35 \end{array}$	$\begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline 72 \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \end{array}$	$\begin{array}{r} 4 \\ \times 9 \\ \hline 36 \end{array}$	$\begin{array}{r} 7 \\ \times 4 \\ \hline 28 \end{array}$
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Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.2: Students memorize to automaticity the multiplication tables for numbers between 1 and 10.

[CONTINUED]

$$\begin{array}{r} 7 \\ \times 7 \\ \hline 49 \end{array}$$

$$\begin{array}{r} 7 \\ \times 6 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 7 \\ \times 9 \\ \hline 63 \end{array}$$

$$\begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 9 \\ \times 7 \\ \hline 63 \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 6 \\ \times 7 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 8 \\ \times 7 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 8 \\ \times 3 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 8 \\ \times 9 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 8 \\ \times 5 \\ \hline 40 \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline 27 \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} 9 \\ \times 4 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 8 \\ \times 6 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline 54 \end{array}$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.3: Students use the inverse relationship of multiplication and division to compute and check results.

Here is a problem. Use multiplication to see if it is solved correctly.
Show your work.

$$\begin{array}{r} 29 \\ 5 \overline{) 135} \end{array}$$

$$29 \times 5 = 135?$$

$$\begin{array}{r} 29 \\ \times 5 \\ \hline 145 \end{array}$$

The
problem is
not solved
correctly

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.4: Students solve simple problems involving multiplication of multidigit numbers by one-digit numbers ($3,671 \times 3 = \underline{\quad}$).

Solve these problems:

a.

$$\begin{array}{r} 465 \\ \times 3 \\ \hline 1,395 \end{array}$$

b.

$$\begin{array}{r} 1,384 \\ \times 4 \\ \hline 5,536 \end{array}$$

c.

$$\begin{array}{r} 3482 \\ \times 5 \\ \hline 17,410 \end{array}$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication and division.

NS 2.5: Students solve division problems in which a multidigit number is evenly divided by a one-digit number ($135 \div 5 = \underline{\quad}$).

Solve these problems:

a. $3 \overline{) 168}$ **56**

b. $4 \overline{) 264}$ **66**

c. $6 \overline{) 546}$ **91**

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication and division.

NS 2.6: Students understand the special properties of 0 and 1 in multiplication and division.

Check true or false:

a. $24 \times 0 = 24$

True False

b. $19 \div 1 = 19$

True False

c. $63 \times 1 = 63$

True False

d. $0 \div 0 = 1$

True False

Answer Key For The California Mathematics Standards Grade 3

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.7: Students determine the unit cost when given the total cost and number of units.

Jill bought 6 pounds of apples for \$1.38. How much did each pound cost? **23 cents**

$$\begin{array}{r} 23 \\ 6 \overline{) \$1.38} \end{array}$$

Number Sense 2.0: Students calculate and solve problems involving addition, subtraction, multiplication, and division.

NS 2.8: Students solve problems that require two or more of the skills mentioned above.

- a. You put 54 marbles into 6 bags, ending up with the same number of marbles in each bag. How many marbles would be in each bag if there were 6 bags? **9 marbles**

$$54 \text{ marbles} \div 6 \text{ bags} \longrightarrow 6 \overline{) 54} \begin{array}{r} 9 \end{array}$$

- b. A tree was planted 54 years before 1961. How old was that tree in 1997? **90 years**

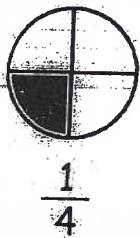
$$1997 - 1961 = 36 \text{ years} \quad 54 \text{ years} + 36 \text{ years} = 90 \text{ years}$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 3.0: Students understand the relationship between whole numbers, simple fractions, and decimals.

NS 3.1: Students compare fractions represented by drawings or concrete materials to show equivalency and to add and subtract simple fractions in context (e.g. $\frac{1}{2}$ of a pizza is the same amount as $\frac{2}{4}$ of another pizza that is the same size; show that $\frac{3}{8}$ is larger than $\frac{1}{4}$).

Fill in parts to show each fraction. Then circle the fractions that are equivalent.



Number Sense 3.0: Students understand the relationship between whole numbers, simple fractions, and decimals.

NS 3.2: Students add and subtract fractions (e.g., determine that $\frac{1}{8} + \frac{3}{8}$ is the same as $\frac{1}{2}$).

$$\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

$$\frac{3}{8} + \frac{2}{8} = \frac{3+2}{8} = \frac{5}{8}$$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 3.0: Students understand the relationship between whole numbers, simple fractions, and decimals.

NS 3.3: Students solve problems involving addition, subtraction, multiplication, and division of money amounts in decimal notation and multiply and divide money amounts in decimal notation by using whole-number multipliers and divisors.

a. $\$3.24 + \$.35 = \3.59

b. You have \$8.00. You buy 2 oranges and 3 juices. Each orange costs \$0.35 and each juice costs \$0.90. How much do you have left? $\$4.60$

$2 \times \$0.35 = \0.70	$\$0.70$	$\$8.00$
$3 \times \$0.90 = \2.70	$+ \$2.70$	$- \$3.40$
	$\$3.40$	$\$4.60$

Answer Key For The California Mathematics Standards Grade 3

Number Sense 3.0: Students understand the relationship between whole numbers, simple fractions, and decimals.

NS 3.4: Students know and understand that fractions and decimals are two different representations of the same concept (e.g. 50 cents is $\frac{1}{2}$ of a dollar, 75 cents is $\frac{3}{4}$ of a dollar).

a. $\frac{1}{2}$ dollar = 50 cents. b. 75 cents is $\frac{3}{4}$ of a dollar

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.1: Students represent relationships of quantities in the form of mathematical expressions, equations, or inequalities.

Write an equation to solve this problem, and then solve the equation.

An oak tree is 42 feet high. The oak tree is 18 feet taller than the fir tree. How tall is the fir tree?

$$\begin{aligned}t &= \text{height of oak tree} = 42 \text{ ft} \\f &= \text{height of fir tree}\end{aligned}$$

The oak tree is 18 feet taller than the fir tree.

$$\begin{aligned}t &= f + 18 \\42 &= f + 18 \\f &= 24\end{aligned}$$

The fir tree is 24 feet high

Answer Key For The California Mathematics Standards Grade 3

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.2: Students solve problems involving numeric equations or inequalities.

If $6 + N > 9$, circle all the numbers that "N" could be:

3

2

4

1

0

8

5

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.3: Students select appropriate operational and relational symbols to make an expression true (e.g. if $4 _ 3 = 12$, what operational symbol goes in the blank?).

Put +, -, x, or ÷ in the circle to make the equation true.

a. $12 \text{ (-) } 3 = 9$

c. $9 \text{ (+) } 6 = 15$

b. $12 \text{ (÷) } 3 = 4$

d. $4 \text{ (×) } 8 = 32$

Answer Key For The California Mathematics Standards Grade 3

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.4: Students express simple unit conversions in symbolic form (e.g., ___ inches = ___ feet \times 12).

a. Change 8 feet into inches. Show your work.

$$8 \times 12 = 96 \text{ inches}$$

$$8 \text{ ft} \cdot \frac{12 \text{ inches}}{1 \text{ ft}} = 96 \text{ inches}$$

b. Change 9 feet into yards. Show your work.

$$\frac{9}{3} = 3 \text{ yards}$$

$$9 \text{ ft} \cdot \frac{1 \text{ yd}}{3 \text{ ft}} = 3 \text{ yards}$$

Answer Key For The California Mathematics Standards Grade 3

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.5: Students recognize and use the commutative and associative properties of multiplication (e.g., if $5 \times 7 = 35$, then what is 7×5 ? and if $5 \times 7 \times 3 = 105$, then what is $7 \times 3 \times 5$?).

- a. Make 2 multiplication and 2 division statements using the numbers 5, 4, and 20:

$$5 \times 4 = 20$$

$$4 \times 5 = 20$$

$$20 \div 4 = 5$$

$$20 \div 5 = 4$$

Answer Key For The California Mathematics Standards Grade 3

Algebra and Functions 1.0: Students select appropriate symbols, operations, and properties to represent, describe, simplify, and solve simple number relationships.

AF 1.5: Students recognize and use the commutative and associative properties of multiplication (e.g., if $5 \times 7 = 35$, then what is 7×5 ? and if $5 \times 7 \times 3 = 105$, then what is $7 \times 3 \times 5$?).

[CONTINUED]

b. $6 \times 12 = 72$

1. What is $6 \times (4 \times 3)$?

$$6 \times 12 = 72$$

2. What is $(6 \times 4) \times 3$?

$$(6 \times 4) \times 3 =$$

$$6 \times (4 \times 3) = 72 \text{ by the Associate Property and part 1}$$

Algebra and Functions 2.0: Students represent simple functional relationships.

AF 2.1: Students solve simple problems involving a functional relationship between two quantities (e.g., find the total cost of multiple items given the cost per unit).

Pencils are 8¢ each. How much would 7 pencils cost? **56¢**

$$8¢ \times 7 = 56¢$$

Answer Key For The California Mathematics Standards Grade 3

Algebra and Functions 2.0: Students represent simple functional relationships.

AF 2.2: Students extend and recognize a linear pattern by its rules (e.g., the number of legs on a given number of horses may be calculated by counting by 4s or by multiplying the number of horses by 4).

Mr. Brown's class was doing a science experiment. There were 7 groups in the class. Each group got 4 test tubes. How many test tubes did the class use? **28 test tubes**

$$\begin{array}{r} 7 \\ \times 4 \\ \hline 28 \end{array}$$

Answer Key For The California Mathematics Standards Grade 3

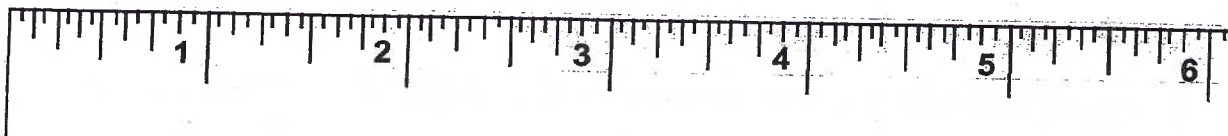
Measurement and Geometry 1.0: Students choose and use appropriate units and measurement tools to quantify the properties of objects.

MG 1.1: Students choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.

a. What is the length of this piece of wood:

2 inches, $2\frac{1}{2}$ inches, $2\frac{1}{4}$ inches, or $2\frac{1}{8}$ inches?

$2\frac{1}{4}$ inches.



b. About how tall is an adult man?

2 centimeters

2 meters

2 kilometers

Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 1.0: Students choose and use appropriate units and measurement tools to quantify the properties of objects.

MG 1.1: Students choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.

[CONTINUED]

c. About how much milk is in the carton that you get at lunch?

1 gallon

1 pint

1 pint

1 quart

d. About how much does a newborn baby weigh?

7 ounces

7 pounds

7 pounds

7 tons

Answer Key For The California Mathematics Standards Grade 3

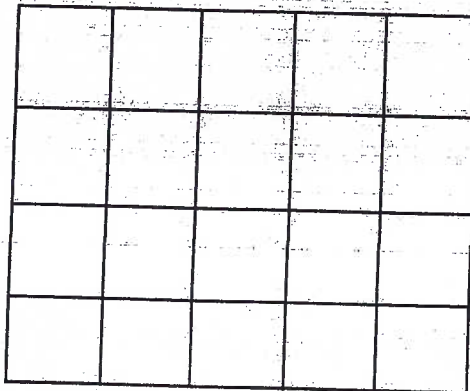
Measurement and Geometry 1.0: Students choose and use appropriate units and measurement tools to quantify the properties of objects.

MG 1.2: Students estimate or determine the area and volume of solid figures by covering them with squares or by counting the number of cubes that would fill them.

Below is a picture of a rectangle.
What is the area of the figure?

20 cm²

4 cm



5 cm

4cm x 5cm = 20cm²

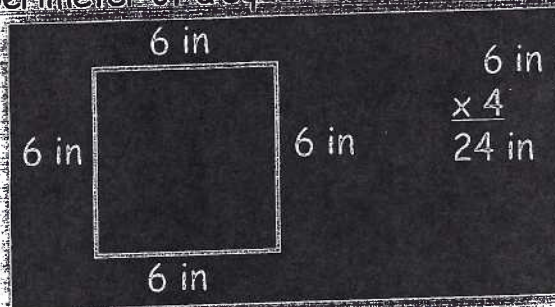
Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 1.0: Students choose and use appropriate units and measurement tools to quantify the properties of objects.

MG 1.3: Students find the perimeter of a polygon with integer sides.

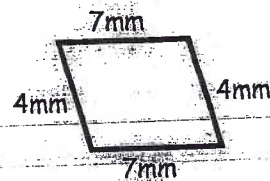
- a. What is the perimeter of a square that is 6 inches on one side?

24 inches



- b. What is the perimeter this figure?

22mm



$$7\text{mm} + 4\text{mm} + 7\text{mm} + 4\text{mm} = 22\text{mm}$$

Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 1.0: Students choose and use appropriate units and measurement tools to quantify the properties of objects.

MG 1.4: Students carry out simple unit conversions within a system of measurement (e.g., centimeters and meters, hours and minutes).

a. 2 hours = 120 minutes.

$$2 \text{ hours} \times 60 \text{ minutes per hr} = 120 \text{ minutes}$$

$$2 \text{ hours} \times \frac{60 \text{ minutes}}{1 \text{ hour}} = 120 \text{ minutes}$$

b. 3 meters = 300 centimeters.

$$3 \text{ meters} \times 100 \text{ centimeters per meter} = 300 \text{ centimeters}$$

$$3 \text{ meters} \times \frac{100 \text{ centimeters}}{1 \text{ meter}} = 300 \text{ centimeters}$$

c. 8 yards = 24 feet.

$$8 \text{ yards} \times 3 \text{ feet per yard} = 24 \text{ feet}$$

$$8 \text{ yds} \times \frac{3 \text{ feet}}{1 \text{ yard}} = 24 \text{ feet}$$

d. 36 inches = 3 feet.

$$36 \text{ inches} \div 12 \text{ inches per foot} = 3 \text{ feet}$$

$$36 \text{ inches} \times \frac{1 \text{ foot}}{12 \text{ inches}} = 3 \text{ feet}$$

Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

MG 2.1: Students identify, describe, and classify polygons (including pentagons, hexagons, and octagons).

a. How many vertices does an octagon have?

8



b. How many sides does a pentagon have?

5



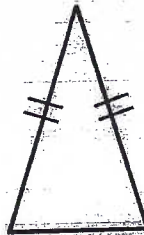
Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

MG 2.2: Students identify attributes of triangles (e.g. two equal sides for the isosceles triangle, three equal sides for the equilateral triangle, right angle for the right triangle).

Label each triangle as isosceles, equilateral or right triangle.



1. right



2. isosceles



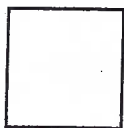
3. equilateral

Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

MG 2.3: Students identify attributes of quadrilaterals (e.g., parallel sides for the parallelogram, right angles for the rectangle, equal sides and right angles for the square).

a. Label the parallelogram and the square.



1. **square**



2. **parallelogram**

b. Tell one way that a parallelogram is different than a square.

The angles of a parallelogram are not required to be 90° . The sides of a parallelogram are not required to be the same length.

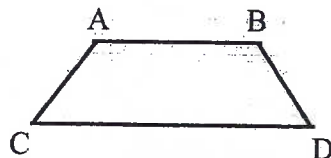
c. Circle the two line segments that are parallel in the trapezoid

below:



BD

AC



Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

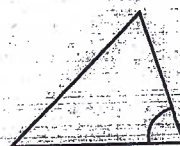
MG 2.4: Students identify right angles in geometric figures or in appropriate objects and determine whether other angles are greater or less than a right angle.



1. **A**



2. **C**



3. **B**

For each figure, write the letter (A, B, or C) that matches the angle.

A. Right angle B. Less than right angle C. Greater than right angle

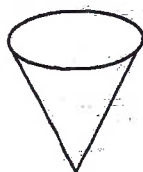
scalene

obtuse

Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

MG 2.5: Students identify, describe, and classify common three-dimensional geometric objects (e.g., cube, rectangular solid, sphere, prism, pyramid, cone, cylinder).

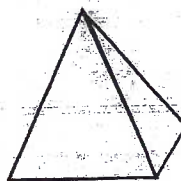
Write the label for each object: sphere, cone, pyramid or prism.



a. **cone**



b. **sphere**



c. **pyramid**



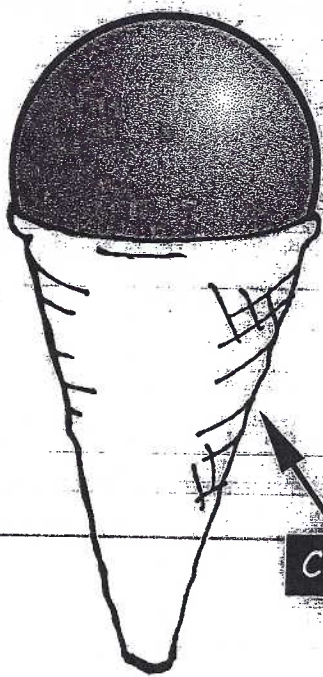
d. **prism**

Answer Key For The California Mathematics Standards Grade 3

Measurement and Geometry 2.0: Students describe and compare the attributes of plane and solid geometric figures and use their understanding to show relationships and solve problems.

MG 2.6: Students identify common solid objects that are the components needed to make a more complex solid object.

What shapes make this picture of an ice cream cone?



SPHERE

- A. A cube and a pyramid
- B. A cone and a sphere
- C. A cone and a circle
- D. A pyramid and a prism

Answer:

B

CONE

Answer Key For The California Mathematics Standards Grade 3

Statistics, Data Analysis, and Probability 1.0: Students conduct simple probability experiments by determining the number of possible outcomes and make simple predictions.

S 1.1: Students identify whether common events are certain, likely, unlikely, or improbable.

Circle the word that describes the likelihood of something happening:

a. The sun will rise tomorrow.

likely

certain

unlikely

impossible

b. You could have an elephant for a house pet.

likely

certain

unlikely

impossible

Answer Key For The California Mathematics Standards Grade 3

Statistics, Data Analysis, and Probability 1.0: Students conduct simple probability experiments by determining the number of possible outcomes and make simple predictions.

S 1.2: Students record the possible outcomes for a simple even (e.g., tossing a coin) and systematically keep track of the outcomes when the event is repeated many times.

I dropped a penny on the floor. Here is what happened:

1st time:	tails	
2nd time:	tails	5 tails
3rd time:	heads	3 heads
4th time:	tails	
5th time:	heads	5
6th time:	tails	-3
7th time:	tails	2
8th time:	heads	

How many more times did tails occur than heads?

2

Answer Key For The California Mathematics Standards Grade 3

Statistics, Data Analysis, and Probability 1.0: Students conduct simple probability experiments by determining the number of possible outcomes and make simple predictions.

S 1.3: Students summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot).

[SEE NEXT PAGE FOR SOLUTION]

Here are the results of an experiment in which a student flipped a coin:

First flip	Heads
Next flip	Tails
Next flip	Tails
Next flip	Tails
Next flip	Tails
Next flip	Heads
Next flip	Tails
Next flip	Heads
Next flip	Tails

Answer Key For The California Mathematics Standards Grade 3

Statistics, Data Analysis, and Probability 1.0: Students conduct simple probability experiments by determining the number of possible outcomes and make simple predictions.

S 1.3: Students summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot).

[CONTINUED]

Make a bar graph to show the results:

