DOCUMENT RESUME

ED 434 922 TM 030 174

TITLE	Alaska Benchmark Examination Booklet.
INSTITUTION	Alaska State Dept. of Education, Juneau.
PUB DATE	1999-06-00
NOTE	25p.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Academic Standards; *Achievement Tests; *Benchmarking; Educational Change; Elementary Education; Mathematics; Reading; State Programs; *State Standards; Test Construction; Test Content; Test Format; Test Results; Test Use; *Testing Programs; Writing (Composition)
IDENTIFIERS	*Alaska; Reform Efforts

ABSTRACT

The Alaska Benchmarks Examinations measure student achievement in reading, writing, and mathematics at grades 3, 6, and 8. This booklet answers some of the most frequently asked questions about these examinations and presents some sample questions. The Benchmark Examinations are part of a statewide school reform effort known as the Quality Schools Initiative. Information about student achievement will be used in planning and implementing school improvement. The Benchmark examinations measure whether students are achieving statewide academic standards in reading, mathematics, and writing. Results are reported to individual students, schools, and school districts to provide information on student strengths and weaknesses. Each examination contains multiple-choice, short constructed-response, and extended constructed-response test items. The sample questions for each of the three benchmark levels (grades 3, 6, and 8) illustrate the kinds of questions students face on the Benchmark Examinations. The first operational administration of the Benchmark Examinations is set for March 2000. (SLD)

Alaska Benchmark Examination Booklet

State of Alaska
Department of Education

The reading passages, test items, and scoring guides in this publication are representative only and should not be interpreted as exact duplicates of the passages and items that may appear on the Alaska Benchmark Examination, nor the scoring guides used to score them. Authority for final approval of all test items and testing materials rests with the Alaska Department of Education.

Publication Date: June 1999

LETTER

In 1998 the Alaska Legislature passed Governor Tony Knowles' plan to develop a statewide system of student assessment to measure how well students are learning state academic performance standards in reading, writing, and mathematics.

As part of that legislation, the Department of Education has been developing the Alaska Benchmark Examinations at grades 3, 6 and 8.

In 1997, the Legislature directed the Department of Education to develop an examination in reading, writing, and mathematics that high school students needed to pass before they could be awarded a diploma. Those who do not pass the High School Graduation Qualifying Examination will be denied a diploma and will receive instead a certificate of attendance.

It is no accident that the Benchmark Examinations and the High School Graduation Qualifying Examination measure student performance in the same subjects. The tests at grades 3, 6 and 8 are indexed to what Alaskans believe their children should know in reading, writing, and mathematics at age ranges 5-7, 8-10, and 11-14, respectively. The Benchmark Examinations are designed to tell parents and educators if their children are making sufficient progress toward passing the high school exam, which also tests students in reading, writing, and mathematics.

The Alaska Benchmark Examinations and High School Graduation Qualifying Examinations are part of a statewide school reform effort known as the Quality Schools Initiative. Under the Quality Schools Initiative, each school will be required to do a number of things aimed at improving the education that our children receive. The Quality Schools Initiative will require:

- schools to chart a developmental profile for each child entering kindergarten or first grade to discover strengths and areas needing improvement;
- schools to adopt state-mandated academic standards in mathematics, reading, and writing;
- schools to administer state examinations at grades 3, 6 and 8 to measure whether each student is meeting the standards and to identify the academic areas in which they need assistance;
- schools to report certain information to their communities and the state about their progress;
- low performing schools to work with their communities to create and put in place school improvement plans aimed at helping students reach the standards; and
- each high school student to pass the High School Graduation Qualifying Examination.

I invite you to join us in building Quality Schools for Alaska—schools with greater accountability, where every child meets high standards in reading, writing, and mathematics, and where every high school student passes the High School Graduation Qualifying Examination and earns a diploma.

Sincerely,

Richard S. Cross
Commissioner of Education

Frequently Asked Questions

Q **What do the Alaska Benchmark Examinations measure?**

A The Alaska Benchmark Examinations measure whether students are achieving statewide academic standards in reading, writing, and math. The standards are benchmarked at three age levels: ages 5-7 (Benchmark 1); ages 8-11 (Benchmark 2); and ages 11-14 (Benchmark 3).

Q **When do students take the Alaska Benchmark Examinations?**

A Students will take the Alaska Benchmark Examinations in three different grades during their public school careers to see if they are meeting the standards at Benchmark 1 (in grade 3); Benchmark 2 (in grade 6); and Benchmark 3 (in grade 8). Students will need to pass a fourth exam in reading, writing, and math before they can qualify for a high school diploma. The fourth exam is called the Alaska High School Graduation Qualifying Examination.

Q **Why do we have the Alaska Benchmark Examinations?**

A The Legislature authorized the exams and the State Board of Education sets the policy for their development. The Department of Education has contracted with CTB/McGraw-Hill, a commercial test publisher, to help develop the examinations.

Q **How will Alaskans know whether the Alaska Benchmark Examinations are appropriate for students in our state?**

A The State Board of Education has appointed several committees of Alaskans to review the work of the test publisher. The committees have made sure the examinations are fair for all students in Alaska and that they measure the levels of achievement that Alaskans expect of their young people at certain points in their schooling. The committees have also looked at such issues as test bias and alignment with the Alaska Student Performance Standards.

Q **How long will students spend taking an examination?**

A A time limit will not be set for finishing an examination. Students will have as long as they need to complete it. However, most students can expect to spend two or three hours to complete each of the three tests. One test per day will be administered over a three-day period.

Q **How will students find out about the Alaska Benchmark Examinations results?**

A The Department of Education will coordinate the administration, scoring, and reporting of the Alaska Benchmark Examinations. Following the administration and scoring of the examinations, the department will provide results for individual students, schools, and school districts. The reports will provide information on student strengths and weaknesses in reading, writing, and mathematics.

Q **Will there be any financial cost to parents or students for taking the Alaska Benchmark Examinations?**

A No.

Q **What is considered a passing score on the Alaska Benchmark Examinations?**

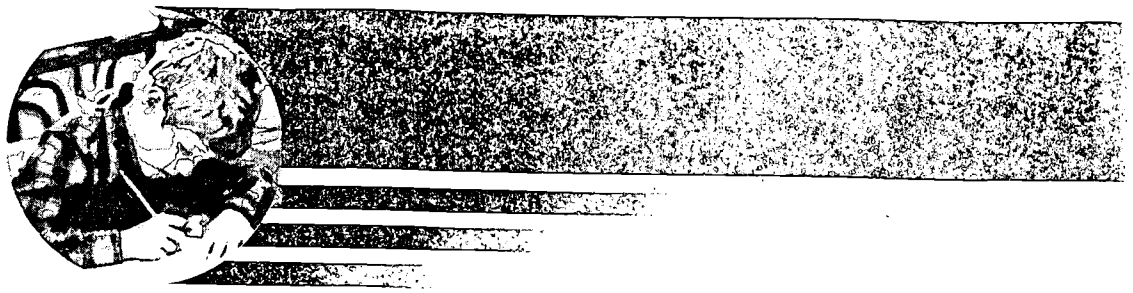
A There is no passing score. There will be four levels of achievement that students can earn: Advanced; Proficient; Below Proficient; and Not Proficient. A committee composed of Alaska educators, parents, Native and business leaders, and others, will set the levels of proficiency in the summer of 2000.

Q **What kinds of questions will be on the Alaska Benchmark Examinations?**

A There will be three types of questions in each of the three tests: multiple-choice, short constructed-response, and extended constructed-response. Multiple-choice questions will have three or four answer choices; students will select the correct answer and fill in an answer bubble. For constructed-response questions, students will write their answers to the questions on lines provided. Short constructed-response items may require a few words, phrases, or sentences; that a problem be solved; or a form or chart be completed. These questions may take two to five minutes to complete. Extended constructed-response items may require students to write a paragraph, an essay, or to complete a multi-step task. These questions may take five to fifteen minutes to complete; the essays may require about an hour to complete. Constructed-response questions in mathematics will require students to show their work.

Q **How will the constructed-response questions be scored?**

A For each question, there will be a scoring guide that consists of an example of a response and describes the performance criteria for each of the score points possible for that question. These scoring guides will be reviewed in advance by a committee of Alaska educators and field-tested along with the questions. The examination will be scored by professional raters who will be trained on the use of the Alaska Benchmark Examinations scoring guides in order to apply them consistently on all papers. Some questions, such as the essay, will also have samples of actual papers, written by Alaska students during the field test administration, that have been identified as examples or models for the scoring guide.



SAMPLE TEST QUESTIONS

The next section of this booklet contains sample test questions of the type that will be on the Alaska Benchmark Examination and the scoring guide used to score the questions. These are sample questions only and are not actual passages, items, or scoring guides that will be used in the administration or scoring of the examination. See how many questions you can answer correctly.

READING

Sample Test Item—Benchmark 1 (Grade 3)

At Benchmark 1, there are a few items with three answer choices, but most items have four answer choices.

Directions

Here is a story about a girl, her twin sister, and a day they spend with their Aunt Lily. Read the story. Then do Numbers 1 through 3.

My Aunt Lily enjoyed life. Her sisters thought rules were the most important thing, but my Aunt Lily had other ideas.

One clear spring day, she invited my twin sister and me to walk with her to the candy store. It was a long walk from her house to the store, but Aunt Lily made it interesting. She didn't lead us down the same old streets. Instead, we explored the back roads and followed her along the old railroad tracks. On the way home, we ate our candy and sang silly songs. She taught us funny poems. We danced on the path by the tracks, twirling and jumping.

When we got home, we didn't tell our other aunts about the candy, because they didn't want us to eat candy. We didn't tell them about the singing and funny poems, because they thought we should learn more important things. And we didn't tell them about our dancing, because they probably just wouldn't understand. They asked us where we had been and what we had been doing, but we just looked at our Aunt Lily and smiled.

1 **Which of these is the best name for the story?**

Ⓐ Aunt Lily Buys Lunch

Ⓑ Aunt Lily Follows the Rules

● Aunt Lily and the Special Trip

READING STANDARD **Students can identify the main idea of a passage.**

In this item, students demonstrate their understanding of the story's main idea by selecting the best "name" for the story.

Sample Test Item–Benchmark 1 (Grade 3)

24

The boxes above show what happened in the story. One box is empty. Now look at the pictures below. Find the picture below that shows what belongs in the empty box.

✔● Ⓑ Ⓒ

READING STANDARD: Students can retell, dramatize, or restate information after reading or hearing a text.

This item assesses the student's ability to identify the correct sequence of events in the story. Other items may focus on following simple directions or identifying common forms of texts.

35

Do you think the girls have more fun with Aunt Lily or with their other aunts? Give a reason from the story to support your answer.

_____

_____

_____

_____

READING STANDARD: Students can make connections between a text and personal experiences, experiences of others, or other texts, and locate details in the text to illustrate these connections.

This item assesses the student's ability to infer relationships between characters and to support the inference with details from the story.

Sample Scoring Guide—Benchmark 1 (Grade 3)

SCORING GUIDE

Score Points: 2 points

- 1 point for explaining that the girls probably had more fun with Aunt Lily.
- 1 point for providing an example from the story that supports that opinion.

Exemplary Response:

- The girls probably had more fun with Aunt Lily because she liked to do fun things like singing silly songs. The other aunts were more interested in following rules.

Sample Test Item–Benchmark 1 (Grade 3)

Directions

Read this poem by Leslie Hall. Then do Numbers 4 and 5.

My Friend Watches Whales

I have a friend. She is not like me.
My friend looks at the sky.
She sees—whales floating by!
I look outside. What do I see?
I see—clouds, fluffy and white.
No whales! Not one in sight!
Look, there's the tail.
Look, there's the spout.
She points them out,
and then I do see
the tail and the spout
of a big white whale
looking back at me!

Leslie Hall

4 **Read these sentences from the poem.**

My friend looks at the sky.
She sees—whales floating by!

What does floating mean in the second sentence?

Ⓐ leaping
✔● drifting
Ⓒ standing
Ⓓ swimming

READING STANDARD: Students can demonstrate sight recognition of high frequency vocabulary words.

In this item, students are asked to define a word in the context of a poem. Other items may focus on assessing students' knowledge of phonics, word structure, and language structure.

5

Below are four things that happen in the poem. Number the sentences in the order they happen in the poem. The first one is done for you.

The friend points out whales.

The friend sees whales in the clouds.

The girl sees only clouds.

The girl sees whales in the clouds.

READING STANDARD: Students can retell, dramatize, or restate information after reading or hearing a text.

This constructed-response item assesses the student's ability to identify the correct sequence of events in the poem.

Sample Scoring Guide—Benchmark 1 (Grade 3)

SCORING GUIDE

Score Points: 1 point

- 1 point for a response that has all sentences numbered in the correct order.

Exemplary Response:

- 3 The friend points out whales.
  1 The friend sees whales in the clouds.
  2 The girl sees only clouds.
  4 The girl sees whales in the clouds.

WRITING

Sample Test Item—Benchmark 2 (Grade 6)

1 Here is a paragraph a student wrote about the moon. The student made six mistakes in grammar, capitalization, punctuation, and spelling. Draw a line through each mistake, and write the correction above it.

have
People ~~has~~ many misconceptions about the moon. Some people think that the moon is a source of light, but that's not true. It only reflects light that originates from the sun. *Others* ~~Others'~~ believe that a crescent moon occurs because the moon has moved into the sun's shadow, but that's not true either. These people are confusing the phases of the moon with an *eclipse. The* ~~eclipse, the~~ silliest misconception about the moon that I've ever heard is that the moon is made of green cheese*!* ~~?~~ If you can't figure out why that doesn't make any sense, *there* ~~their~~ is no point in my trying to explain it to you!

WRITING STANDARD: Students can proofread and correct grammar, sentence structure, paragraph structure, punctuation, capitalization, spelling, and usage in finished written work.

This constructed-response editing task requires students to proofread, identify, and correct errors, a process similar to what they do when editing their own writing. Note that the corrections are shown on the item; students will be given only the error-riddled text.

SCORING GUIDE

Score Points: 6 points

1 point for making each of these corrections on the above item:

- **has** should be changed to **have**
  Corrects subject/verb agreement
- **Others'** should be changed to **Others**
  Not a possessive
- **eclipse,** should be changed to **eclipse.**
  End of sentence
- **the** should be changed to **The**
  Start of new sentence
- **?** should be changed to either **!** or a **period**
  Not a question
- **their** should be changed to **there**
  Corrects spelling error

2 Choose the sentence that best fills the blank in the paragraph.

Unlike stars, the moon does not make its own light. The sun shines on the moon, which reflects the light from the sun. _____. Therefore, during the new moon phase, when the side facing Earth is dark, the side that we never see is in full sunlight.

Ⓐ The tides are affected by the moon's gravity.

Ⓑ The moon may appear dark red during a lunar eclipse.

✔● In fact, half of the moon is always in the sun's light.

Ⓓ It never rises and sets at the same time.

WRITING STANDARD: Students can revise writing to improve the logical progression of ideas and supporting information.

In this item, students must determine which sentence logically develops the ideas in the paragraph. Other items may focus on choosing a sentence that would be the topic sentence for a paragraph, distinguishing complete sentences from run-ons and fragments, combining two or three sentences into a coherent and concise single sentence, and distinguishing correctly constructed and punctuated sentences from incorrect ones.

3

This cat's owner has to move to a new apartment that won't take pets. Now the cat needs a new owner.

Write a story about the cat finding a new owner. Your story can be happy, funny, sad, or all those things.

For this answer, make sure you use complete sentences and check your work for correct spelling, capitalization, and punctuation.

WRITING STANDARD: **Students can write a well organized two-paragraph composition that addresses a single topic.**

This extended constructed-response question requires students to generate a story. Other questions may require expository, descriptive, or persuasive essays. The students' essays will be scored using a scoring guide that contains sample responses, drawn from the work of Alaska students during the field test. Each essay will be assigned a single score ranging from 1 to 6; this score will be based on criteria that are consistent with other writing assessments in the state.

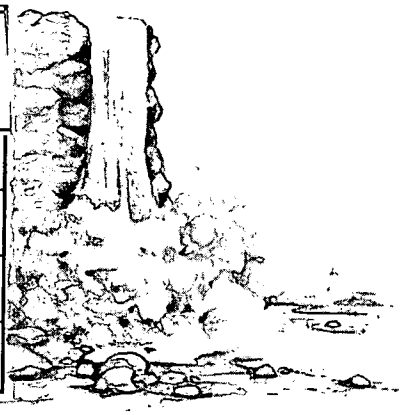
MATHEMATICS

Sample Test Item—Benchmark 1 (Grade 3)

1 Look at the chart. Which waterfall is the highest?

WATERFALLS OF THE WORLD

Waterfall	Height (in meters)
King George VI	488
Krimmler	400
Ribbon	491
Upper Yosemite	436



Ⓐ King George VI

Ⓑ Krimmler

✓● Ribbon

Ⓓ Upper Yosemite

MATHEMATICS STANDARD: **Students can read, write, order, count, and model one-to-one correspondence with whole numbers to 100.**

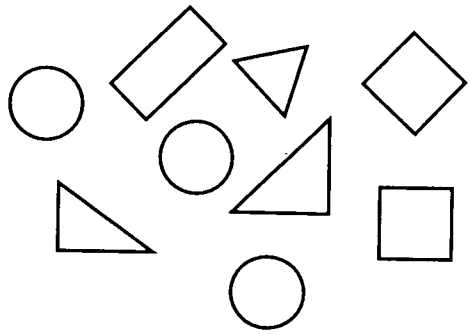
At Benchmark 1, numeration problems cover mathematical facts, concepts, principles, and theories. Items usually present these concepts in real-world contexts.

2

Megan found these shapes.

Draw a circle around each shape that is a triangle.

On the lines below, describe a triangle.



_____

_____

_____

_____

MATHEMATICS STANDARD: Students can identify, sort, describe, model, and compare circles, triangles, and rectangles including squares regardless of orientation.

The focus of this item is on identifying triangles. The student then validates his or her answer by communicating a description of a triangle using mathematical vocabulary and terminology.

Sample Scoring Guide—Benchmark 1 (Grade 3)

SCORING GUIDE

Score Points: 2 points

- 1 point for triangles circled
- 1 point for valid description of a triangle

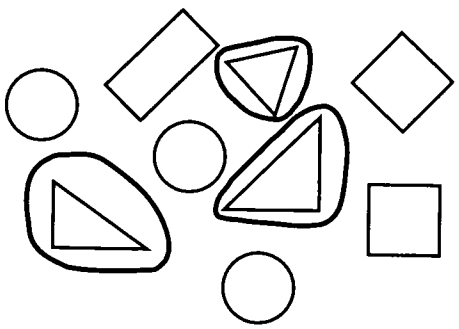
Exemplary Response:

Description equivalent to the following:

- Triangles have 3 sides.

OR

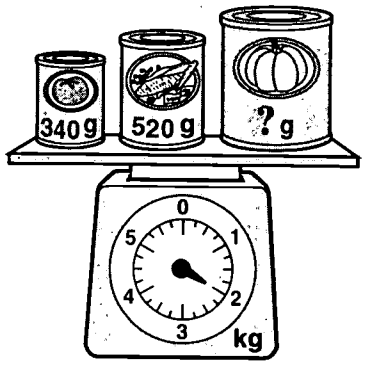
- Triangles have 3 angles.



Sample Test Item—Benchmark 2 (Grade 6)

1

How much does the largest can on the scale weigh?



1,000 grams = 1 kilogram

Ⓐ 860 grams

Ⓑ 1,060 grams

✔● 1,140 grams

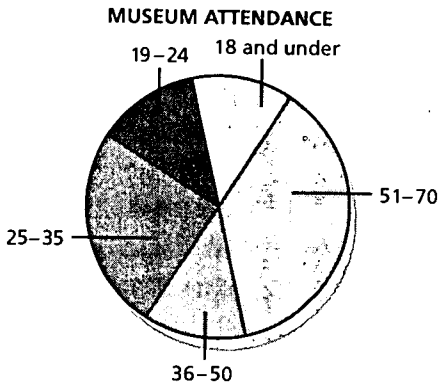
Ⓓ 2,860 grams

MATHEMATICS STANDARD: Students can identify and use equivalent measurements.

At Benchmark 2, measurement items ask students to select and use appropriate systems, units, and tools of measurement including estimation. This sample item measures the student's knowledge of measurement and ability to use a multi-step strategy to solve a problem.

2

The circle graph below shows the average attendance by age group at the Natural History Museum.



Which group had the most visitors to the museum?

Answer: _____

Based on the proportion in the circle graph, about how many people would be 36 and older if a total of 900 people attended the museum?

About _____ people

MATHEMATICS STANDARD: Students can explain the meaning of the data.

At Benchmark 2, data analysis items measure the student's ability to collect, organize, interpret, represent, and formulate questions about data, and make reasonable and useful predictions about certainty, uncertainty, or impossibility of an event. In the sample item, the student is required to analyze and interpret the presented data and to make inferences from the data in order to solve the problem.

Sample Scoring Guide—Benchmark 2 (Grade 6)

SCORING GUIDE

Score Points: 2 points

- 1 point for writing 51–70
- 1 point for writing an answer within the range of 400 to 500

Exemplary Response:

Description equivalent to the following:

- 51–70
- 450 (accept answers ranging from 400 to 500)

Sample Test Item—Benchmark 3 (Grade 8)

1

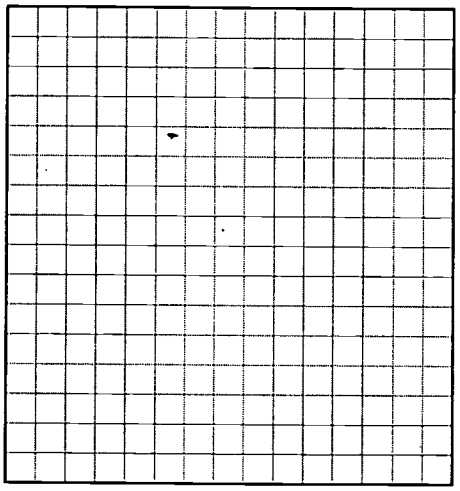
One hundred students were asked to estimate the amount of time they spend doing mathematics homework each week. The data was used to make the table.

ESTIMATED TIME SPENT ON MATHEMATICS HOMEWORK

Minutes	Number of Students
20	5
40	8
60	24
80	30
100	17
120	10
over 120	2

On the grid, construct a bar graph to represent the information in the table. Be sure to:

- title the graph
- label the axes
- use appropriate and consistent scales
- accurately graph the data



MATHEMATICS STANDARD: Students can collect, analyze, and display data in a variety of visual displays.

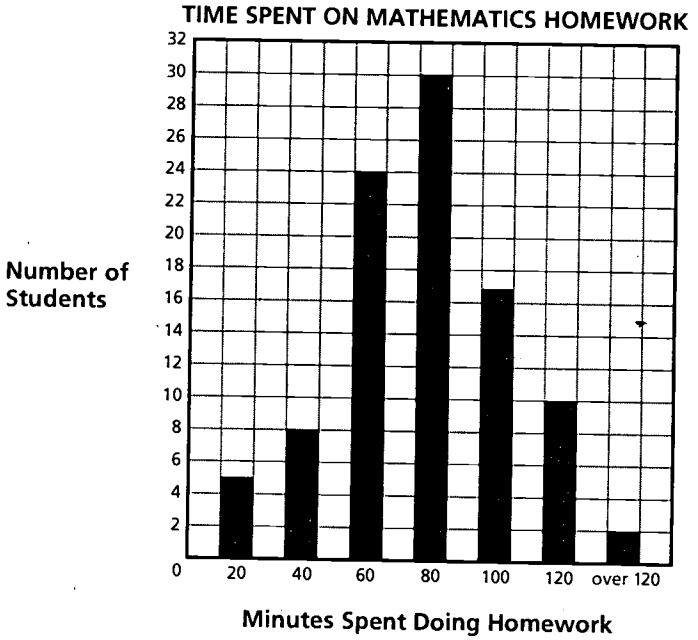
In this extended constructed-response item for Benchmark 3, students demonstrate their ability to construct a bar graph from given real-world data. For this graph, students must create a title, an appropriate and consistent scale, and then accurately graph all of the data.

SCORING GUIDE

Score Points: 4 points

- 1 point for providing an appropriate title and axes labels
- 1 point for at least 4 data points graphed accurately
- 1 additional point for all 7 data points graphed accurately
- 1 point for providing an appropriate and consistent scale

Exemplary Response:



OR

Other valid graph that includes:

- an appropriate title
- accurately graphed data
- both axes labeled

ASSESSMENT TIMELINE

March 2-4, 1999	Field-testing of the Alaska Benchmark Examination
March 7-9, 2000	First operational administration
August 14-19, 2000	Setting the passing score
October 16, 2000	Test results available to parents
March 6-8, 2001	Spring administration
May 1, 2001	Test results of spring administration available

ACKNOWLEDGMENTS

STATE OF ALASKA

Tony Knowles, Governor
Fran Ulmer, Lieutenant Governor

ALASKA DEPARTMENT OF EDUCATION

Richard S. Cross, Commissioner of Education
Richard Smiley, Ph.D., Administrator, Assessments and Student Information
Nicholas Stayrook, Ph.D., Director, Program Planning and Evaluation
Fairbanks North Star Borough School District
Special thanks to former Commissioner Shirley J. Holloway, PhD.

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Valerie Barr Link, Ph.D., Research Scientist

CONTACTS

Richard Smiley, Ph.D.
Administrator
Assessments & Student Information
Alaska Department of Education
801 West Tenth Street, Suite 200
Juneau, AK 99801-1894
(907)465-8691
richard_smiley@educ.state.ak.us

Tricia Airlie-Martin
Program Manager
CTB/McGraw-Hill
20 Ryan Ranch Road
Monterey, CA 93940
(831)393-7579
tairlie-martin@ctb.com

Linda Gardner
Project Coordinator
CTB/McGraw-Hill
20 Ryan Ranch Road
Monterey, CA 93940
(831)393-7111
lgardner@ctb.com

The following committees composed of parents, teachers, public school administrators, and university professors have been working hard to make sure the Alaska Benchmark Examination meets the high standards and expectations of every Alaskan:

CONTENT REVIEW COMMITTEE

Third Grade Mathematics: Susan Brown–Sitka Schools, Nanci Spear–Department of Education, Herb Wottlin–Kenai Peninsula Borough Schools, Dan Blanton–Matanuska Susitna (Mat-Su) Borough Schools, Patricia Stark–Fairbanks North Star Borough Schools, Willard Waite–Lower Kuskokwim Schools, Veronica Michael–Lower Kuskokwim Schools, Third Grade Reading: Colleen McShea-Lower Yukon Schools, Margie Esquiro-Sitka Schools, Mary Duncan-Chatham Schools, Arlie Swett–Denali Borough Schools, Kathryn Gross–Lower Kuskokwim Schools, M. Therese Ashton-Wrangell City Schools, Bev Williams–Lower Kuskokwim Schools, Third Grade Writing: Kathy Nielson–Juneau Borough Schools, Don Sullivan–Matanuska Susitna Borough Schools, Kathy Thompson–Kenai Peninsula Borough Schools, Michael Smith–Lower Kuskokwim Schools, Judith Harris–Fairbanks North Star Borough Schools, Carrie Dahl–Lower Kuskokwim Schools, Sixth Grade Mathematics: Dan Blanton–Matanuska Susitna Borough Schools, Herb Wottlin–Kenai Peninsula Borough Schools, Arne Erickson–Hoonah City Schools, Mike Morris–Sitka Schools, William Wilkinson–Lower Kuskokwim Schools, Sixth Grade Reading: Michelle Massion–Aleutians East Borough Schools, Kathryn Gross–Lower Kuskokwim Schools, Minnie Lewis–Fairbanks North Star Borough Schools, Michael Smith–Lower Kuskokwim Schools, James Pain–Anchorage Schools Student Teacher, Jeanie Heginbotham–Anchorage Schools, Linda Schandelmeier–Fairbanks North Star Borough Schools, Michele Galla–Wrangell City Schools, Sixth Grade Writing: Michael Johnson–Copper River Schools, Kathleen Andrews–Lower Kuskokwim Schools, Colleen McShea–Lower Yukon Schools, David Lass–Sitka Schools, Sandy McMahan–Copper River Schools, Carol Doyle–Copper River Schools, Bev Williams–Lower Kuskokwim Schools, Russ Lewis–Kenai Peninsula Borough Schools, Eighth Grade Mathematics: Dexter Lemon–Lower Kuskokwim Schools, Gary Callister–PTA, Fort Richardson, Lyle Sparrowgrove–Sitka Schools, Patricia Gilbert–Wrangell City Schools, Colleen McShea–Lower Yukon Schools, Willard Waite–Lower Kuskokwim Schools, Patty Kennedy–Anchorage Schools, Eighth Grade Reading: Bev Williams–Lower Kuskokwim Schools, Polly Wheeler–Tanana Chiefs Conference, Kathy Wilson–Anchorage Schools, Janielle Farvour–Sitka Schools, Kathryn Gross–Lower Kuskokwim Schools, Joan Lessard–Fairbanks North Star Borough Schools, Eighth Grade Writing: Carolyn Jordan–Fairbanks North Star Borough Schools, Dennis Hoyt–Yukon Flats School District, Jody Marcello-Sitka Schools, Rita Johnson–Anchorage Schools, Tanya Boedeker–Kenai Peninsula Borough Schools, Virginia Moses–Lower Kuskokwim Schools, Connie Lutz–Matanuska Susitna Borough Schools

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PUBLICATION NOTICE:

This booklet was published by the Department of Education. It was printed at a cost of $0.23 per copy in Juneau and paid for with federal and state funds. *Publication date: June 1999*

Alaska Department of Education
801 West Tenth Street
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