

Early Literacy and Mathematics Benchmark Assessments



MDE Guidance for Kindergarten

Guidance on Kindergarten Assessments effective for 2016-17 school year

- Kindergarten - No required testing
- Two types of optional assessments
 - Observation-based assessment of skills upon kindergarten entry
 - Student-facing benchmark assessments

MDE Guidance for Kindergarten

Student-facing benchmark assessments:

- Optional
- MDE's Early Literacy and Math Benchmark
- ELA and Math
- Only available for spring administration
- Online only (for now)
- 100% aligned to Michigan Academic Standards

MDE Guidance for Grades 1 and 2

Student-facing Academic Benchmark Assessments should be administered to students in grades 1 and 2:

- The MDE-developed benchmark assessments are the Early Literacy and Mathematics K-2 Benchmark Assessments.

OR

- A different benchmark assessment that meets the definition and criteria developed by the MDE.

MDE will not be giving a list of approved benchmark assessments. It is up to the district to determine whether the chosen benchmark assessment meets the definition and criteria.

Definition of Benchmark Assessments

- Used to evaluate student knowledge and skills relative to a specific set of academic goals
- Designed to inform decisions at the classroom level
- Are reported beyond the classroom
- Used to predict a student's ability to succeed on large-scale summative assessment
- Used to evaluate a particular educational program
- Used to diagnose gaps in student learning

Criteria for Benchmark Assessments

- Administered at regular intervals
- Aligned to Michigan Academic Standards in ELA and mathematics
- Complement Michigan's Summative Assessment System
- Rates of improvement are specified
- Provide information on pupil achievement

Michigan Educator Involvement in MDE Early Literacy and Mathematics Benchmark Assessments

Michigan educators have been involved in the following:

- ❑ Context Writing and Review (ELA)
- ❑ Item Writing
- ❑ Initial Item Review
 - Bias-Sensitivity Reviewers (BSC)
 - Content Reviewers (CAC)

After Field Testing, Michigan educator take part in the following:

- ❑ Data Review
 - Bias-Sensitivity Reviewers (BSC)
 - Content Reviewers (CAC)

MDE Early Literacy and Mathematics Benchmark Assessments

For Grades 1 and 2

- ELA and Math
- Fall and spring administration
- Online only (for now)
- May serve as one measure of student growth
- 100% aligned to Michigan Academic Standards
- Field Tests: Spring 2014, Fall 2014, Spring 2016

MDE Early Literacy and Mathematics Assessment

- Color graphics
- Larger font size
- No scrolling
- Look and feel of computer game
- Audio supports
 - ✦ Human voice audio: Kindergarten and 1st grade
 - Male and Female
 - ✦ Text-to-Speech: Grade 2 (items only)
- Vertically aligned with grade 3 M-STEP
 - ✦ Item type
 - ✦ Rigor
 - ✦ Accessibility (text-to-speech)

MDE Early Literacy and Mathematics Assessment

Mathematics

- Counting and Cardinality (K only)
- Operations & Algebraic Thinking
- Number & Operations in Base Ten
- Measurement & Data
- Geometry

MDE Early Literacy and Mathematics Assessment

English Language Arts

○ Reading

- ✦ Informational
- ✦ Narrative
- ✦ Foundations

○ Writing

- ✦ Narrative
- ✦ Informational
- ✦ Opinion

○ Language

- ✦ Conventions
- ✦ Vocabulary

MDE Early Literacy and Mathematics Assessment

- Positive feedback from teachers
- Students report, “It’s fun!”
- Data Review indicates student success
- Continuous development
 - ✦ New test items
 - ✦ New item types
 - ✦ New passages (ELA)
- Available on multiple platforms
 - ✦ Chromebook
 - ✦ iPad
 - ✦ Desktop
 - ✦ Laptop

Technology-Enhanced Item Types

- Matching
- Graphic drag and drop
- Hotspot
- Hot Text
- Order
- Choice
- Matching: Table

Technology-Enhanced Item Types

In Chrome Browser, go to [eDIRECT](https://wbte.dracedirect.com/MI/portals/mi)
(<https://wbte.dracedirect.com/MI/portals/mi>)

Select Online Tools Training under “Early Literacy and Numeracy K,
1, 2”

Match

Connect items on the left with a “match” on the right.

Language Standards

L.K.VA.5a

With guidance and support from adults, explore word relationships and nuances in word meanings. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

Match each animal to its home.

The image shows a digital matching interface. On the left, there are two text boxes: "the sea" and "a barn". On the right, there are four animal images in separate boxes: a clownfish, a pig, a cow, and a dolphin. Blue lines connect "the sea" to the clownfish and the dolphin, and "a barn" to the pig and the cow. The interface includes a toolbar at the top with an eraser, undo, and redo button, and a question mark icon in the top right corner.

Graphic Drag and Drop

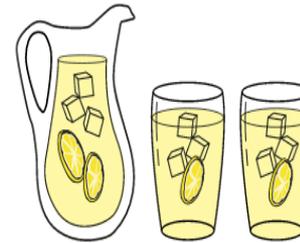
Move the sentence onto a blank line to complete the task.

Writing Standards

W.K.TP.1

Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).

Cam is writing about Dad's lemonade. Move a sentence onto the paper that tells why Cam likes Dad's lemonade.



 ?

Dad makes the best lemonade.
He puts real lemons in it.

I drink it from my favorite cup.

Lemonade is good on a hot day.

Hotspot

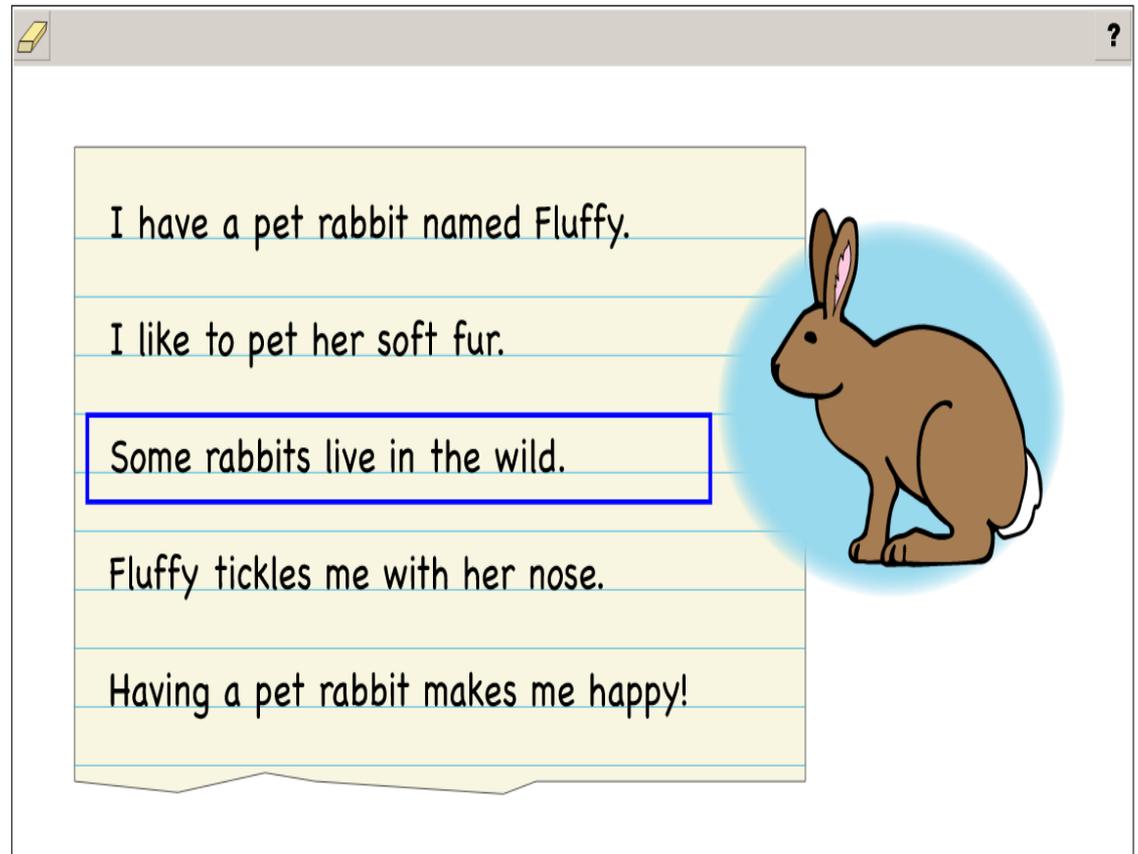
Choose a correct sentence by “clicking” or choosing.

Writing Standards

W.1.PD.5

With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.

Jill is writing about her pet rabbit. Choose 1 sentence that does **not** fit in her story.



I have a pet rabbit named Fluffy.

I like to pet her soft fur.

Some rabbits live in the wild.

Fluffy tickles me with her nose.

Having a pet rabbit makes me happy!

Hot Text

Choose a correct sentence by “clicking” or choosing.

Language Standard

L.1.SE.1c

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).

Choose the sentence that is correct.



He spin the top.

They spins the top.

She spins the top.

Order

Move sentences into the correct order.

Reading Standards

RL.2.IK.7

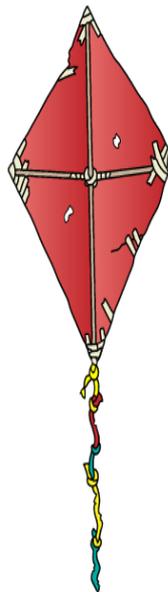
Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

This story has 3 pages. First, read the story. Next, Answer the questions.

My Old Kite

My old paper kite has
Four sides, a diamond shape.
I put it all together
Using glue and lots of tape.

The tail tied at the bottom
Is made with strips of cloth.
They are worn and kind of tattered,
Been eaten by a moth.



Turn page

Move the events into the order they happened in the poem.



?

The kite flies higher than other kites.

The narrator fixes the tail of the kite.

The narrator takes the kite to the park.

The kite crashes to the ground.

Choice

Choose the words to answer the question.

Reading Standards

RI.2.KI.1

Ask and answer such questions as *who, what, where, when, why,* and *how* to demonstrate understanding of key details in a text.

Safety Lights

Cars have lights in front and the back. These lights help drivers see the road. These lights also help people see the cars.

Streetlights are lights that are on tall poles. They help drivers and walkers see the streets when it is dark.



Choose the words that tell what car lights help drivers do.

- see the road
- read in the dark
- watch a stage

Hotspot

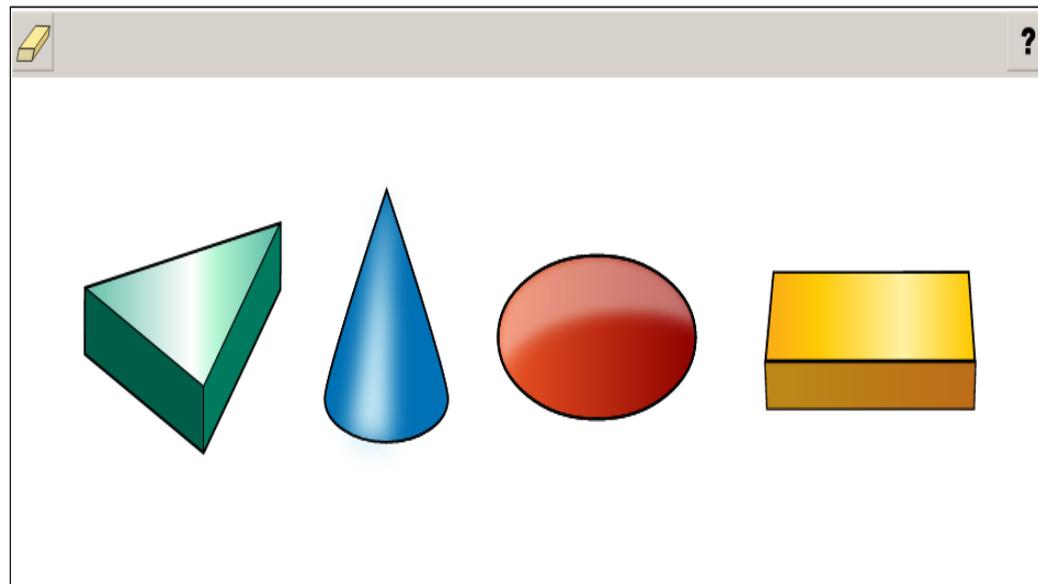
Choose a correct response/picture by “clicking” or choosing.

Math Standards

M.K.G.A.2

Correctly name shapes regardless of their orientations or overall size.

Connor is looking for a cone. Help Connor by choosing the cone.



Graphic Drag and Drop

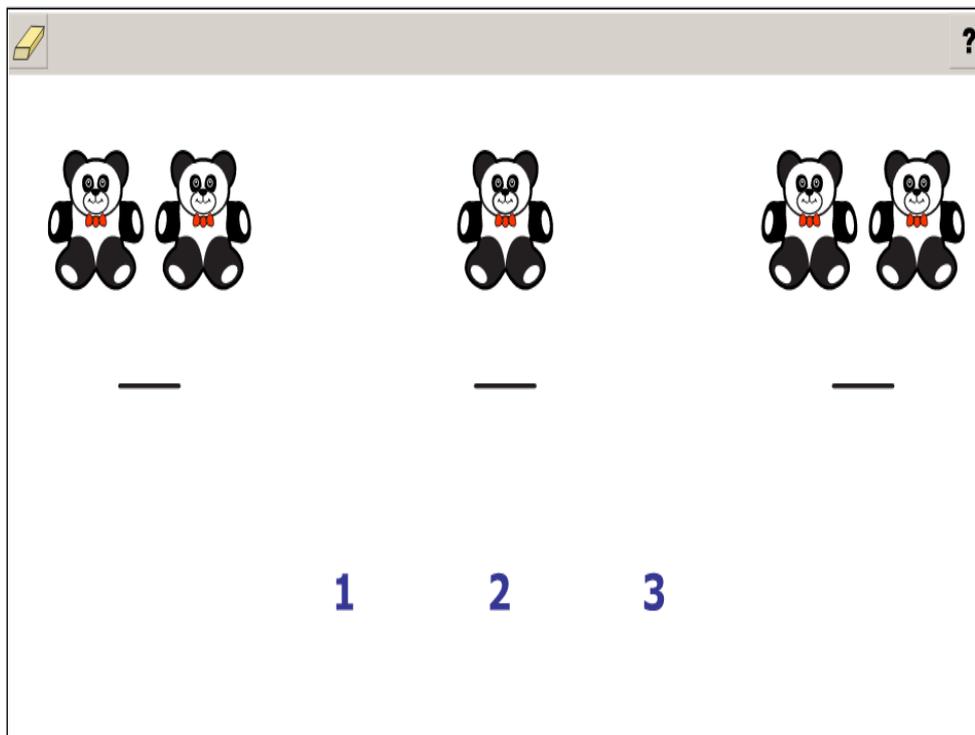
Move numbers into a field to show how many bears there are.

Math Standards

M.K.CC.A.3

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

David is counting his groups of bears. Move numbers to the lines to show how many are in each group.



?

— — —

1 2 3

Graphic Drag & Drop

Move base ten blocks to add.

Math Standards

M.1.NBT.C.4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Esme has 20 blocks. Ken has 10 blocks. Move blocks to the box to show how many they have in all.

The interface shows a math problem: $20 + 10 = \square$. On the left, there are two vertical rods of 10 orange blocks each, labeled '20'. In the middle, there is a plus sign followed by a single vertical rod of 10 orange blocks, labeled '10'. To the right of the plus sign is an equals sign followed by a large empty rectangular box. Further right is a single vertical rod of 10 orange blocks. At the top right of the interface is a question mark. A small yellow eraser icon is in the top left corner.

Graphic Drag & Drop/Hotspot

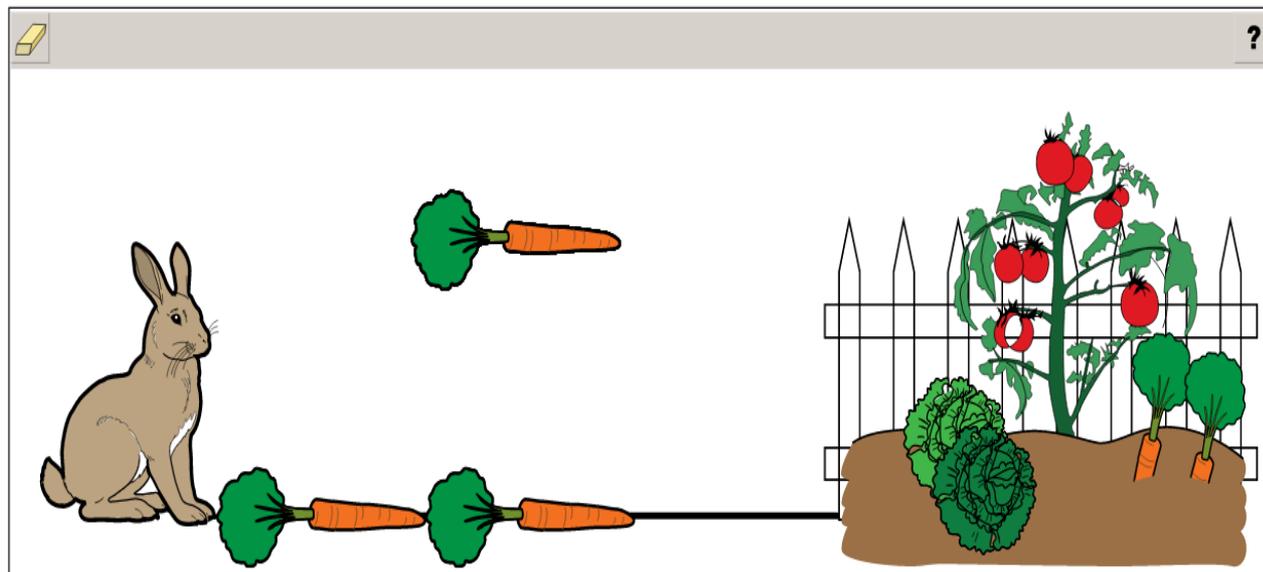
Move the carrot to show how many carrot lengths the path is. Choose the number of carrots.

Math Standards

M.1.MD.A.2

Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Measure the path between the rabbit and the garden using the carrot.



Choose the number of carrots needed to measure the length of the path.

3 4 5

Graphic Drag & Drop

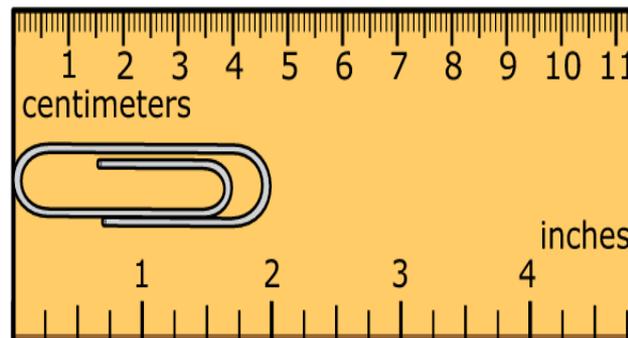
Move the number into the blank.

Math Standards

M.2.MD.A.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Carson measures his paper clip in centimeters and in inches. Move numbers to the lines to show the estimated length of the paper clip in centimeters and in inches.



 ?

The paper clip is about ____ centimeters long.

The paper clip is about ____ inches long.

2 3 4 5

Matching: Table

“Match” items on a grid to demonstrate relationship. This item type (format) is grade 2 on

Math Standards

M.2.MD.C.7

Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

Match the clocks that show the same time.

			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Choice

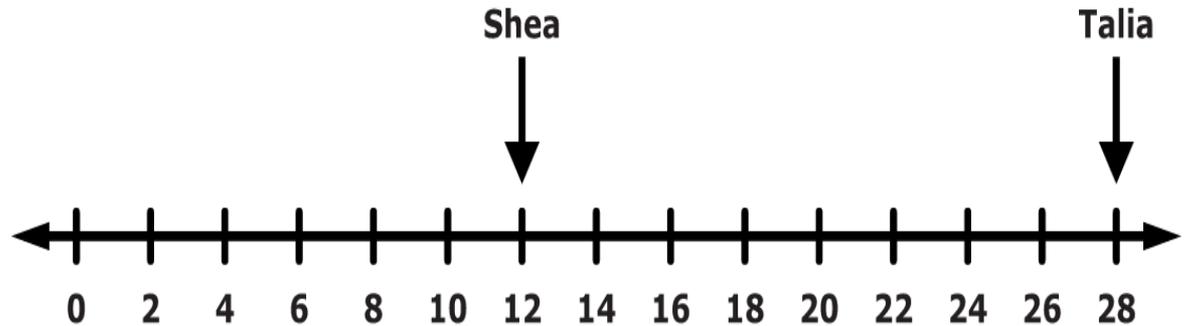
Choose the correct answer to the question.

Math Standards

M.2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Talia walks 28 blocks. Shea walks 12 blocks.



How much **farther** does Talia walk than Shea?

- 8 blocks
- 16 blocks
- 28 blocks

Be Prepared!



ELA

ELA Kindergarten

ELA Grade 1

ELA Grade 2

ELA Grade 2 Designated Support TTS

Math

SAMPLE ITEM SETS

- ALL GRADE LEVELS, K-2
 - AUDIO SUPPORTS
- ALIGNED TO MI STANDARDS
- ACCESS USING INSIGHT

[OPEN IN CHROME](#)



MDE Early Literacy and Mathematics Benchmark Assessments

- Fall Admin dates: October 3 - October 21, 2016
- Timing
 - 30-40 minutes per part
 - 2 sessions (2 test tickets: Part 1, Part 2)
 - Breaks can be provided during test sessions using the software's pause feature.
- Reports
 - Student Roster Reports will be available within 48 hours.
 - Individual Student Reports will be available later in the fall.
 - Information obtained will be aggregated.

MDE Early Literacy and Mathematics Assessment Sign in Screen



[Online Tools Training](#)
[Test Sign In](#)



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ELA Individual Student Report

Domains	Fall 2016		Spring 2017		Fall to Spring Change
	Points Earned/ Points Possible	# omitted	Points Earned/ Points Possible	# omitted	
Reading — Literary Text	4/6	—	6/6	—	▲
Reading — Informational Text	6/6	—	4/6	—	▼
Reading — Foundational Skills	4/9	2	6/9	—	▲
Writing	4/6	—	4/6	—	○
Language	9/9	—	9/9	—	●
Total	24/36	2	26/36	—	▲

 = Points Earned Increase
  = Points Earned Decrease
  = No Change in Points Earned
  = Earned All Points Possible on Fall & Spring Tests

ELA Individual Student Report

Assessment Categories	Brief Description of Academic Standards	Fall 2016	Spring 2017
		Score	Score
Reading — Literary Text		4/6	6/6
Key Ideas and Details	Understand key details; retell stories (inc. central message); describe characters/setting/events.	3/3	3/3
Craft and Structure	Identify sensory words/phrases and narrator of a literary text; identify literary text types.	0/1	1/1
Integration of Knowledge and Ideas	Use graphics to describe story elements; compare/contrast character experiences in literary text.	1/2	2/2

ELA Individual Student Report

Reading — Informational Text		6/6	4/6
Key Ideas and Details	Understand key details; retell text (inc. main topic); describe connections in informational text.	3/3	1/3
Craft and Structure	Determine word/phrase meaning; know/use text features; distinguish between text/graphic information.	1/1	1/1
Integration of Knowledge and Ideas	Use graphics to describe ideas; identify text support; identify similarities/diff. between texts.	2/2	2/2
Reading — Foundational Skills		4/9	6/9
Print Concepts	Demonstrate understanding of the organization/features of print. Recognize features of a sentence.	2/5	3/5
Phonological Awareness	Demonstrate understanding of spoken words, syllables, and sounds	0/1	0/1
Phonics and Word Recognition	Know and apply grade-level phonics and word analysis skills in decoding words.	2/3	3/3
Writing		4/6	4/6
Text Types and Purposes	Know and use elements of writing opinion, informative, and narrative texts.	1/2	1/2
Production and Distribution of Writing	Use revision process to improve writing (focus on topic and add details).	0/2	0/2
Research to Build and Present Knowledge	Use information from provided sources to answer a question.	0/2	0/2
Language		6/9	6/9
Conventions of Standard English	Demonstrate command of the conventions of standard English grammar and usage when writing.	6/6	6/6
Vocabulary Acquisition and Use	Determine the meaning of unknown and multiple-meaning words/phrases, using an array of strategies.	3/3	3/3

Mathematics Individual Student Report

Domains	Fall 2016		Spring 2017		Fall to Spring Change
	Points Earned/ Points Possible	# omitted	Points Earned/ Points Possible	# omitted	
Operations and Algebraic Thinking	4/12	—	11/12	—	▲
Number and Operations in Base Ten	5/12	—	11/12	—	▲
Measurement and Data	3/8	5	2/8	—	▼
Geometry	2/4	—	2/4	1	●
Total	14/36	5	26/36	1	▲

 = Points Earned Increase
  = Points Earned Decrease
  = No Change in Points Earned
  = Earned All Points Possible on Fall & Spring Tests

Mathematics Individual Student Report

Assessment Categories	Brief Description of Academic Standards	Fall 2016	Spring 2017
		Score	Score
Operations and Algebraic Thinking		4/12	11/12
Represent and solve problems involving addition and subtraction	Add/subtract within 20 to solve word problems; solve for addition of 3 whole numbers	1/4	4/4
Understand and apply properties of operations and the relationship between addition and subtraction	Apply properties of operations to add/subtract; subtraction as an unknown-addend problem	0/2	1/2
Add and subtract within 20	Relate counting to addition/subtraction; add/subtract within 20 demonstrating fluency	1/2	2/2
Work with addition and subtraction equations	Understand the meaning of =; determine the unknown whole number in addition/subtraction equation	2/4	4/4

Mathematics Individual Student Report

Number and Operations in Base Ten		5/12	11/12
Extend the counting sequence	Count to 120, starting at any number less than 120	0/1	0/1
Understand place value	Understand that 2 digits represents 10s/1s; compare 2 2-digit numbers using $>$, $=$, and $<$	2/5	5/5
Use place value understanding and properties of operations to add and subtract	Add within 100; mentally find 10 more or less than a 2-digit number; subtract multiples of 10	3/6	6/6
Measurement and Data		3/8	2/8
Measure lengths indirectly and by iterating length units	Order 3 objects by length; express length of an object as a whole number of length units	2/4	2/4
Tell and write time	Tell and write time in hours and half-hours using analog/digital clock	0/1	0/1
Represent and interpret data	Organize, represent and interpret data up to 3 categories	1/3	0/3
Geometry		2/4	2/4
Reason with shapes and their attributes	Distinguish between attributes; compose 2-D/3-D shapes; partition circles/rectangles into 2 or 4 equal shares	2/4	2/4

Student Roster Report for ELA

		Reading— Literary Text				Reading— Informational Text				Reading— Foundational Skills				Writing			Language				
Students ▲		Key Ideas and Details	Craft and Structure	Integration of Knowledge and Ideas	subtotal ▲	Key Ideas and Details	Craft and Structure	Integration of Knowledge and Ideas	subtotal ▲	Print Concepts	Phonological Awareness	Phonics and Word Recognition	subtotal ▲	Text Types and Purposes	Production and Distribution of Writing	Research to Build and Present Knowledge	subtotal ▲	Conventions of Standard English	Vocabulary Acquisition and Use	subtotal ▲	TOTAL ▲
Max Points		3	1	2	6	2	1	3	6	3	3	3	9	2	2	2	6	5	4	9	36
Last Name, First Name	I	3	1	1	5	3	0	0	3	1	1	2	4	0	0	0	0	2	3	5	17
Last Name, First Name	R	2	1	1	4	1	1	1	3	1	1	0	2	1	0	1	2	3	3	6	17
Last Name, First Name		5	1	2	8	4	1	3	8	1	1	2	4	2	2	2	6	3	3	6	32
Last Name, First Name		0	0	0	0	0	1	0	1	1	1	0	2	0	0	0	0	2	1	3	6
Last Name, First Name		4	1	2	7	3	1	3	7	1	1	1	0	0	1	1	2	1	1	2	18

Student Roster Report for Mathematics

		Operations and Algebraic Thinking					Number and Operations in Base Ten				Measurement and Data			Geometry			
Students ▲		Represent and solve problems involving addition and subtraction.	Understand and apply properties of operations and the relationship between addition and subtraction.	Add and subtract within 20.	Work with addition and subtraction equations.	subtotal ▲	Extend the counting sequence.	Understand place value.	Use place value understanding and properties of operations to add and subtract.	subtotal ▲	Measure lengths indirectly and by iterating length units.	Tell and write time.	Represent and interpret data.	subtotal ▲	Reason with shapes and their attributes.	subtotal ▲	TOTAL ▲
Max Points		4	2	2	4	12	1	5	6	12	4	1	3	8	4	4	36
Last Name, First Name	Ⓘ	1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5
Last Name, First Name	Ⓘ	4	2	2	4	12	1	5	6	12	4	1	3	8	4	4	36
Last Name, First Name	Ⓘ	1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5
Last Name, First Name	Ⓘ	3	2	2	4	11	1	5	6	12	4	1	3	8	4	4	35
Last Name, First Name	Ⓘ	4	2	2	4	12	1	5	6	12	4	1	3	8	4	4	36
Last Name, First Name		1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5
Last Name, First Name		4	2	2	4	12	1	5	6	12	4	1	3	8	4	4	36
Last Name, First Name		1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5
Last Name, First Name		1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5
Last Name, First Name		2	1	1	3	7	1	3	3	7	2	1	2	5	2	2	21
Last Name, First Name		1	0	0	1	2	0	1	1	2	0	0	1	1	0	0	5

Resources

Watch the **Early Literacy and Mathematics Assessments Video**

- Find it here: [Early Literacy and Mathematics Assessments Video](https://www.youtube.com/watch?v=QVOX3M5TYgY)

(<https://www.youtube.com/watch?v=QVOX3M5TYgY>)

Watch the **Tutorial** video with students

- Find it here: [Tutorial Video](http://assets.drccdirect.com/States/MI/Tutorials/Student/20160419/HTML5_EOCEP_MI/index.html)

(http://assets.drccdirect.com/States/MI/Tutorials/Student/20160419/HTML5_EOCEP_MI/index.html)

Resources

Student completes the ELA & Math **Online Tool Training (OTT)**

Find them here: [Online Training Tools](#)

(<https://wbte.drcedirect.com/MI/portals/mi/>)

Read the [Early Literacy and Mathematics Test Administration Manual](#)

(<http://www.michigan.gov/k-2benchmark>)

Read the [Early Literacy and Mathematics Test Administration Directions](#)

(<http://www.michigan.gov/k-2benchmark>)

(available by end of September)

Resources

Read the **Early Literacy and Mathematics Benchmark Assessments (K-2) Supports and Accommodations Table and Resources**

Find it here: [Supports and Accommodations Table](#)

(http://www.michigan.gov/documents/mde/K2_Early_Literacy__Math_Accom_Table_532245_7.pdf)

Visit the [Early Literacy and Mathematics Benchmark Assessments \(K-2\) web page](#) for more information.

(<http://www.michigan.gov/k-2benchmark>)

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Questions?





Thank you!