MARYLAND STATE DEPARTMENT OF EDUCATION
Preparing World-Class Students

Lillian M. Lowery, Ed.D.
State Superintendent of Schools

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TO: Members of the State Board of Education

FROM: Lillian M. Lowery, Ed.D.

DATE: September 25, 2012

SUBJECT: Standards for the Mastery and Application of the Braille Code for English/Language Arts, and Mathematics

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PURPOSE:

The purpose of this memorandum is to inform the State Board of Education of the development of the *Maryland Common Core State Curriculum Frameworks for Braille: Mathematics and English/Language Arts*, and to request State Board authorization to release these Frameworks and accompanying Braille standards to guide the instruction of students with visual impairments in Maryland so that they graduate college and career ready.

BACKGROUND:

As a result of action by the General Assembly in 2010, §8–408 of the Education Article (Special Programs for Exceptional Children, Children with Disabilities) was amended. The amendment called for establishment of standards for mastery of Braille by directing that "On or before September 1, 2012, the State Board shall establish standards for the mastery of Braille for use in English, language arts, and mathematics instruction of blind and visually impaired students in pre-kindergarten through grade 12."

EXECUTIVE SUMMARY:

In response to this amendment, the Division of Special Education/Early Intervention Services established a Task Force in September 2010 comprised of stakeholders with representatives from the Maryland State Department of Education, the Maryland School for the Blind, local school systems, parents, and advocacy groups to develop the standards (Attachment 1). The Task Force met six times during the 2010-11 school year and ten times during the 2011-12 school year to draft the *Maryland Common Core State Curriculum Frameworks for Braille: Mathematics* and the *Maryland Common Core State Curriculum Frameworks for Braille: English/Language Arts*, respectively. The standards for students who read braille are based on the same standards for all students and promote high, grade-level expectations. The standards include the identified braille skills students need to access core curriculum content and materials in order to be college or career ready.

A sample of the standards is shown in Attachment 2. This sample of the frameworks includes a key to how the frameworks were modified for braille readers, and a sample of the charts included in the document that identify the braille code to be learned at each grade level.

ACTION:

The State Board of Education is requested to authorize release of this Framework to guide the instruction of visually impaired students in Maryland schools.

ATTACHMENT I

TASK FORCE MEMBERS

Susan Adams, Teacher of the Blind and Visually Impaired and Orientation and Mobility Specialist, Montgomery County Public Schools

Dr. Michael J. Bina, President, The Maryland School for the Blind

Eldre Boggs, Resource Teacher for Blind and Visually Impaired, Anne Arundel County Public Schools

Dr. Lea Ann Christenson, English/Language Arts Specialist, Maryland State Department of Education, Division of Instruction

Melinda Demaris, Teacher of the Blind and Visually Impaired, Orientation and Mobility Specialist, Wicomico County Public Schools

Karen Ehrhardt Lloyd, Program Head, Vision Services, Howard County Public Schools

Heather Johnson, Teacher, The Maryland School for the Blind

Dr. Allison Layland, Associate Director, Mid-South Regional Resource Center, University of Kentucky

Jacqueline Otwell, Teacher of the Blind and Visually Impaired, Carroll County Public Schools

Susan Polansky, Maryland Parents of Blind Children

Melissa Riccobono, President, Maryland Chapter of the National Federation of the Blind

Jill Richmond, Parent, Maryland Parents of Blind Children, National Federation of the Blind

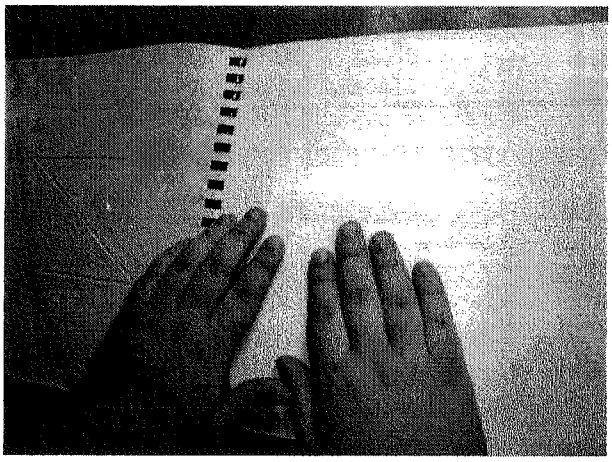
Dr. Karen Ross, Mathematics Specialist, Maryland State Department of Education, Division of Instruction

Carol Seckington, Assistant Principal, The Maryland School for the Blind

Sally Shreck, Certified Braille Transcriber, Maryland Instructional Resource Center for Students with Visual Impairments, The Maryland School for the Blind

Linda Starner, Teacher of the Blind and Visually Impaired, Orientation and Mobility Specialist, Baltimore County Public Schools

Lisa Wright, Statewide Vision/Low Incidence Specialist, Maryland State Department of Education, Division of Special Education/Early Intervention Services and The Maryland School for the Blind



MARYLAND COMMON CORE CURRICULUM FRAMEWORKS FOR BRAILLE

2012

MARYLAND STATE DEPARTMENT OF EDUCATION
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MSDE
Division of Special Education /Early Intervention Services

SAMPLE

Key:

Black print – Common Core State Standards

Red print – The Essential Skills and Knowledge identified by Maryland Educators. These statements are intended to help teachers develop common understandings and valuable insights into what a student must know and be able to do to demonstrate proficiency with the standard.

Purple print – The Common Core State Standard was judged as an excellent match with the existing State Curriculum during the gap analysis, such as SC, 6 (read "State Curriculum, Grade 6)

Underlining – word/phrases/sentences that pertain to braille reading, writing, and tactile graphics.

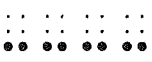
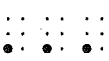
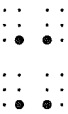
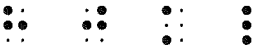
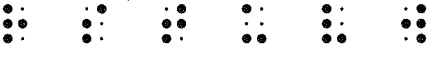
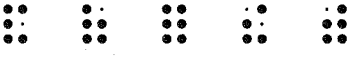
~~Strikethroughs~~ – word/phrases that are visual in nature and not applicable to a student who reads braille.

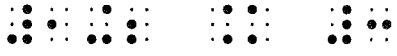
LANGUAGE

Cluster: **Conventions of Standard English**		
L1 CCR Anchor Standard Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.		
Kindergartners:	**Grade 1 students:**	**Grade 2 students:**
L1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking	**L1** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	**L1** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
L1.a ~~Print~~ Write many upper and lowercase letters in braille, using the capital sign to indicate the uppercase letters. **Essential Skills and Knowledge** • With prompting and support, o explicitly and sequentially strengthen fine motor skills, including finger isolation and strength which support letter formation in braille using a variety of activities o via direct instruction of letter formation correctly form many upper and lowercase braille letters, using the capital sign to indicate uppercase letters on various sizes and styles of braille paper, and other tactile mediums in a developmentally appropriate manner. o correctly form upper and lowercase letters in first and last name in braille using the capital sign as appropriate	**L1.a** ~~Print~~ Write all upper and lowercase letters in braille, using the capital sign to indicate the uppercase letters. (SC, 1) **Essential Skills and Knowledge** • Develop and strengthen fine motor skills including finger isolation and strength using a variety of activities. • Correctly form all upper and lowercase letters in braille using capital sign as appropriate. • Practice forming upper and lowercase braille letters, using the capital sign to indicate upper case letters on various sizes and styles of braille paper, and other tactile mediums.	**L1.a** Use collective nouns (e.g., *group*). **Essential Skills and Knowledge** • Identify and define collective nouns presented in a variety of braille texts. • Distinguish between common, proper, and possessive, and collective nouns. • Demonstrate the use of collective nouns in oral and written language.

CHARTS OF BRAILLE SYMBOLS
KINDERGARTEN

Literary

	Literary Sign	Braille Symbol
Double dash	----	
Ellipsis	...	
Letter sign	N/A	
Transcriber's note Opening Closing	N/A	
Braille contractions for alphabet words	but can do every from go	
	have just knowledge like	
	more not people quite	
	rather so that us very will	
	it you as	
Braille Contractions	and of for the with	

Mathematics

	Mathematical Sign	Nemeth Symbol
Hyphen	-	
Read and write numbers 0-20	0-20	
Mathematical comma	,	
Ellipse	2, 3, 4, ...	
Plus	+	
Minus	-	
Equal to	=	
Write equations in horizontal format	1+2 = 3