# The Assessment Anchors

a tool to prepare students for the PSSA

#### **Presented by:**

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# What are Assessment Anchors?

Assessment Anchors are designed to anchor both the...

 State assessment system (PSSA) and
 The local curriculum, instruction and

assessment practices

# What are Assessment Anchors?

A tool to:

- Design the PSSA test for 2005 and beyond
- Connect PSSA to classroom practice so teachers can better prepare students
- Clarify the PA Standards in Reading and Mathematics

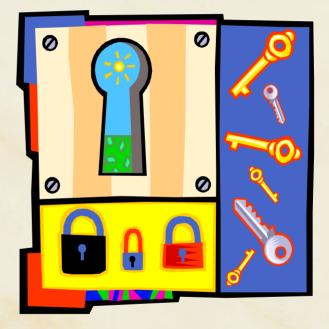
#### Why Do We Need Assessment Anchors?

Clarity
Focus
Alignment
Grade appropriate skills
Curricular flow
Rigor
Manageability



# The KEYS to Assessment Anchors

 Reporting Category
 Assessment Anchor
 Reference to PA Standard
 Eligible Content
 Sample Item



### A Graphic Organizer

**PA Academic Standards** 

**Reporting Categories** 

**Assessment Anchors** 

Descriptors

**Eligible Content** 



#### Standard: 1.3. Reading, Analyzing and Interpreting Literature

#### 1.3.5. GRADE 5

- A. Read and understand works of literature.
- B. Compare the use of literary elements within and among texts including characters, setting, plot, theme and point of view

#### **R5.B** Interpretation and Analysis of Literature

#### **ASSESSMENT ANCHOR**

R5.B.1 Describe and interpret literary elements within and among texts.

R5.B.1.1 Compare characters, settings and plots *Reference:* 1.3.5.B R5.B.1.1.1

Items may ask the students to compare or explain relationships among the following: Characters: main. supporting, actions, motives and emotions/feelings: Settings: where or when the story takes place, a detail that describes the setting, or information form the text that suggests a setting; Plots: conflict, rising action, climax and resolution. **Note:** Items may ask students to utilize story maps or Venn diagrams to show sequence, cause & effect, and/or comparison/contrast.

#### Pennsylvania Department of Education

### **RWSL Academic Standards**

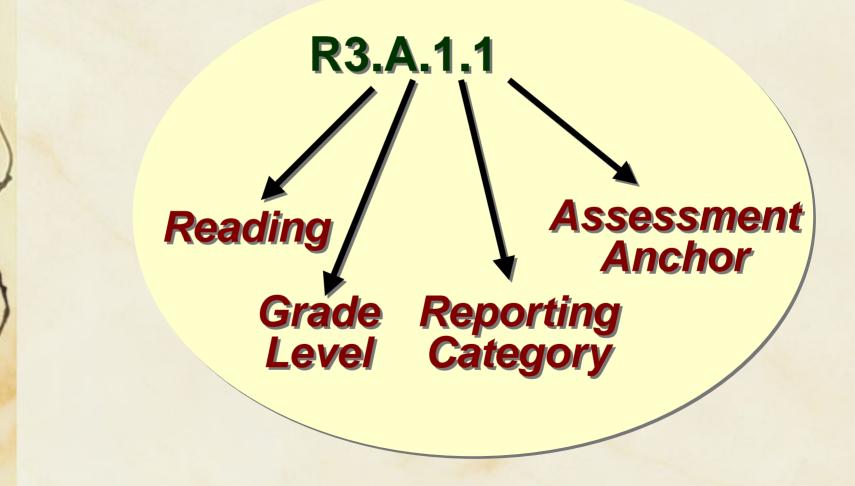
- **1.1 Learning to read independently**
- 1.2 Reading critically in all content areas
- 1.3 Reading, analyzing, and interpreting literature
- 1.4 Types of writing
- 1.5 Quality of writing
- 1.6 Speaking and listening
- 1.7 Characteristics and function of the English language
- 1.8 Research

# **Reporting Categories - Reading**

Reporting Category*	Standard(s)
A. Comprehension and Reading Skills	<ul><li>1.1 Learning to read independently</li><li>1.2 Reading critically in all content areas</li></ul>
B. Interpretation and Analysis of Literature	1.3 Reading, analyzing, and interpreting literature

\*PSSA scores will be reported at this level only. Scores will not be further broken down.

# How to Read Assessment Anchor Coding





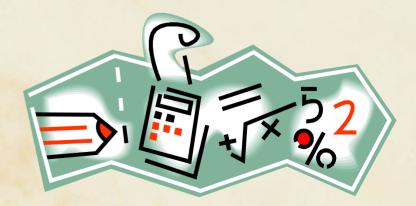
g o identify as and
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becific ask about it is most inderstandin Items may mation
o identify a ext(s).

- 2. According to the passage, compressed plastic is now used for making pallets because ...
- 3. According to the passage, which type of storm has the strongest winds?
- 4. Why did (main character) want to learn to ride a bike?
- 5. Which word best describes the habitat of the polar bears?

Pennsylvania Department of Education Assessment Anchors: 4/12/04 Draft: DO NOT DISSEMINATE Reading Grade 5 - Page 10

#### Math Academic Standards

- 2.1 Numbers, number systems, and number relationships
- 2.2 Computation and estimation
- 2.3 Measurement and estimation
- **2.4 Mathematical reasoning and connections**
- 2.5 Mathematical problem solving and communication
- 2.6 Statistics and data analysis
- 2.7 Probability and predictions
- 2.8 Algebra and functions
- 2.9 Geometry
- 2.10 Trigonometry
- 2.11 Concepts of calculus

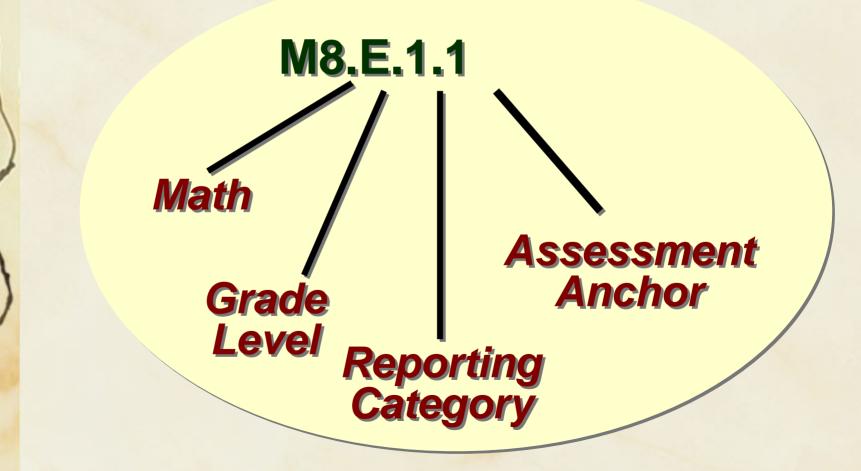


# **Reporting Categories - Math**

Reporting Category*	Standard(s)
A. Numbers and Operations	2.1 Numbers, number systems, and number relationships
	2.2 Computation and estimation
B. Measurement	2.3 Measurement and estimation
C. Geometry	2.9 Geometry
States and a second	2.10 Trigonometry
D. Algebraic Concepts	2.8 Algebra and functions
E. Data Analysis and Probability	2.6 Statistics and data analysis
	2.7 Probability and predictions

\* Mathematical reasoning and connections, Mathematical problem solving and communication, and Calculus are not specifically identified, but could be embedded across all reporting categories.

# How to Read Assessment Anchor Coding





Standard: 2.1. Numbers,

**Number Systems and** 



#### **M8.A Numbers and Operations**

#### **Assessment Anchor**

M8.A.1 Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers, and number systems.

#### Number Relationships 2.1.8. GRADE 8

- A. Represent and use numbers in equivalent forms (e.g., integers, fractions, decimals, percents, exponents, scientific notation, square roots).
- B. Simplify numerical expressions involving exponents, scientific notation and using order of operations.

#### M8.A.1.1 Represent numbers in equivalent forms. *Reference:* 2.1.8.A, 2.1.8.B

#### **ELIGIBLE CONTENT**

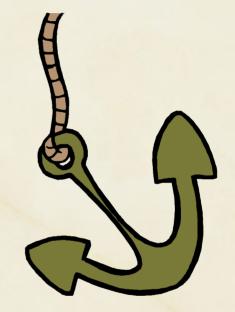
- M8.A.1.1.1 Convert fractions, decimals and/or percents to equivalent forms (i.e., 1/3 = 33 1/3% = .333).
  M8.A.1.1.2 Use scientific notation or exponential forms
  - to express numbers. **M8.A.1.1.3** Find the square or cube of a whole number and/or the square root of a perfect square (without a calculator).

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Algebraic Concepts	Reporting Category N
ASSESSMENT ANCHOR	
M8.D.2 Represent and/or analyze mathematica symbols, words, tables and/or graphs.	
	ELIGIBLE CONTENT
M8.D.2.2 Create and/or interpret expressions, equations or inequalities that model problem situations. <i>Reference: 2.8.8.C</i>	<ul> <li>M8.D.2.2.1 Match a written situation to its numeric and/or algebraic express equation or inequality (up to two variables in equations or expressi – one variable with inequalities).</li> <li>M8.D.2.2.2 Write and solve an equation for a</li> </ul>
	given problem situation (one varia only).
EXAMI	PLEITEMS
<ul> <li>Mark spent \$6.00 for two cheeseburgers a costs twice as much as an order of fries, y</li> </ul>	and a large order of french fries. If a cheeseburg
A. \$2.40 B. \$2.00 C. \$1.50	
* D. \$1.20	(Pennsylvania Department of Educ
	de weighs 4.2 kilograms. The box weighs 0.6 kg eight of one video cassette, which of the following
A. 8w = 4.2	
★ B. 8w + 0.6 = 4.2 C. 8w - 0.6 = 4.2	
D. 8(w + 0.6) = 4.2	(New Jersey Department of Educ
	4/12/04 Math Grade 8 - Pa

#### Activity

# ANCHORS IN PRACTICE



"Students can do no better than the assignments they are given."



### Steps to Alignment

- 1. Read the directions and complete the assignment.
- 2. Analyze the demands of the assignment. What does it require the student to know and be able to do?
- **3.** Link the assignment to the appropriate Assessment Anchor.

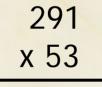
#### Math Anchors in Practice Activity Computation



105

x 32

\$ 6.27



### Math Activity

You have decided that you want to re-do the floor in your den within the next 2 weeks. The room measures 8 feet by 12 feet. The room needs to be covered with new tiles. The tiles are right triangles. The legs of the right triangles are 12" long. Each tile costs \$.79.

How much does it cost to buy tiles to cover the floor?

### **Reading Activity**

#### 8<sup>th</sup> grade reading activity "Hurricanes"



Practice Activities provided on the PDE website Assessment Anchors Item Bank

www.pde.state.pa.us

### ACTIVITY

#### **ADOPT-AN-ANCHOR**



#### **ADOPT-AN-ANCHOR**

Deepens the instructional experiences in Reading and Math across content areas.

Helps staff share responsibility for teaching essential skills in Reading and Math.

### **Reading Assessment Anchor**

**R5.A Comprehension and Reading Skills** 

R5.A.2 Demonstrate the ability to understand and interpret non-fiction texts including informational e.g. textbooks and print media (magazines, brochures, etc.); autobiography; biography...

R5.A.2.5 Retell or summarize the major ideas or procedures of the text

#### **Social Studies**

#### 🔾 Task:

Summarize an article on the effects of Western Expansion on the Native American way of life.

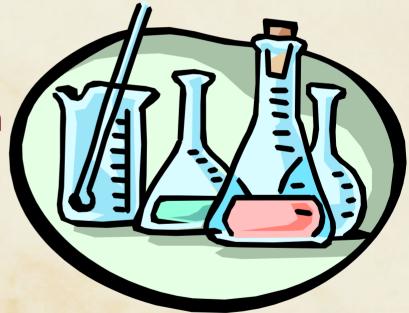
### **Environment and Ecology**

#### 🔾 Task:

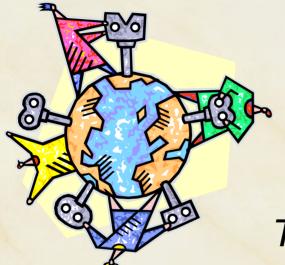
Summarize the causes of environmental pollution in urban areas. You must read at least three articles and synthesize your findings in one summary.

#### **Health Education**

Task: Summarize the main points from an article on the impact of HIV on society.



#### World Languages



Task:

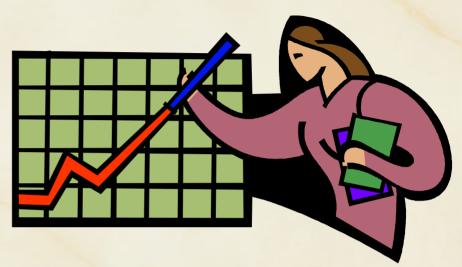
Retell or summarize the major ideas of an on-line newspaper article about the recent Mars landing of the "Spirit" explorer using a world language (Spanish, French, German or Japanese).

# Math Assessment 3 5 54 Anchor

M8.E Data Analysis and Probability
M8.E.4 Develop and/or evaluate inferences and predictions or draw conclusions based on data displays.

M8.E.4.1 Draw conclusions, make inferences and/or evaluate hypotheses based on statistical and data displays.

#### Science



#### Task:

Based on the following graph from 2000-2004, what is your prediction that any city, USA, can expect a flu epidemic in the coming year? Why do you say this? What might be some influencing factors?

#### The 2005 PSSA – Tools & Tips

#### Testing Calendar

Feb. 14 – 23	5th, 8th & 11th Writing	5th & 8th – PSSA Field Test (required for all students) 11th – PSSA Operational Test (w/ embedded field test prompt)
Apr. 4 – 15	3rd, 5th, 8th & 11th Math/Rdg.	PSSA Operational Test
Apr. 4 – 15	4th, 6 <sup>th</sup> & 7th Math/Rdg.	PSSA FieldTest (required for all students)
Mar. 14 – Apr. 22	3 <sup>rd</sup> -8th, & 11th PASA	PASA Operational Test

#### **Reading Assessment Highlights**

There are 2 reporting categories rather than 5 The assessment will not assess word origins and research

In order to make the expectations of the open-ended items clearer to students, more explicit directions will be provided.

Item-specific scoring guidelines (rubrics) with a 0-3 point scale will be used

Item and Scoring Samplers are available on the PDE website

### Math Assessment Highlights

- There are 5 reporting categories rather than 11
- Open-ended items are now shorter in length (10-15 min.) and are scaffolded providing more than one entry point
  - The assessment will explicitly tell students if they need to 'explain why'
- Items will be scored using an item-specific scoring guide (rubric) on a 0-4 point scale.
- The non-calculator items will NOT be reported out separately
- Item and Scoring Samplers are available on the PDE website



Thompson, Max. (2002) Catching Kids Up. Learning Concepts Inc. Boone, NC

Madison-Oneida BOCES and Learning Concepts. (2004) Leadership, The Path to High Achievement. www.learningconcepts.org.

Milrod, Robert J. (2002) *PSSA: Building a Framework for Success*. Upper Moreland, PA.

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Content included in this presentation prepared in part with the resources provided by Jill Craig, Educational Consultant, IU # 15