Investigating the CCSS Secondary School

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August 9, 2013

PROGRESSIONS DOCUMENTS

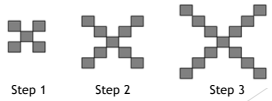
- *What are they?*
- *Who uses them?*
- *When do I use them?*
- *Where can I find them?*
- *Why do I need them?*

Progressions Documents

- Overview
  - "K-7 foundations for functions" - Pages 3-4

Visual Patterns

- Determine the number of squares in the n^{th} step of this pattern using:
  - Pictures
  - Numbers
  - Symbols
  - Words



Source: http://visualpatterns.org/2012/12/26/pattern-4.aspx

Visual Patterns

- Determine the number of squares in the n^{th} step of this pattern using:
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  - Numbers
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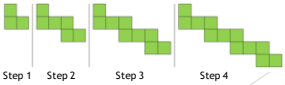


Source: http://visualpatterns.org/2012/12/27/patterns-18.aspx

Visual Patterns

- Determine the number of squares in the n^{th} step of this pattern using:
  - Pictures
  - Numbers
  - Symbols
  - Words

Source: http://visualpatterns.org/2012/12/27/pattern-16.aspx

Progressions Documents

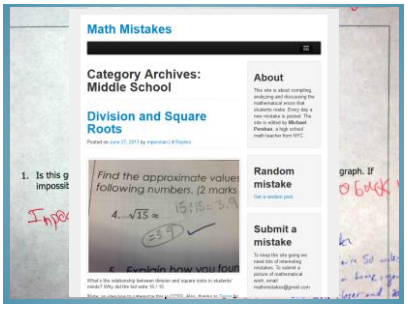
- Overview
- Building functions
  - "Define, evaluate, and compare functions" - Page 5
  - "Build a function that models a..." - Pages 11-12

Interpreting Functions

- Function to context
  - Preview / Warm up
  - Write a Story
- Context to function
  - Graphing Stories

Progressions Documents

- Overview
- Building functions
- Interpreting functions
  - "Use functions to model relationships…" - Page 6
  - "Interpret functions that arise in…" - Page 9



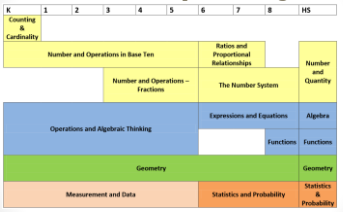
Partnership for Assessment of Readiness for College and Careers (PARCC) Task Types

- Type I: Concepts, Skills, and Procedures
  - Balance of conceptual understanding, fluency, and application.
  - May involve any or all mathematical practice standards.
  - Will be machine scored.
- Type II: Expressing Mathematical Reasoning
  - Includes:
    - Written arguments/justification
    - Critique of reasoning
    - Precision in mathematical statements
  - May be machine scored and/or hand scored.
- Type III: Modeling / Applications
  - Modeling/application in a real-world context or scenario.
  - May be machine scored and/or hand scored.

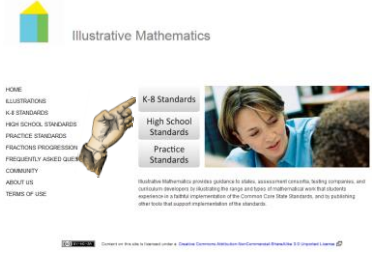
Review PARCC Examples

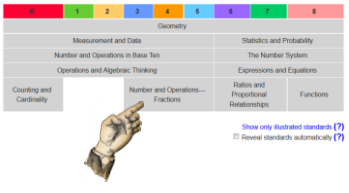
1. Go to http://www.ccsstoolbox.com
2. Click on "Resources for Implementation" on the top menu bar.
3. Click on "PARCC Prototyping Project" on the lower left menu bar.
4. Click on your grade level.
5. Browse the available tasks.

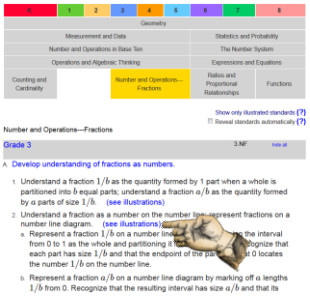
Domain and Conceptual Categories



Source: http://www.doe.in.gov/achievement/curriculum/resources-implementing-indianas-common-core-standards







Content Standards Review

- Read your course standards
  - What has changed?
  - What are they talking about?
- Reference standards on illustrativemathematics.org
- Review standards for one or more grade levels above and below

Planning Time

- What lessons could you incorporate multiple representations into?
  - Operations with rational numbers
  - Systems of equations
- Which concepts have you found students to be the most lacking in?
  - Read the progression documents for that content area.
- CCSS Resources
  - How could I incorporate them?
- Figure out details such as:
  - When would I do this lesson?
  - What resources would I need?
  - What other teachers could I collaborate with?

NEXT STEPS

- *Start with realistic goals:*
  - *At least one per semester*
  - *Perhaps one per unit*
- *Collaboration is key*
- *Standards for Mathematical Practice*
  - *Talking and writing about mathematics*

Contact

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