Getting Started

Welcome to the Idaho Standards Review Kickoff! Thank you for joining us today.

While you are waiting please include the following in the chat:

1. Where you live in Idaho
2. Three words that come to mind when you think of standards

Zoom tip: Make sure you minimize Zoom to find your chat box and participants icons at the bottom of your screen

STATE STANDARDS REVIEW

KICKOFF MEETING JUNE 29 AND 30, 2020

Supporting Schools and Students to Achieve

SHERRI YBARRA, ED.S., SUPERINTENDENT OF PUBLIC INSTRUCTION

6/29/20

Big Picture

Why

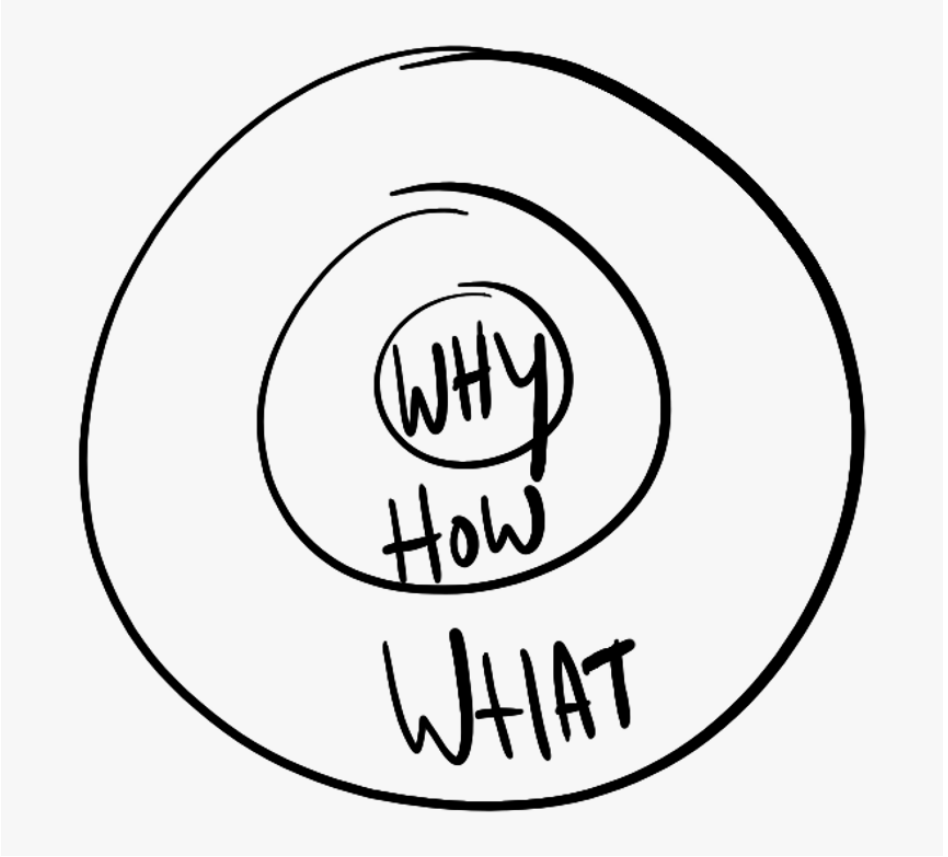
- strong educational standards of what students should know and be able to do at the end of each grade
- the Legislature has provided us guidance

How

- workgroup tasks

What

- completed Idaho Content Standards



This Photo of Simon Sinek's Golden Circle (2017) is retrieved via Google images

Welcome

Marilyn Whitney

Deputy Superintendent of Policy and Communications

AGENDA

WHY

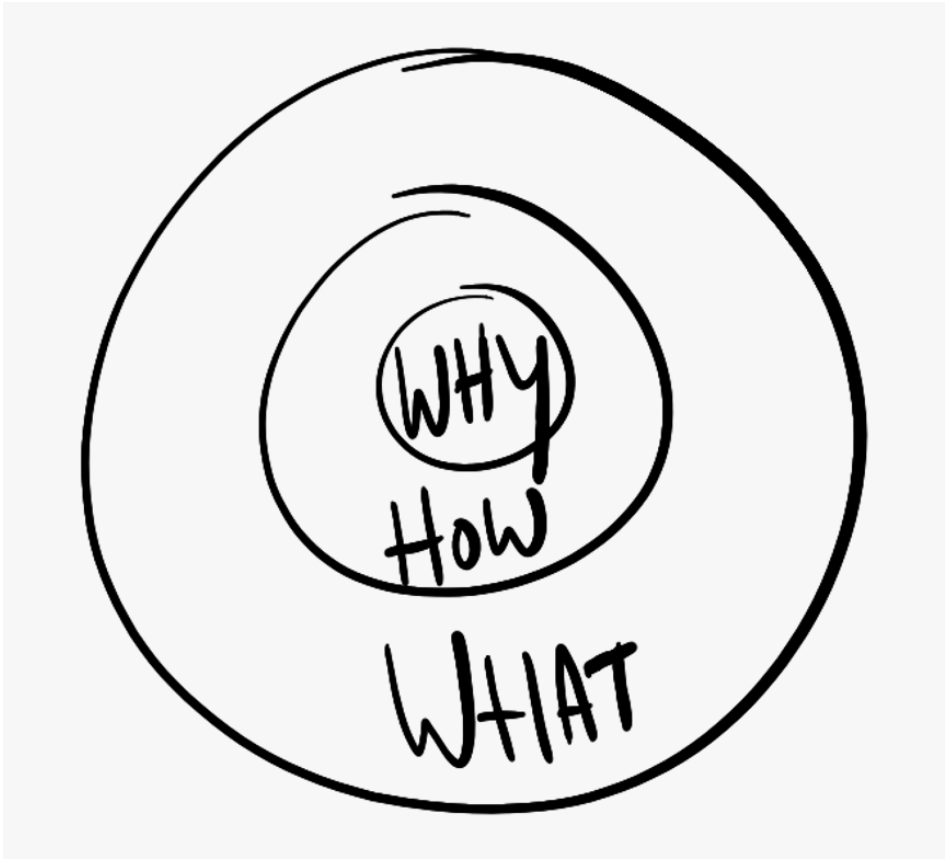
- Context for the Work
- Personal WHY

HOW

- Meet the Group
- Logistics
- Edmodo

WHAT

- Standards Walk Through
- Homework



This Photo of Simon Sinek's Golden Circle (2017) is retrieved via Google images

What is our why?

Historical Perspective

- Letter from House and Senate Education Committees
- State Department of Education/State Board of Education Response
- Timeline
- The Legislative Study Committee
- Your task

http://www.covermesongs.com/wp-content/uploads/2017/01/QA.jpg

Zoom tip: Use your "raise hand" icon in the participants window and we will call on you or ask your question in the chat box

Education Committees' Letter

Task:

- Reread the Education Committees' Letter- document 2 in documents and instructions email (5 mins)
- After reading, please answer the bullet below in the chat:
  - Tell us how your why connects to the Education Committees' Letter

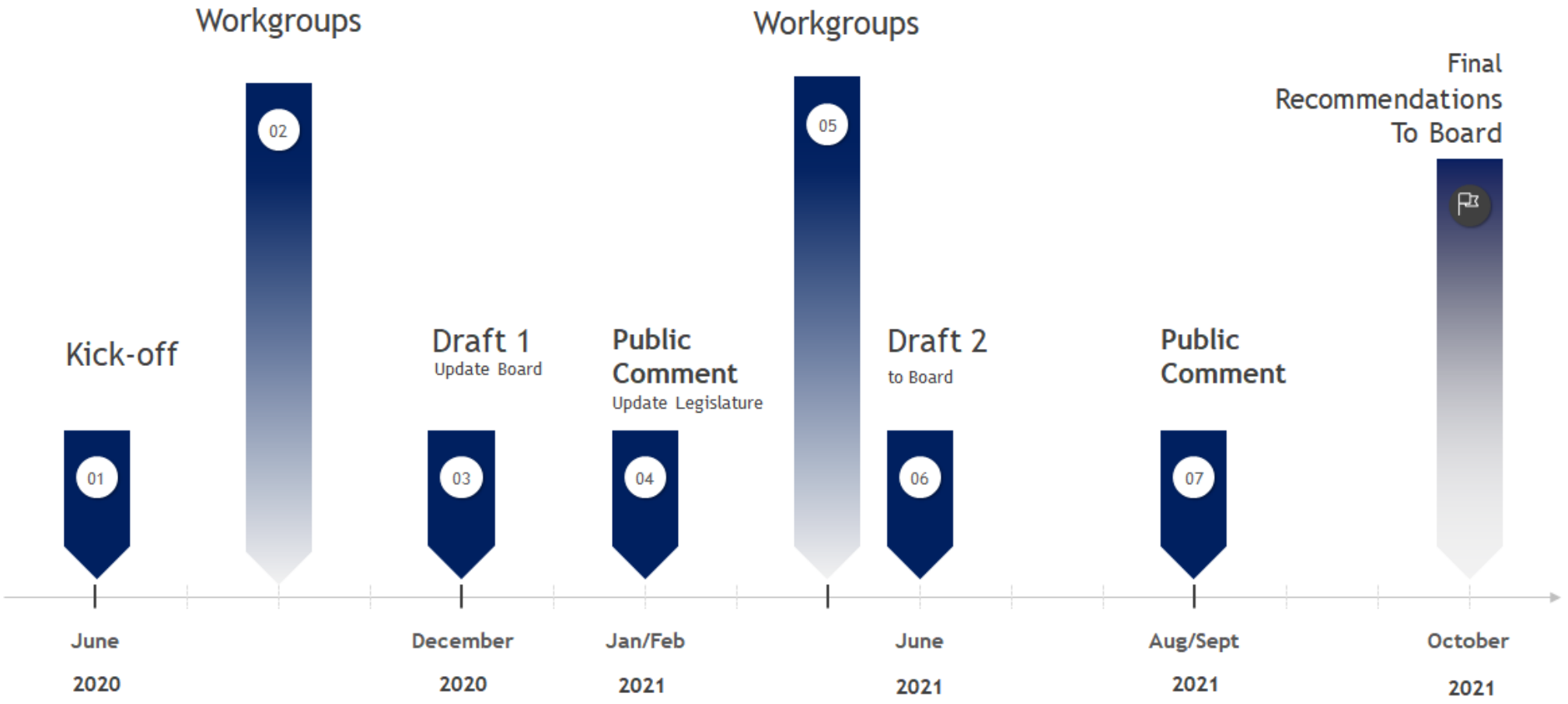
Education Committees' Letter: Math Focus

1. Explicitly state grade levels at which students should demonstrate mastery of addition, subtraction, multiplication, and division facts. Integrate these basics with critical thinking and real-life problem solving throughout the standards to ensure more connections to science, business, and other related disciplines.
2. Reduce the number of standards, use less complex verbiage, and prioritize the more important concepts without marginalizing the accuracy of the standards.
3. Ensure the standards are age and grade level-appropriate especially in the early grades, emphasizing the concrete nature of young minds.
4. Make certain that standards requiring problem solving are age appropriate and do not exceed the knowledge standards accepted for each grade level.

How will we get there?

Timeline

Content Standards Review Timeline



MEET OUR C & C TEAM

Todd Driver,
C&C Director

Dr. Catherine Beals,
Mathematics Coordinator

Sharon Cates,
Science/STEM/ISAS Coordinator

Liz James,
ELA/Literacy Coordinator

Aaron McKinnon,
Mastery-Based Education Coordinator

Peter Kavouras,
Social Studies/PE/Health Coordinator

Rebecca Martin,
Arts/Humanities/GATE Coordinator

Rick Kennedy,
IT/Computer Science Coordinator

Linda Becker,
Grants/Contracts Specialist

Chrystal Allen,
Curricular Materials Specialist

Melissa Knutzen,
C&C AA

How We Are Organized

- **Working Group**- write the standards, driving the work
- **Facilitators**- moderator, logistics, communication
- **Content Coordinators**- content consultant
- **Consultants**- from other states
- **Subgroup Facilitators**- SDE Idaho Coaching Network/Regional Math Centers

How We Communicate in Zoom

- Use the chat to engage in conversation, agree with others, or ask questions
- Raise your hand electronically
- Camera on is preferred
- Microphone muted – unmute to talk
- Make sure your name shows correctly

How We Communicate in Zoom Continued

Photo courtesy of zoom: https://support.zoom.us/hc/en-us

How We Work Together

Be Respectful

Be Supportive

Be Present

Be Open

Photo courtesy of PowerPoint

Our Team

Let’s get to know our team!

Please:

- Introduce yourself
- Committee role
- Who was your favorite teacher and why?

Photo courtesy of PowerPoint

Break

Get a glass of water.

Take a very short walk.

Rest for a few minutes.

Progress Bar

EDMODO

- All review documents will be posted and housed
- Discussion board to ask questions and keep connected in between meetings
- Group announcements and reminders

What is the outcome?

Dr. Catherine Beals - Math Coordinator

A Math Challenge

- 310,000 Idaho students
- Add 6 more entering kindergarten classes of 25,000
- Multiply by 50 people they impact in their careers
- Double it

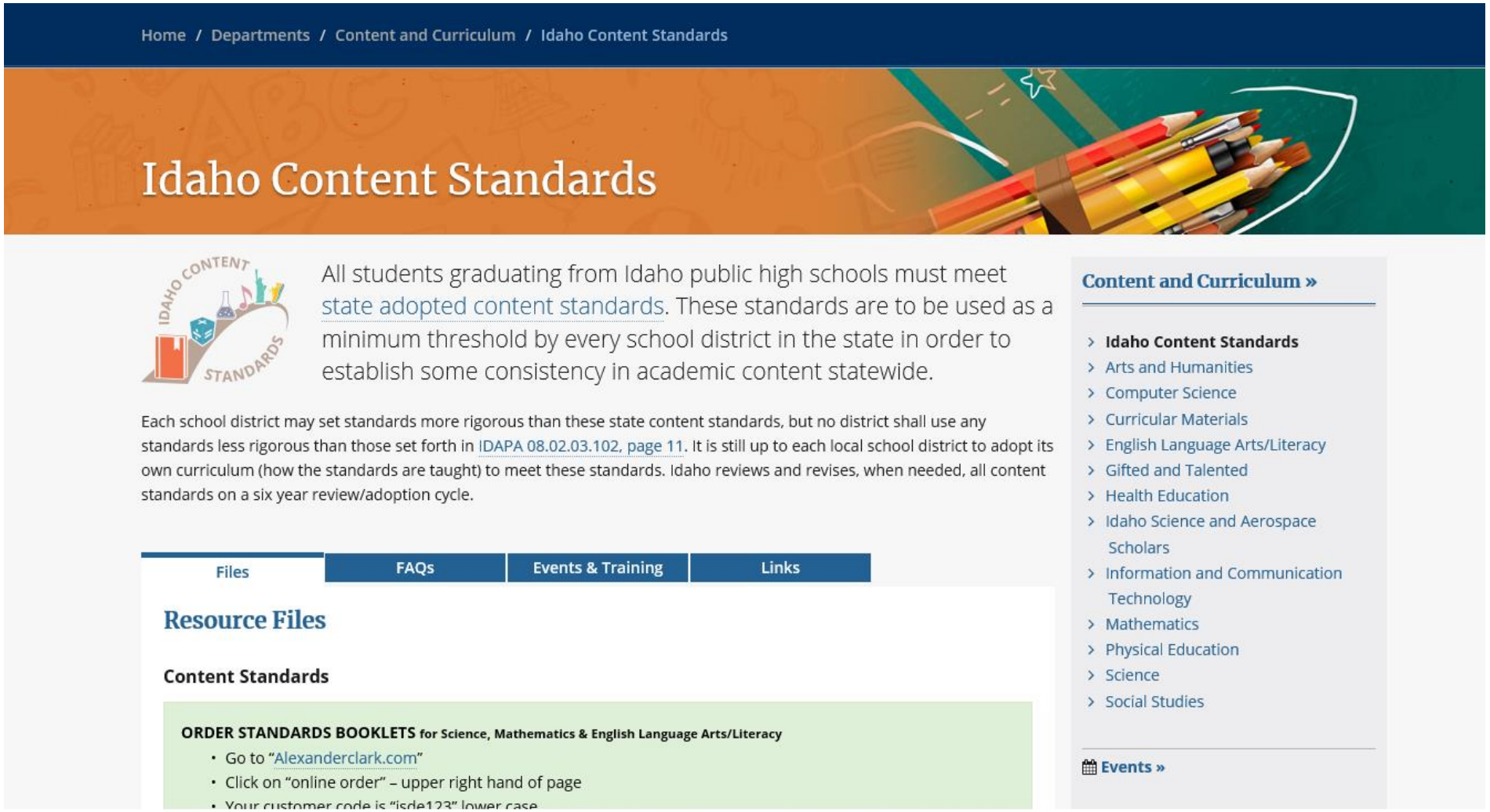
EXPONENTIAL IMPACT

Standards Handout

What are standards?

What is curriculum?

Present Standards Overview



Organization- Sections

1. Table of Contents
2. Introduction
3. How to Read
4. Standards for Practices for all grades
5. Grade Level Content K-8 *Overviews
6. Topical 9-12

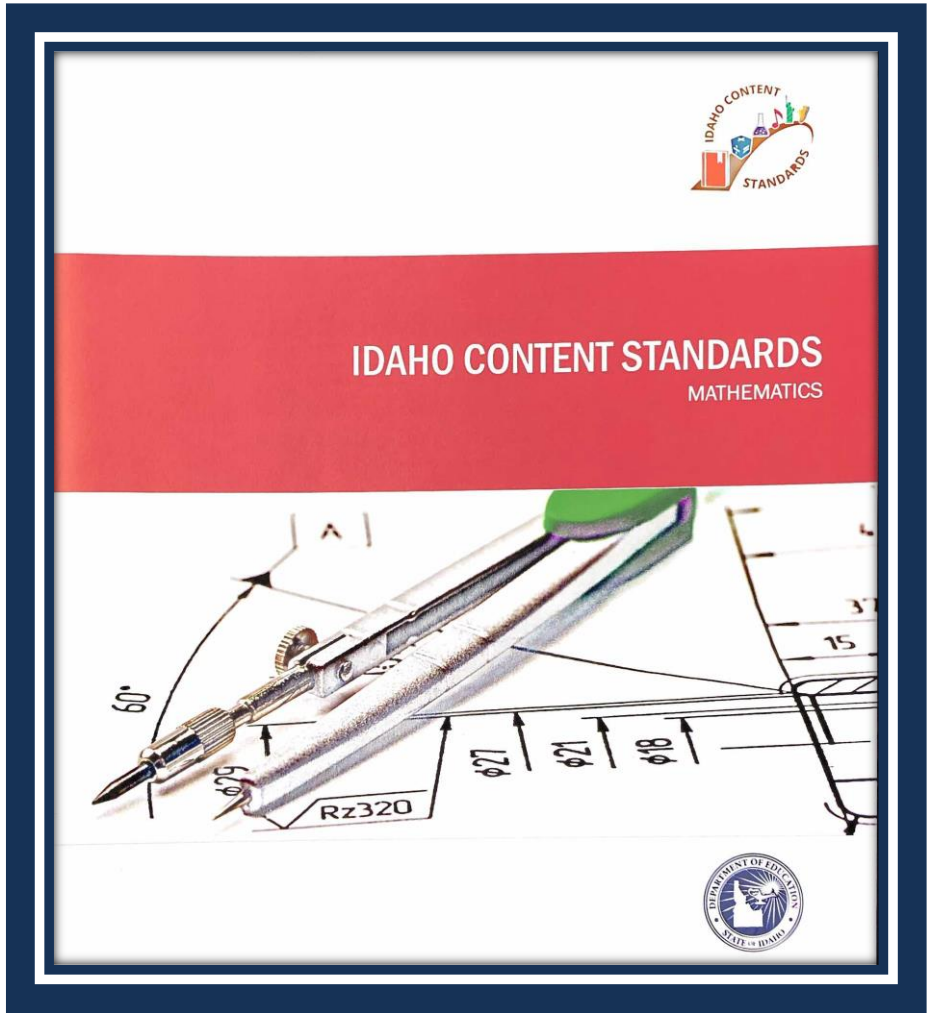
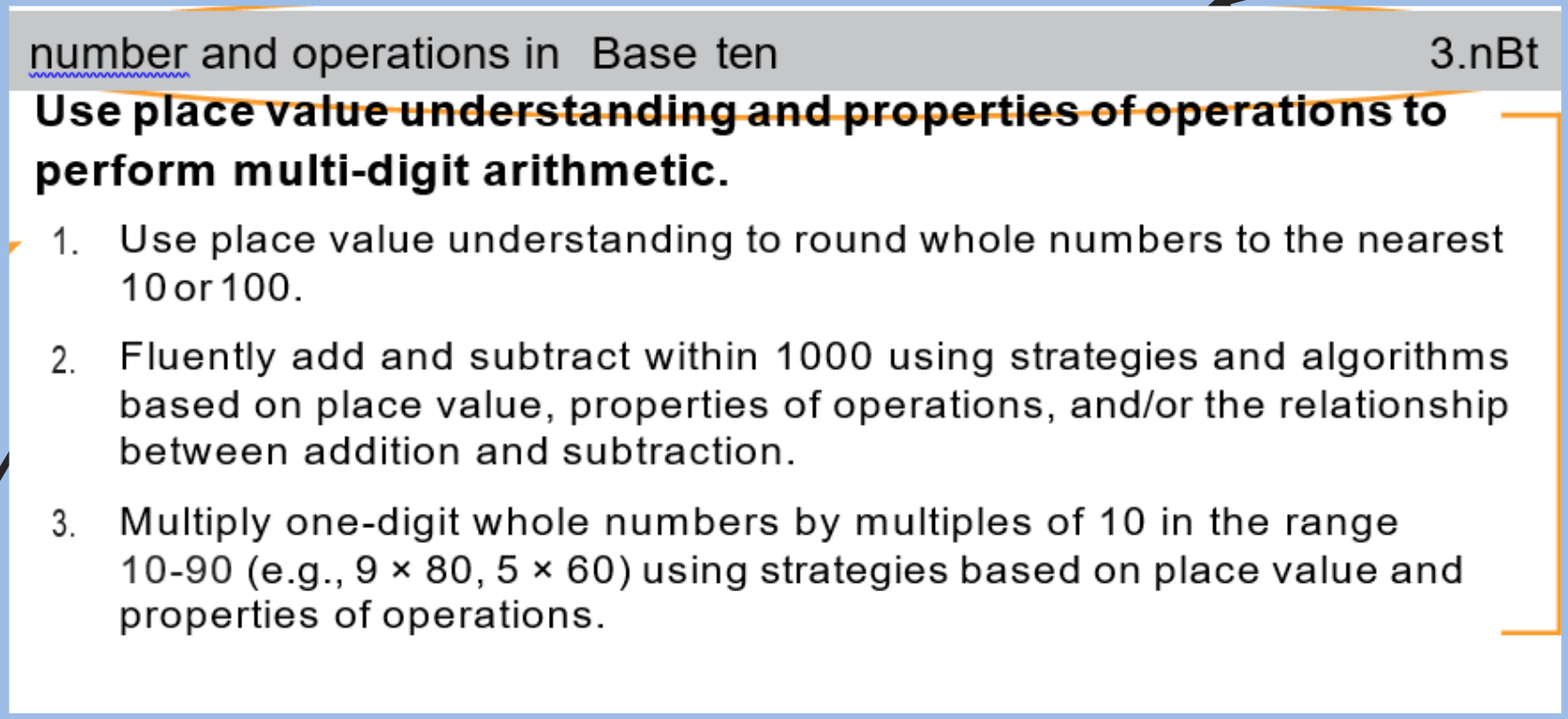


Photo courtesy of sde.idaho.gov

Standards Organization



Standards for Mathematical Practice

STANDARDS FOR MATHEMATICAL PRACTICE

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report Adding It Up: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

1. **Make sense of problems and persevere in solving them.**
   Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.
2. **Reason abstractly and quantitatively.**
   Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for an express regularity in reasoning.

K-8 Content with Overview pages

GRADE 4 OVERVIEW

Operations and Algebraic Thinking

- Use the four operations with whole numbers to solve problems.
- Gain familiarity with factors and multiples.
- Generate and analyze patterns.

Number and Operations in Base Ten

- Generalize place value understanding for multi- digit whole numbers.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Extend understanding of fraction equivalence and ordering.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
- Understand decimal notation for fractions, and compare decimal fractions.

Measurement and Data

- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
- Represent and interpret data.
- Geometric measurement: understand concepts of angle and measure angles.

Geometry

- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

GEOMETRY OVERVIEW

Congruence

- Experiment with transformations in the plane
- Understand congruence in terms of rigid motions
- Prove geometric theorems
- Make geometric constructions

Similarity, Right Triangles, and Trigonometry

- Understand similarity in terms of similarity transformations
- Prove theorems involving similarity
- Define trigonometric ratios and solve problems involving right triangles
- Apply trigonometry to general triangles

Circles

- Understand and apply theorems about circles
- Find arc lengths and areas of sectors of circles

Expressing Geometric Properties with Equations

- Translate between the geometric description and the equation for a conic section
- Use coordinates to prove simple geometric theorems algebraically

Geometric Measurement and Dimension

- Explain volume formulas and use them to solve problems
- Visualize relationships between two- dimensional and three-dimensional objects

Modeling with Geometry

- Apply geometric concepts in modeling situations

Learning Progression of Domains

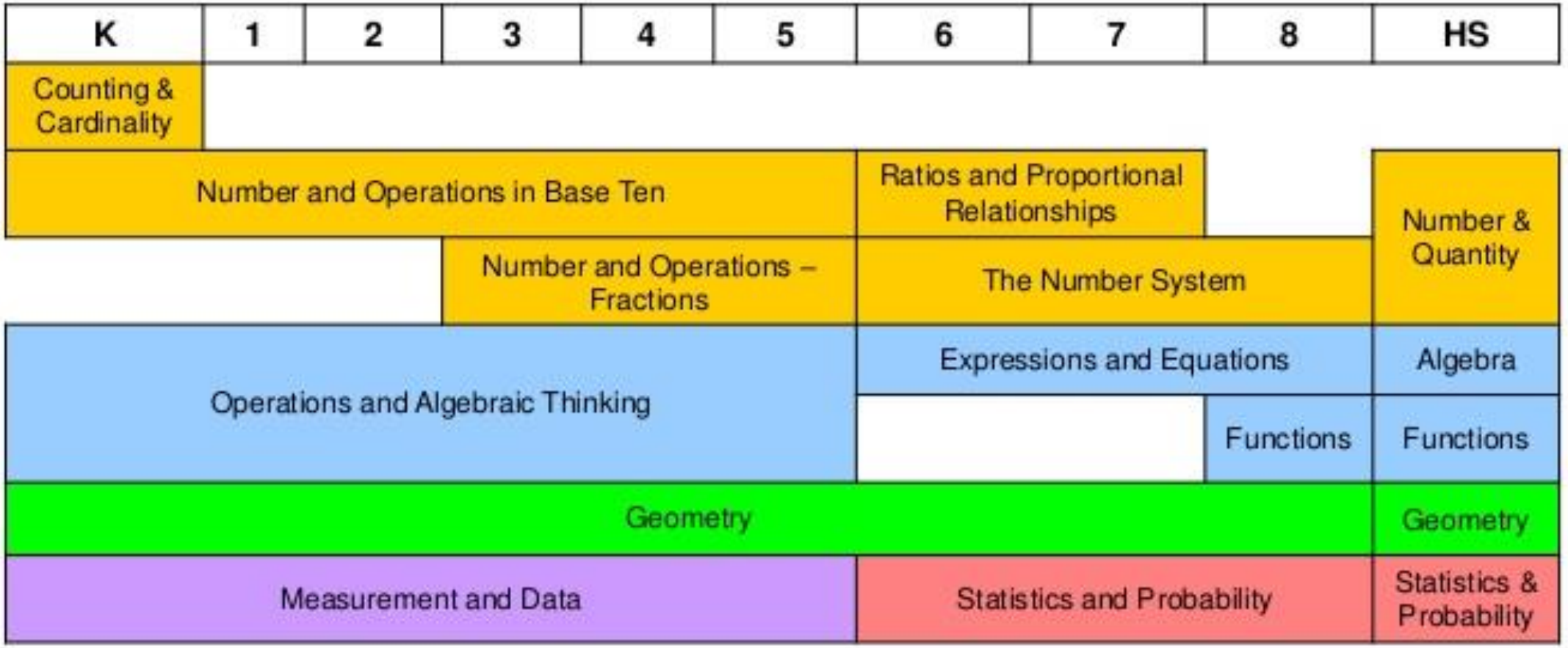


Image from Jackson County, AL 6-12 Math CCRS quarterly meeting 08/10/15
retrieved from https://slideplayer.com/slide/6911709

Homework Connection

- Legislature has asked us to review nationally recognized quality standards from a variety states such as:
  - Florida
  - Massachusetts
  - Texas
  - Nebraska
- Compare and contrast with Idaho's Content Standards
- Consider:
  - Age appropriateness
  - Readability
  - Quality of content
  - Sequential nature

Focus from Letters

Include

- Clear expectations on mastery of basic facts
- Basic skills connected to real life
- Prioritized most important concepts
- Age and grade level appropriateness

Exclude

- Supporting information
- Guidance
- Complex verbiage

Homework - Assignment#1

Essential Question: What do you think is important about the way standards are **formatted** so they are easily understood?

Choose two other states from the list of links in Edmodo:

1. Pick one page of their standards
2. Identify similarities and differences between the format of the Idaho standards and the two other states
3. Complete assignment #1 note catcher

Homework- Assignments #2

Essential Question: What does a student learn (**content**) in one state compared to another state?

Choose two other states from the links in Edmodo:

1. Pick a grade level
2. Identify what you notice and wonder after focusing on the content of standards from different states
3. Use the assignment #2 note catcher

Homework– Assignment #3

Essential Question: What do you see as the strengths and challenges of the Idaho Content Standards?

Use the SDE website to:

1. Review the current Idaho Content Standards for your subject area and grade band
2. What do you see as strengths of the current standards?
3. What do you see as challenges?
4. Post your thoughts in the content area discussion board on Edmodo

HOMEWORK – ASSIGNMENT #4

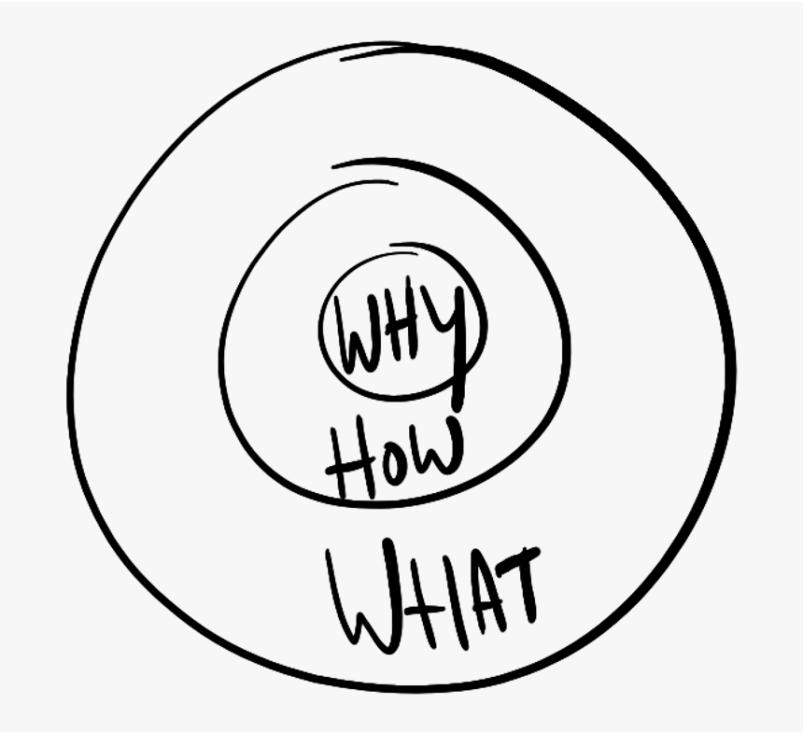
Code the present standards for your grade level band.

Yellow - What (Know or Do)

Pink – How (Strategies/Guidance)

Green – Why (Theory)

Underline Complex Verbiage



This Photo of Simon Sinek's Golden Circle (2017) is retrieved via Google images

HOMEWORK – ASSIGNMENT #4 Example 1

5.NF.5b

Interpret multiplication as scaling (resizing) by explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b=(n*a)(n*b) to the effect of multiplying a/b by 1.

HOMEWORK – ASSIGNMENT #4 Example 2

8.SP.2

Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

Today we…

WHY
- Context for the Work
- Personal WHY

HOW
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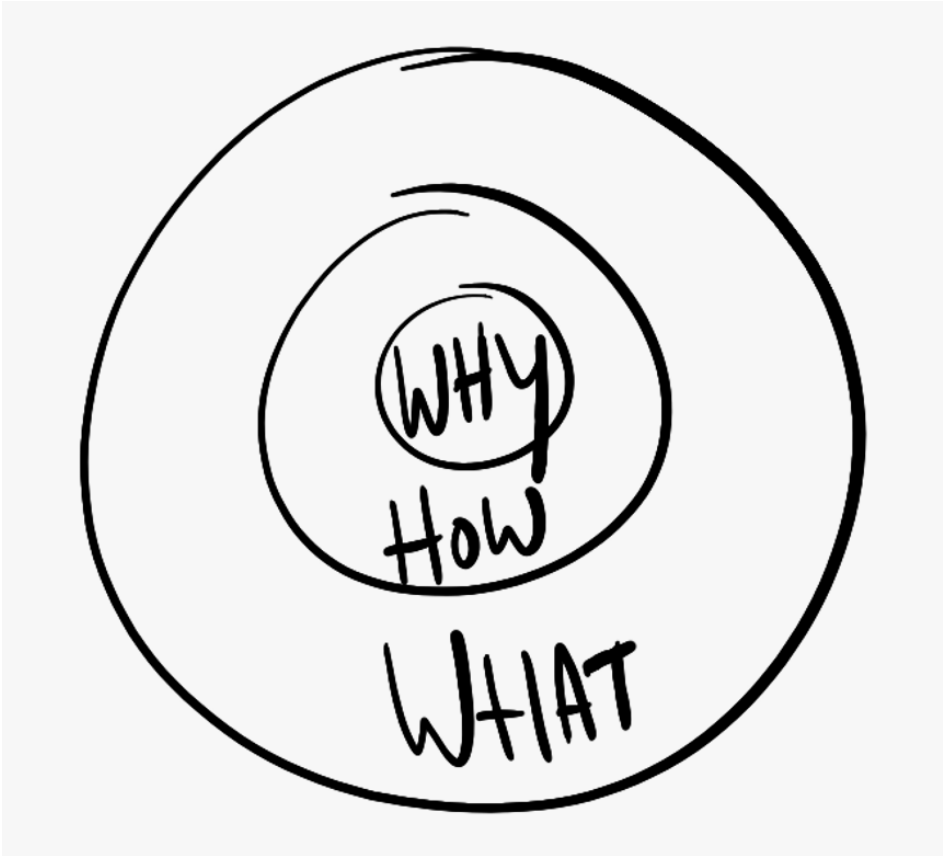

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August 3 we will...

- Summarize our Edmodo discussion
- Learn from other Idaho standards review committee work
- Small Group Break Out Work
  - Discuss learning from looking at other states

Wrap-Up

Put into Chat:

- Any additional questions?

http://www.covermesongs.com/wp-content/uploads/2017/01/QA.jpg

Wrap-Up Continued

Put into Chat:

- Take away points

Contact

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