

Arizona Science Standards Revision Working Group



November 6, 2017

Housekeeping

1. Sign in
2. Parking validation
3. Restrooms
4. Breaks/Lunch
6. Travel Questions – Fill out W9 if needed
7. Sign non-disclosure form – All members

***Cell phones should only be used during breaks and lunch.
If you need to take a call, please go to the break room.
Please check text and email only during break due to non-disclosure.***

Biggest Thank You!



Housekeeping

Dr. Eugene Judson

Associate Professor - Science
Education Arizona State University



ASU Research project – IRB
consent

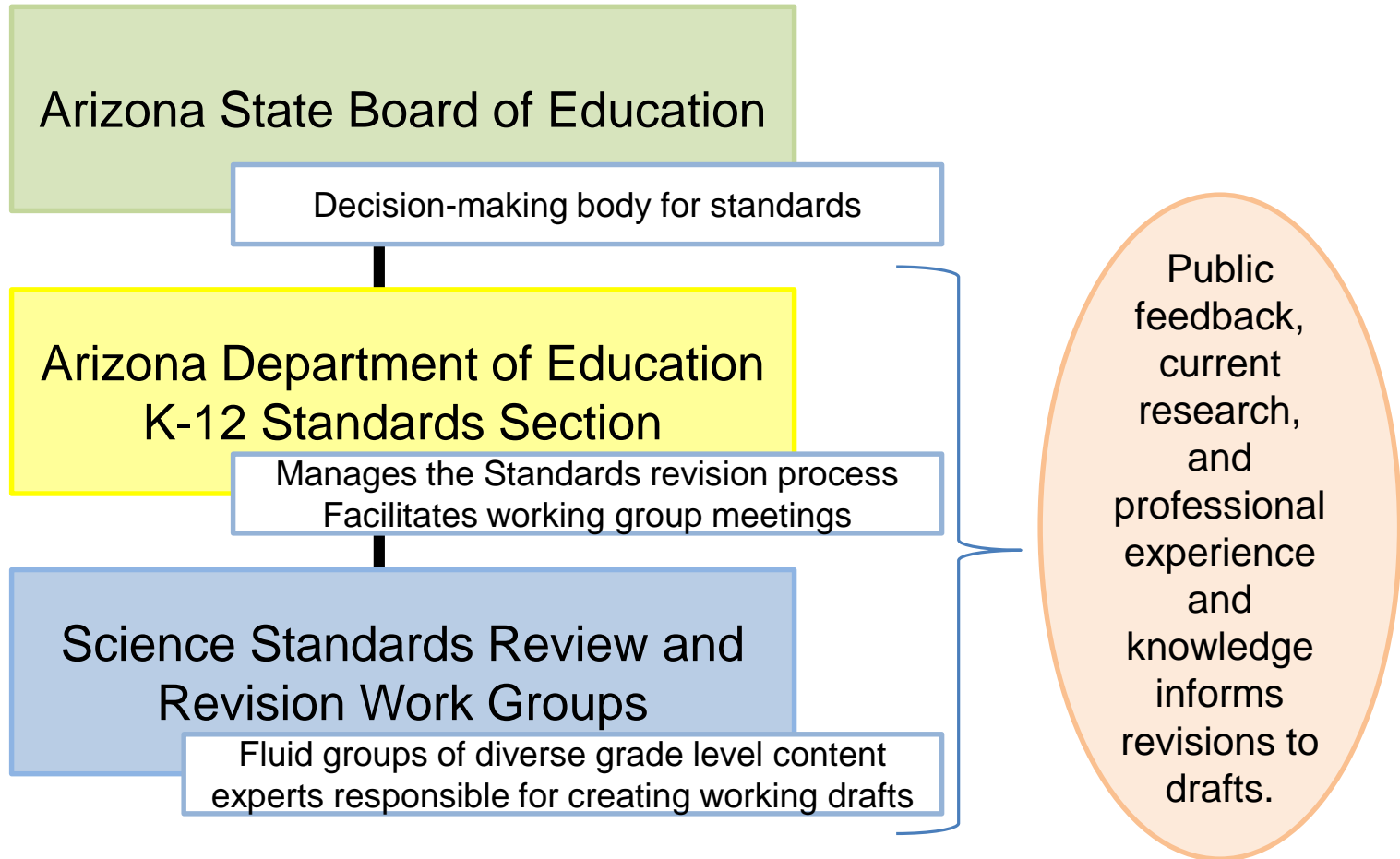
Participation in this research project is completely voluntary and does not impact your participation in standards work.

Introductions

Introduce yourself by telling everyone in the group:

1. Your name
2. Your school/district
3. Your current position

Standards Review - Structure



Science Standard Revision and Implementation Timeline

September 2016

Revision process opened with the State Board of Education

October – December 2016

ADE collected public feedback on existing standards

January 2017 – Spring 2018

ADE convenes working groups of educators, content experts, community members, and parents

Anticipated Spring 2018

ADE presents standard to State Board of Education for adoption

Transition and Implementation

Summer 2018
ADE develops support documents

2018-2019
Transition Year

2019-2020
Transition Year

2020-2021
Implementation Year

Spring 2021
Administer science assessment aligned to new standards

Working Group Norms

- Actively engage in all discussions
- Be open-minded
- Have an attitude that fosters collaboration, agreement, and consensus
- Be mindful of timelines and scope of work
- **Cell phone/email checks are limited to breaks (non-disclosure)**

ADE Directive for the Science Standards

- Arizona standards, written for Arizona teachers and students, by Arizona educators and content experts
- Write grade-level standards and not performance objectives

Standards, Curriculum, & Instruction

Standards – What a student needs to know, understand, and be able to do by the end of each grade. Standards build across grade levels in a progression of increasing understanding and through a range of cognitive demand levels. Standards are adopted at the state level by the State Board of Education.



This is the “WHAT”



Standards, Curriculum, & Instruction

Curriculum – The resources used for teaching and learning the standards. Curricula are adopted at a local level by districts and schools.

Instruction – The methods used by teachers to teach their students. Instructional techniques are employed by individual teachers in response to the needs of the students in their classes to help them progress through the curriculum in order to master the standards.



This is the “HOW”



Standards versus Performance Objectives

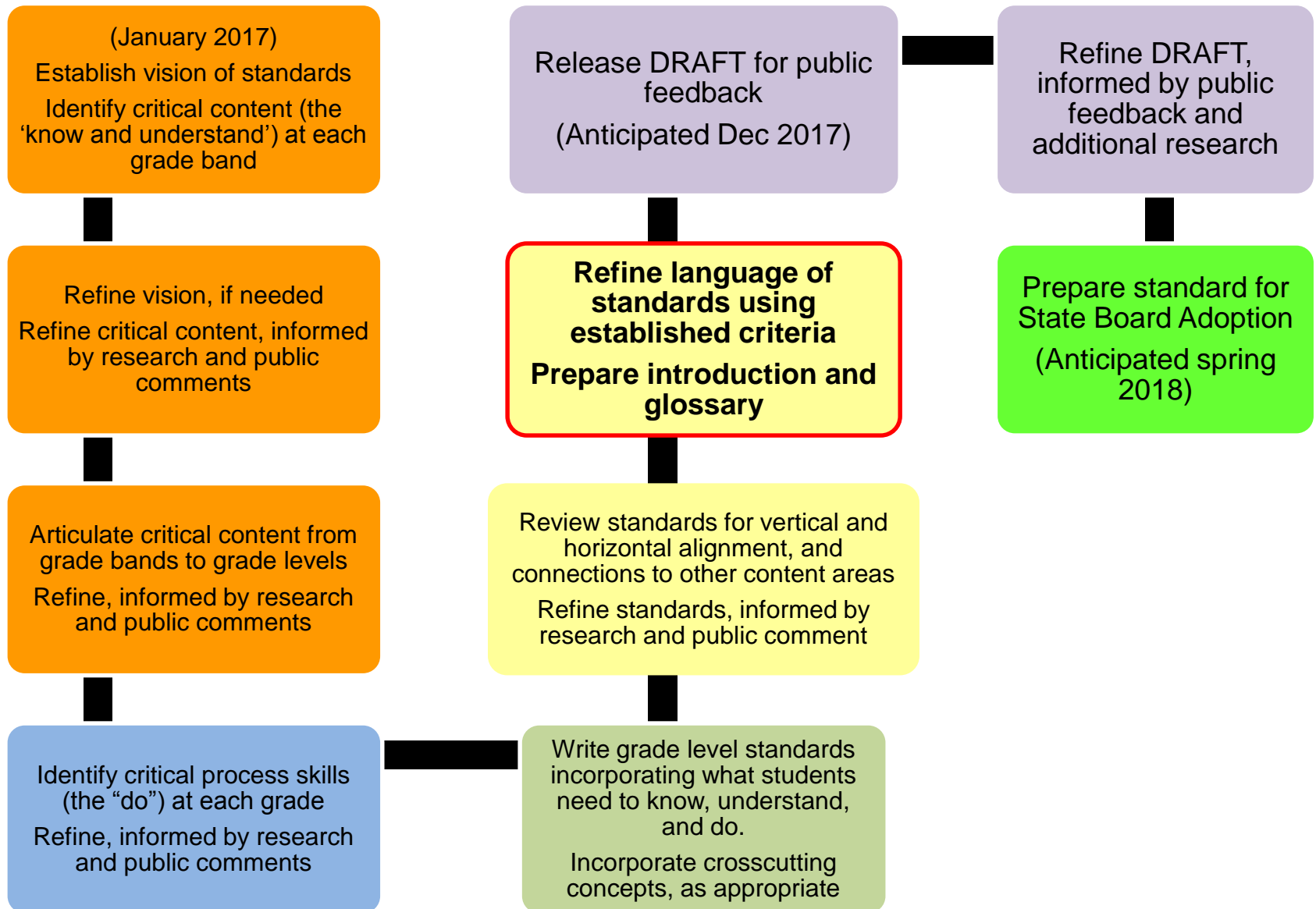
Content Standards

Standards are what students need to know, understand, and be able to do **by** the end of each grade level. Standards build across grade levels in a progression of increasing understanding and through a range of cognitive demand levels.

Performance Objectives

Performance Objectives are **incremental steps** toward mastery of individual content standards. Performance Objectives are knowledge and skills that a student must demonstrate at each grade level. Performance objectives do not imply a progression of learning and, because they are discrete skills, reach a limited level of cognitive demand.

Standards Review - Structure



Today's Tasks



Individually read the standards document. Record any comments on the recording sheet.

- Intro
- Grade band/grade intros
- Appendix

Do not focus on wording of standards at this time.

Strengths?
Weaknesses?
Edits?

Today's Tasks



Share out major ideas

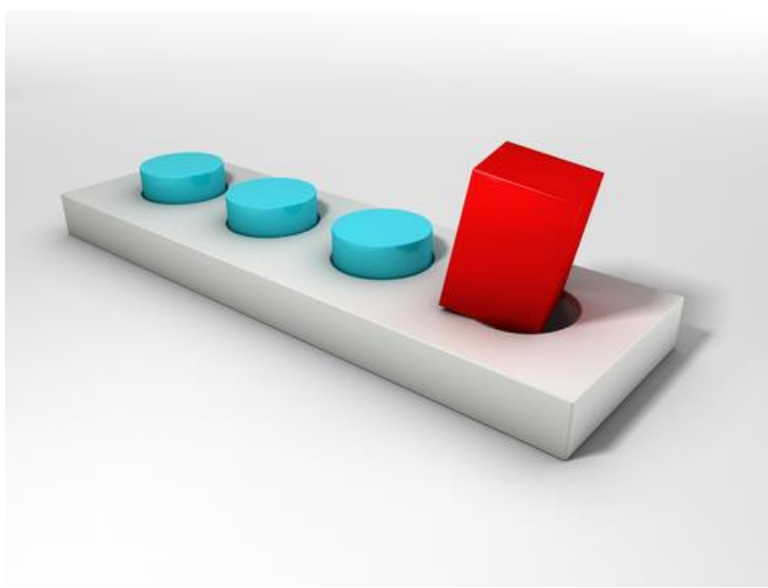
- Intro
- Grade band/grade intros
- Appendix

Strengths?

Weaknesses?

Edits?

Today's Tasks - #1



Individually read your assigned part of the document.

Does the standard really match the core idea?

Recommend:

- Reword to match core idea

OR

- Realign to match wording

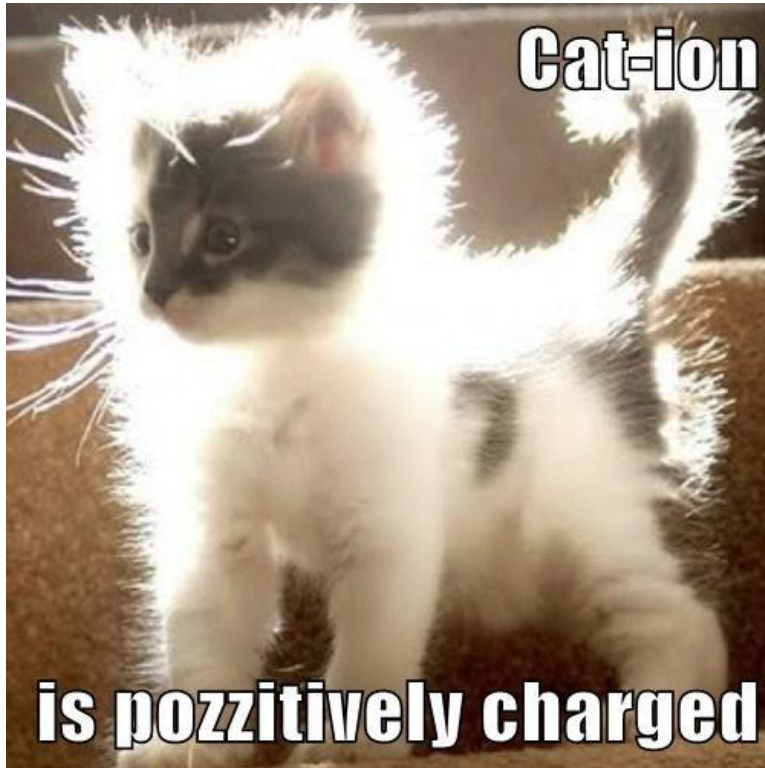
Today's Tasks - #1

Table discussion to reach consensus on actions needed

Jigsaw: Members from Tables 4, 5, and 6 join tables 1, 2, and 3 to present and explain recommendations



Today's Tasks - #2



Tables 1-3

Make edits to standards based on all feedback

Tables 4-6

Review and edit introductory materials and appendices