

If you are carrying an iPad, iPhone, or iPod Touch please download the following apps for this presentation:



SAS® Math Stretch  
(iPad only)



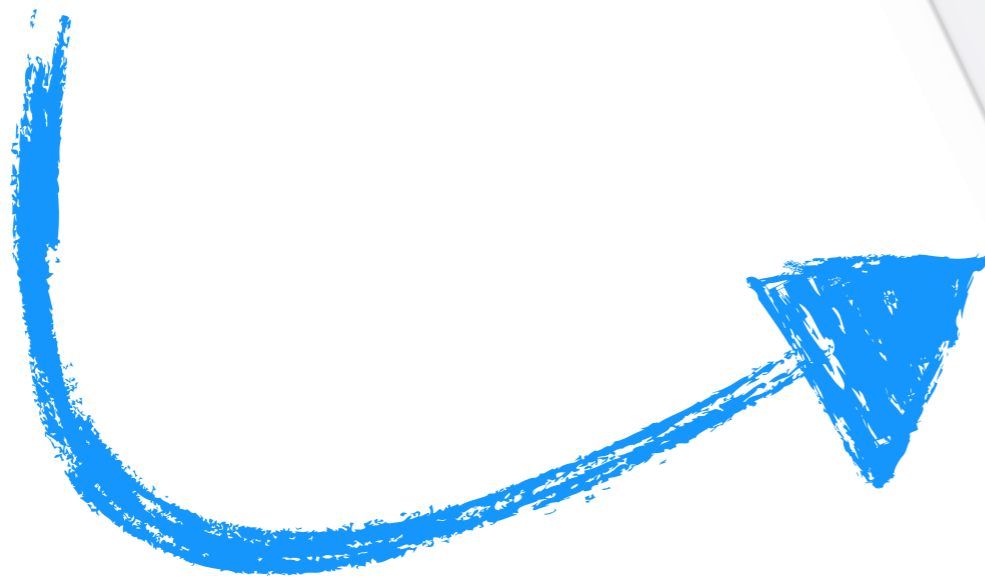
SAS® Flash Cards



SAS® Data Notebook  
(iPad only)

Search 'SAS Institute' on the Apple iTunes App Store.

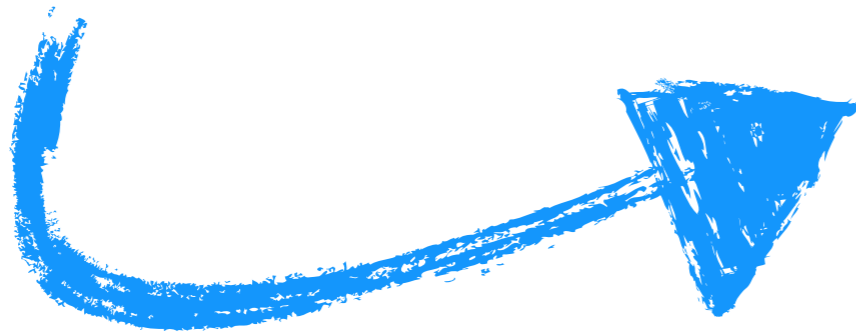
# From Desktop to Mobile with SAS® Curriculum Pathways®



# Agenda

- SAS Curriculum Pathways
- Mobile apps for Elementary Math
- Other resources from Curriculum Pathways
- Conclude & Questions
- Demo & Hands On

# The Challenge:



Meeting the evolving needs of technology-infused learners...



# Initial Solution: Blended Learning Model

"Blending" traditional classroom assignments with technology delivered by PC/Mac on desktops or laptops

Our approach:

- Interactive
- Standards-based
- Core disciplines
- Delivered online at no cost

# SAS® Curriculum Pathways®

The image displays several overlapping screenshots from the SAS Curriculum Pathways platform. The largest screenshot on the left is the main website interface, featuring a search bar, navigation tabs for 'Favorites', 'Standards', and 'Professional Development', and a central banner for the 'NEW SAS Curriculum Pathways' with a butterfly illustration. Below the banner are sections for 'OPEN HOUSE' and 'PROFESSIONAL DEVELOPMENT'. Other screenshots show specific educational modules: 'Visit Stream Ecology' with a colorful landscape and data input fields; 'SIMPLIFIER: Order of Operations' with a calculator interface and math problems; and 'Punctuation Rules!' with a lesson on commas and a list of sentences for punctuation practice.



# Simplifying Expressions Using Order of Operations

QUICK TOUR

USER INFO

PRACTICE

QUIZ

ENTER OR SELECT  
PROBLEM

$8 + 3 \cdot 6$

« 1 »

START  
WORK

ENTRY PALETTE

1	2	3	4	5
6	7	8	9	0
.				
÷	*	-	+	
	$\frac{\square}{\square}$	( )	(0)	
$\square * 10^{\square}$	$\sqrt{\square}$	$\square^{\square}$	$\square^2$	
$\frac{x}{y}$				

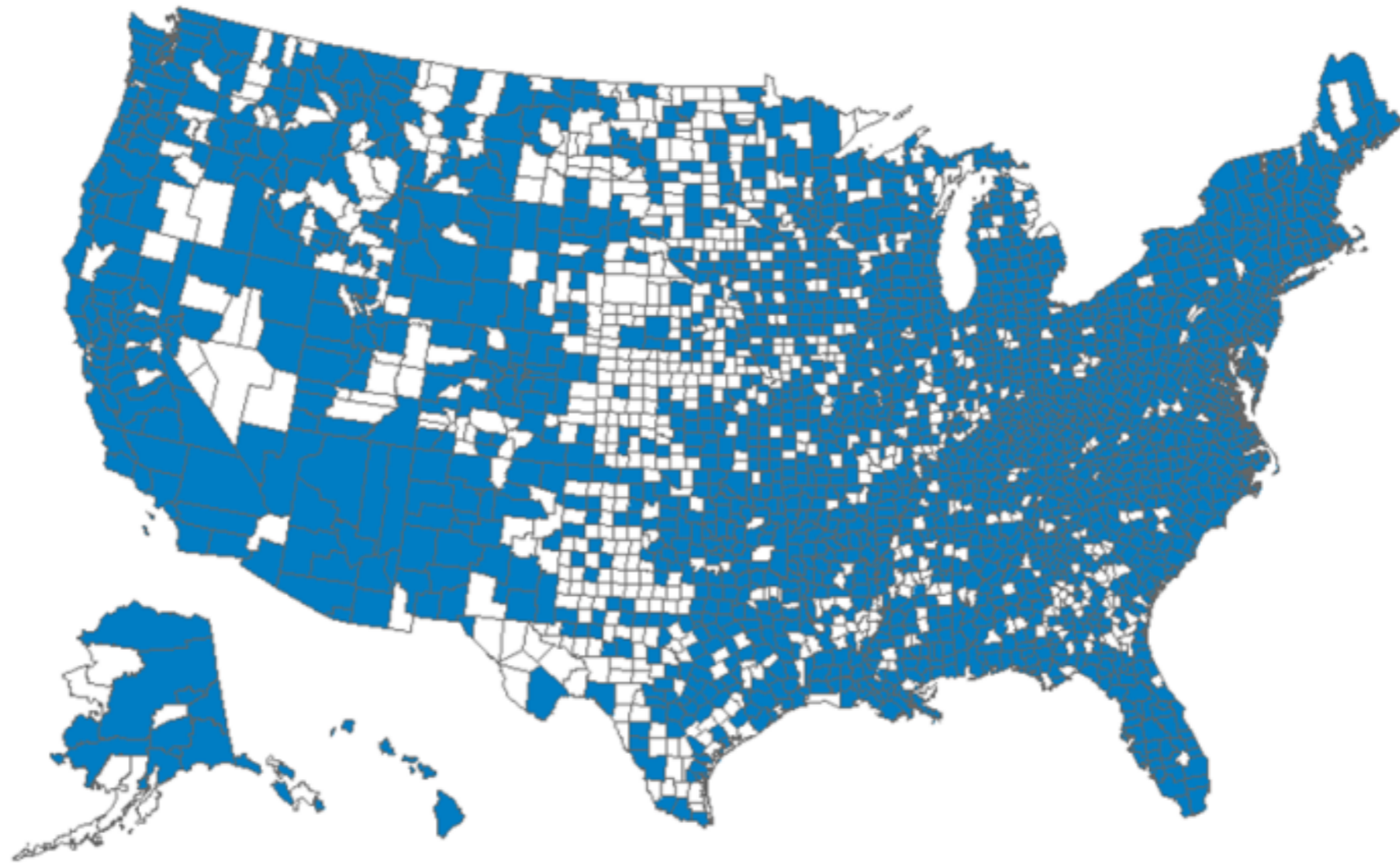
To begin, select a provided problem or enter your own. Then press Enter or click START WORK.

CHECK WORK      COPY LINE   DELETE LINE   UNDO   REDO   CLEAR ALL

FINAL  
ANSWER

CHECK ANSWERS

# SAS<sup>®</sup> Curriculum Pathways<sup>®</sup>



100,000+ teachers



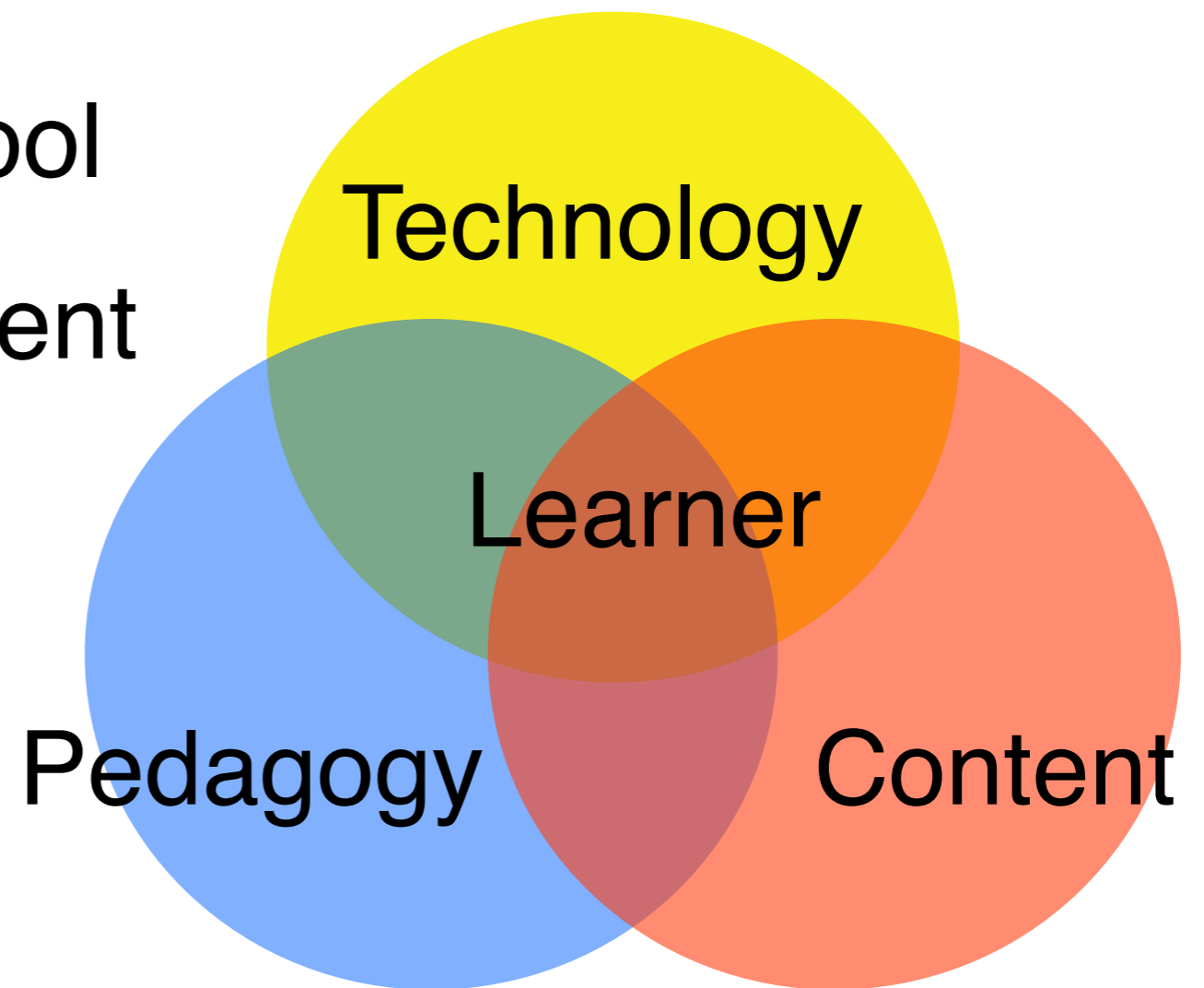
# The Challenge Evolves

- 125,000,000+ iPads (JAN 2013)
- 8,000,000+ iPads in schools (MAR 2013)  
(more iPads than Macs being delivered)
- Daily iPhone sales outpace the average daily birth rate, ~ 380,000 iPhones
- 500 Million+ iOS devices (JAN 2013)



# Apps as Tools

- More broadly, technology as a tool
- Pedagogy & Content integration



# Mobile Learning @ SAS

- Focused on tools
- Developed in collaboration with teachers and students
- Available at no cost and ad free
- Integrated with SAS Curriculum Pathways in June 2013

# SAS Curriculum Pathways for Mobile + Math







# Math Stretch



- Exercises and tools for elementary math
- Develop number literacy, number sense
- Exercises and routines for the beginning of classes (2-15 minutes)
- $103 + 79 = 100 + 70 + 3 + 9 = 100 + 70 + 12 = 182$
- Early research indicates increased likelihood to take Algebra I by 8th grade and improved PSAT math scores

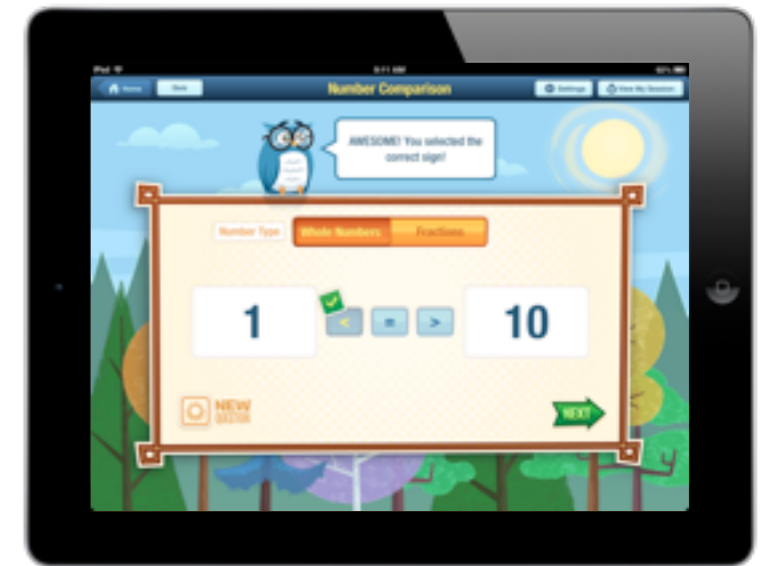
# Math Stretch Sample Activities



Ordering Numbers



Even / Odd



Number Comparison



# SAS Flash Cards

- For iPhone and iPad
- Initially released with iPad launch (April 2010)
- 85,000+ downloads



# SAS Flash Cards History



v1.1

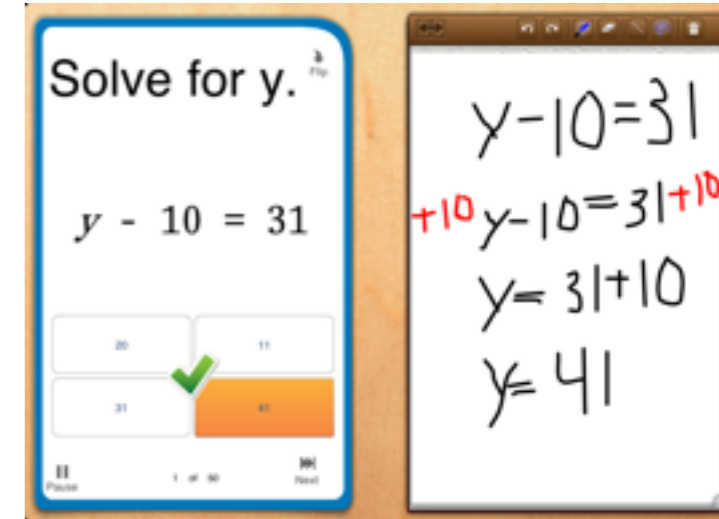


v1.2

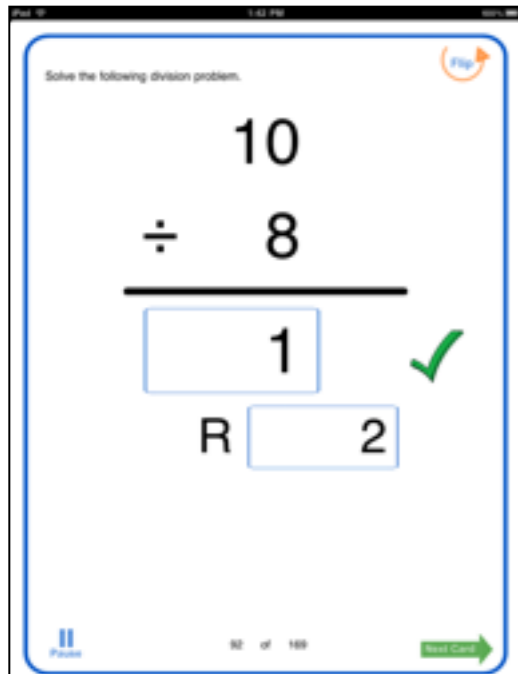
v1.3



v2.1



v2.2

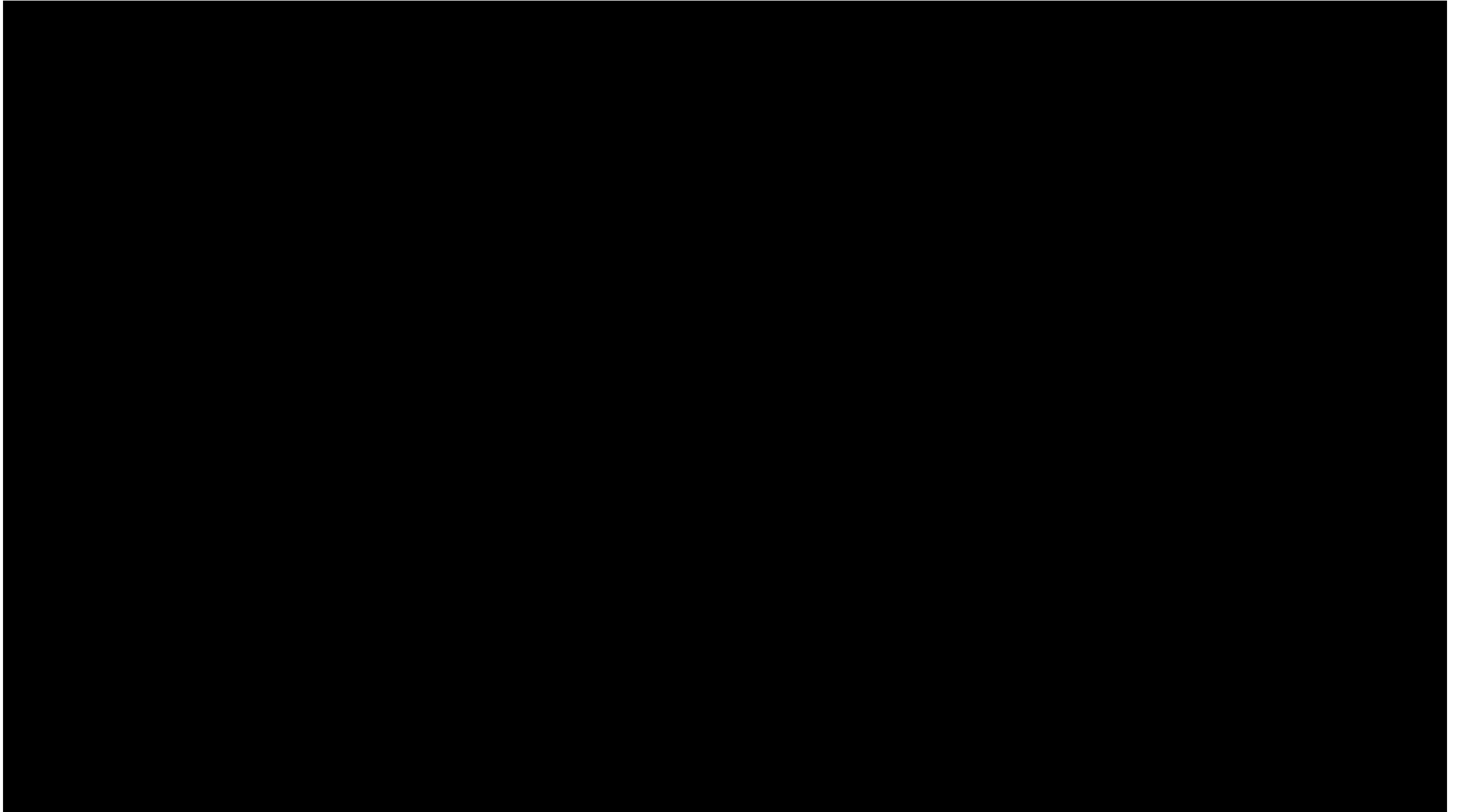




# CRPs: Customer Reported Problems

- Build your own decks (v1.2)
- Quiz mode (v1.3)
- Email results (v1.3)
- Audio (v2.1)
- Sharing (v2.2)
- Upload spreadsheets (v2.3)
- Button sizes (v2.4)
- Ratings (v2.4)
- Change titles (v2.5)
- Improve Sharing (v2.5)

# SAS Flash Cards Autoplay

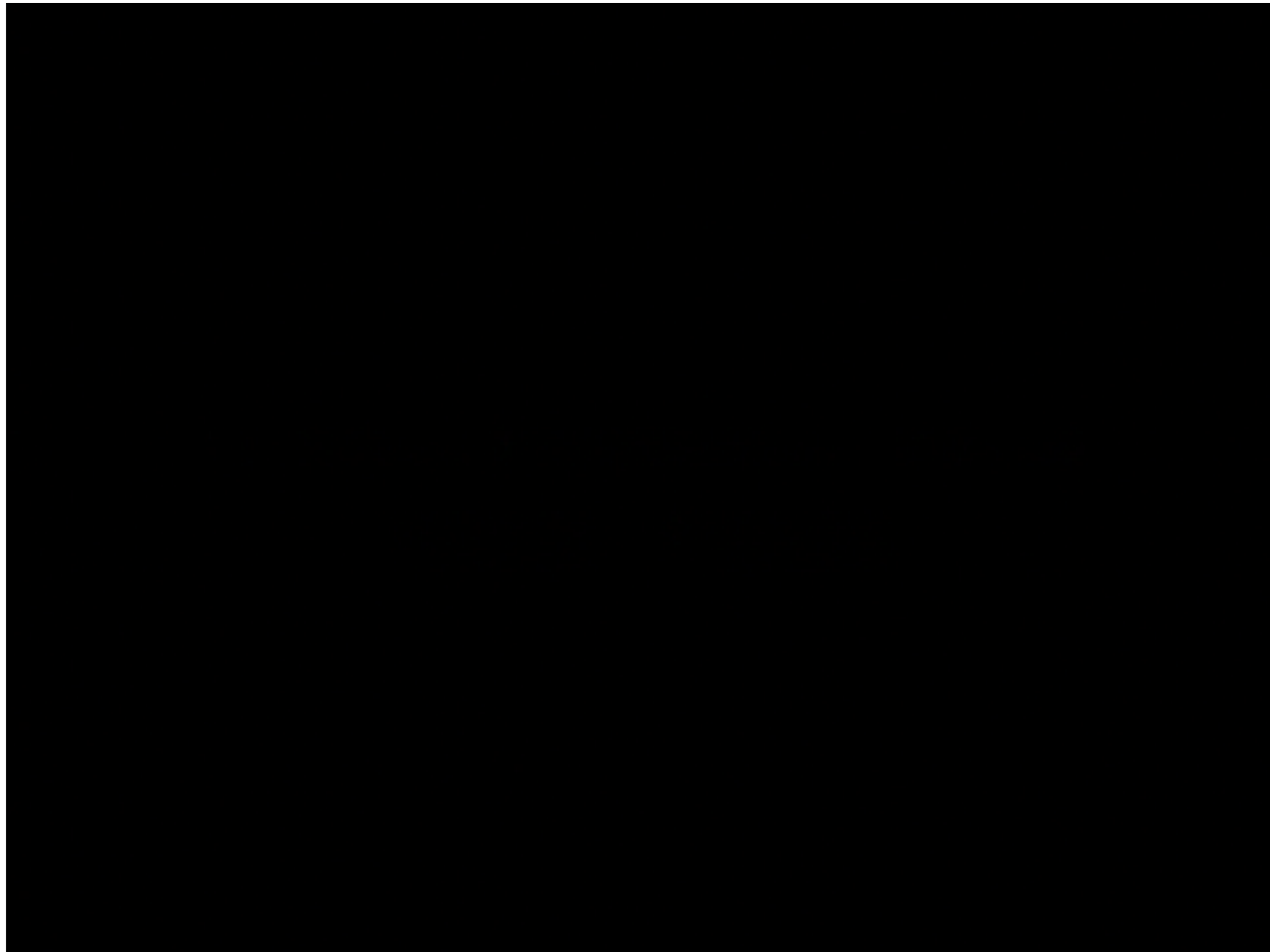


# Three Case Studies



- 1:1 iPad implementation
- Special Education
- NC School for the Blind

# 1:1 School Implementation



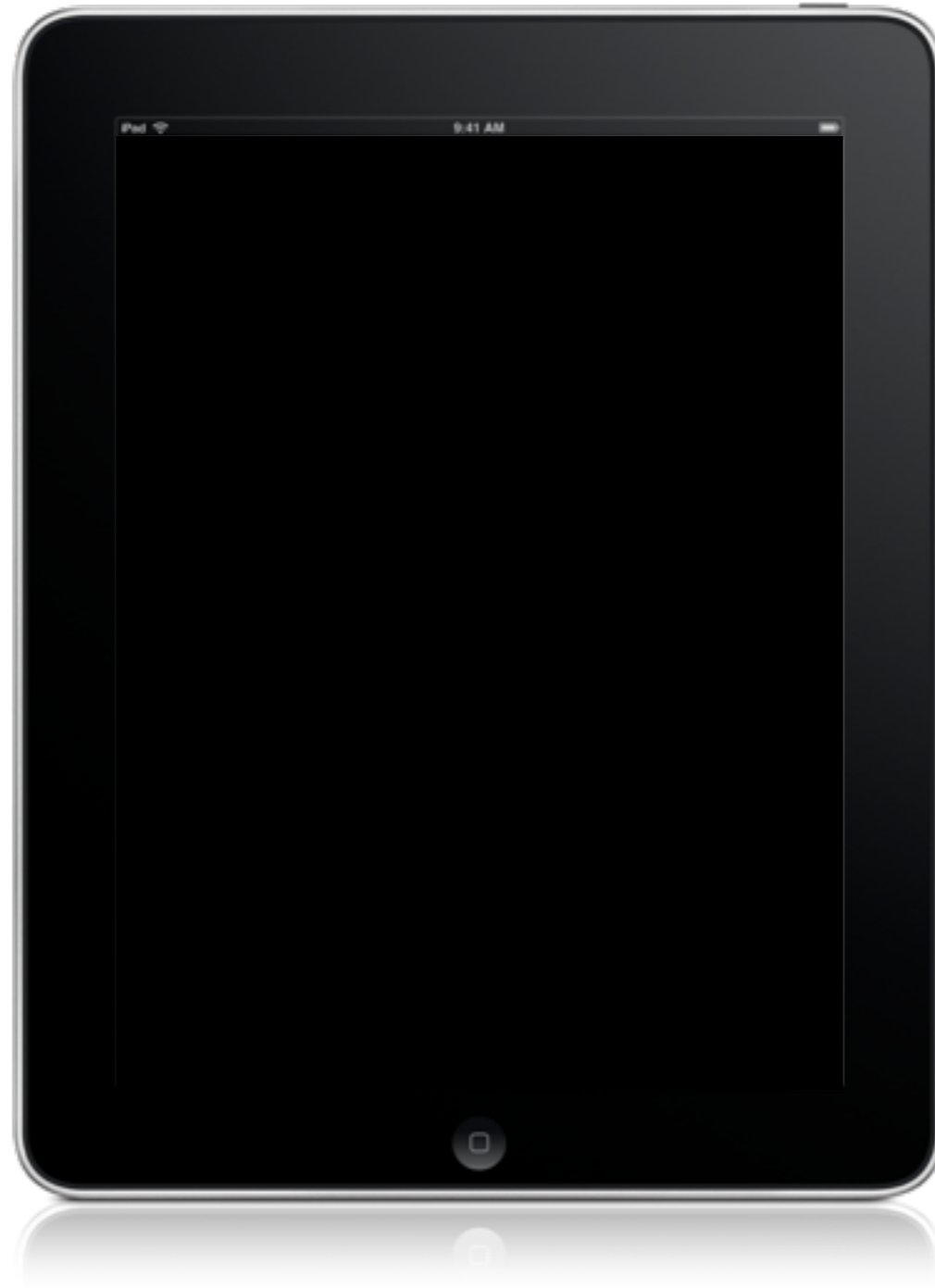
- 2 decks in top 10 downloads
- 10,000+ total downloads
- 30+ countries



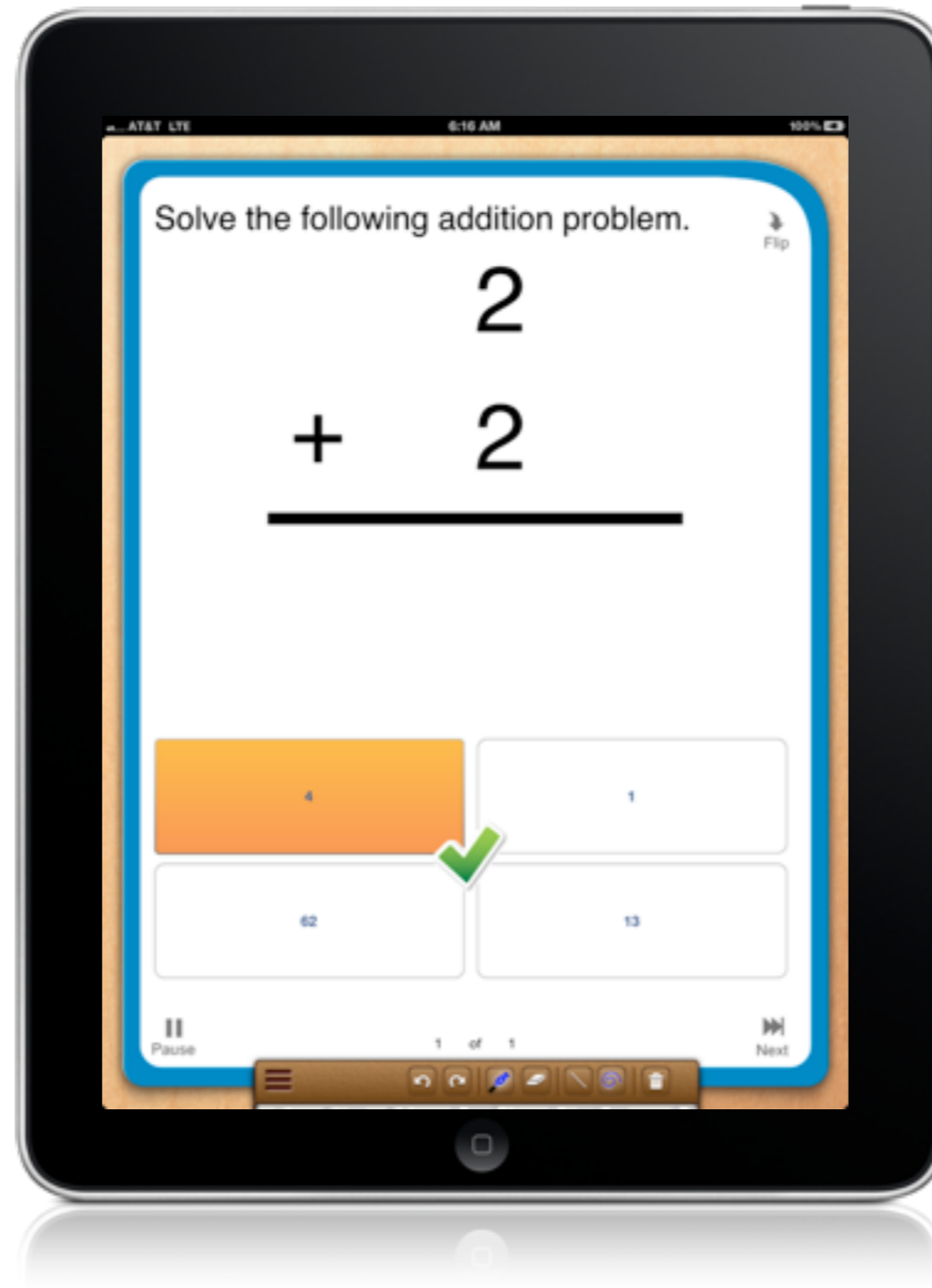
# Special Education Implementation

The image displays three overlapping tablet screens, each showing a step in a sequence. The top screen shows the text "Walk to mail room" above a photograph of a wooden door with a sign that reads "ATD MAIL AND PRINTING CENTER". The middle screen shows the text "Get cart" above a photograph of a shopping cart filled with supplies. The bottom screen shows the text "Say hello" above a photograph of a woman sitting at a desk in an office, looking at a computer monitor. Each screen has a blue border and a "Flip" button in the top right corner. The bottom screen also includes a "Pause" button and a "Next" button. The status bar at the top of each screen shows "AT&T LTE", the time "8:18 PM" or "8:19 PM", and "81% (B)" battery level.

# Accessibility Implementation



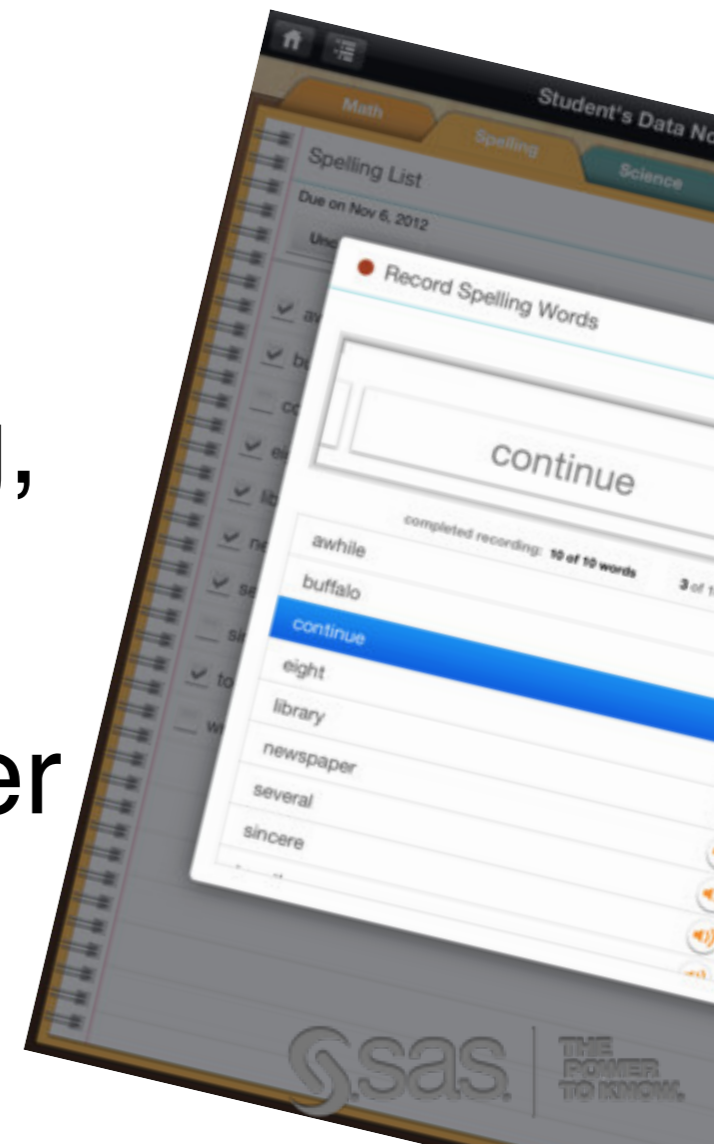
# Accessibility Implementation





# Data Notebooks

- Supports student implementation of data notebooks
- Follows Baldrige Performance Excellence Program (NIST)
- Supports SRL through goal setting, monitoring, and reflection
- JEO/GKB (IN) development partner

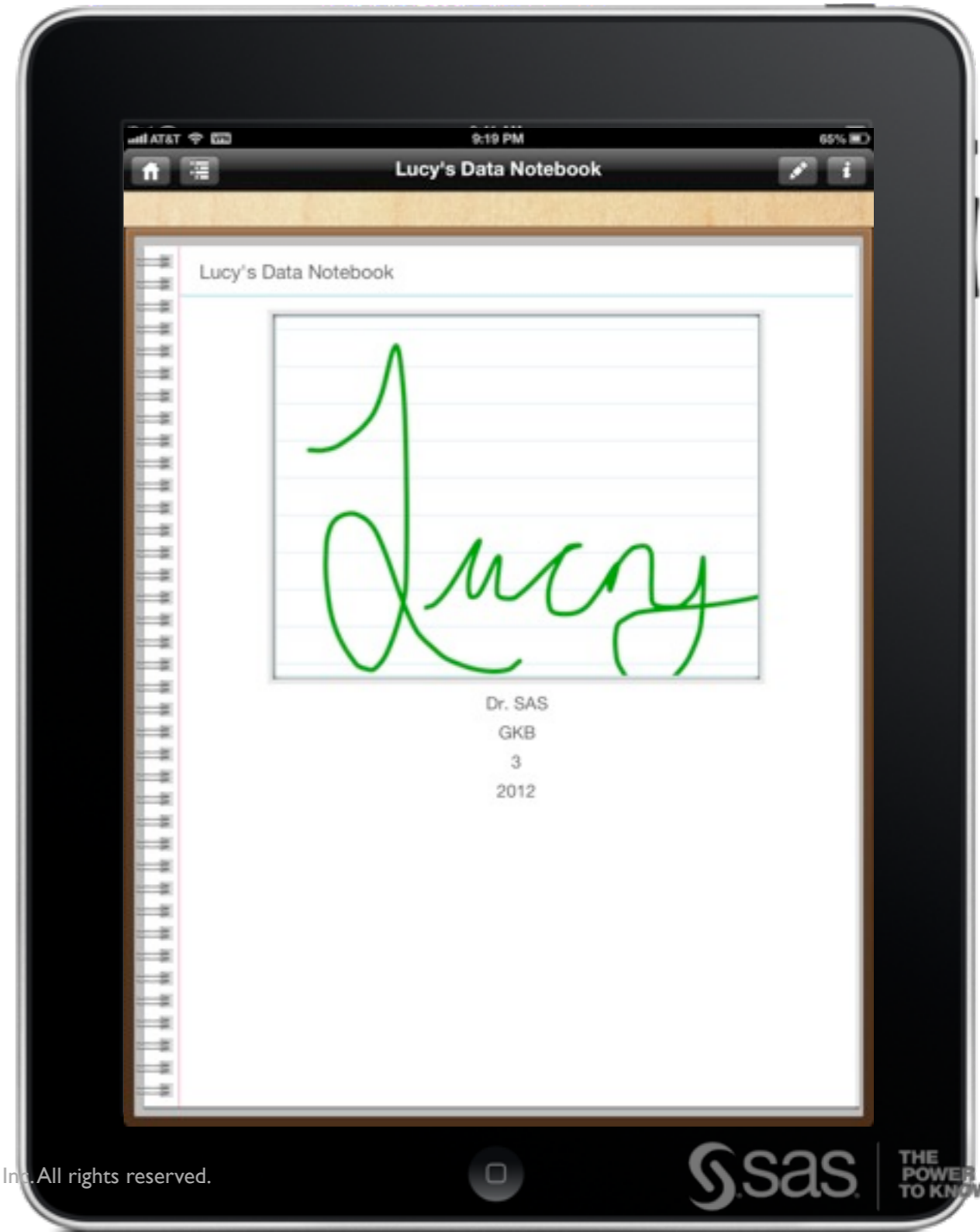
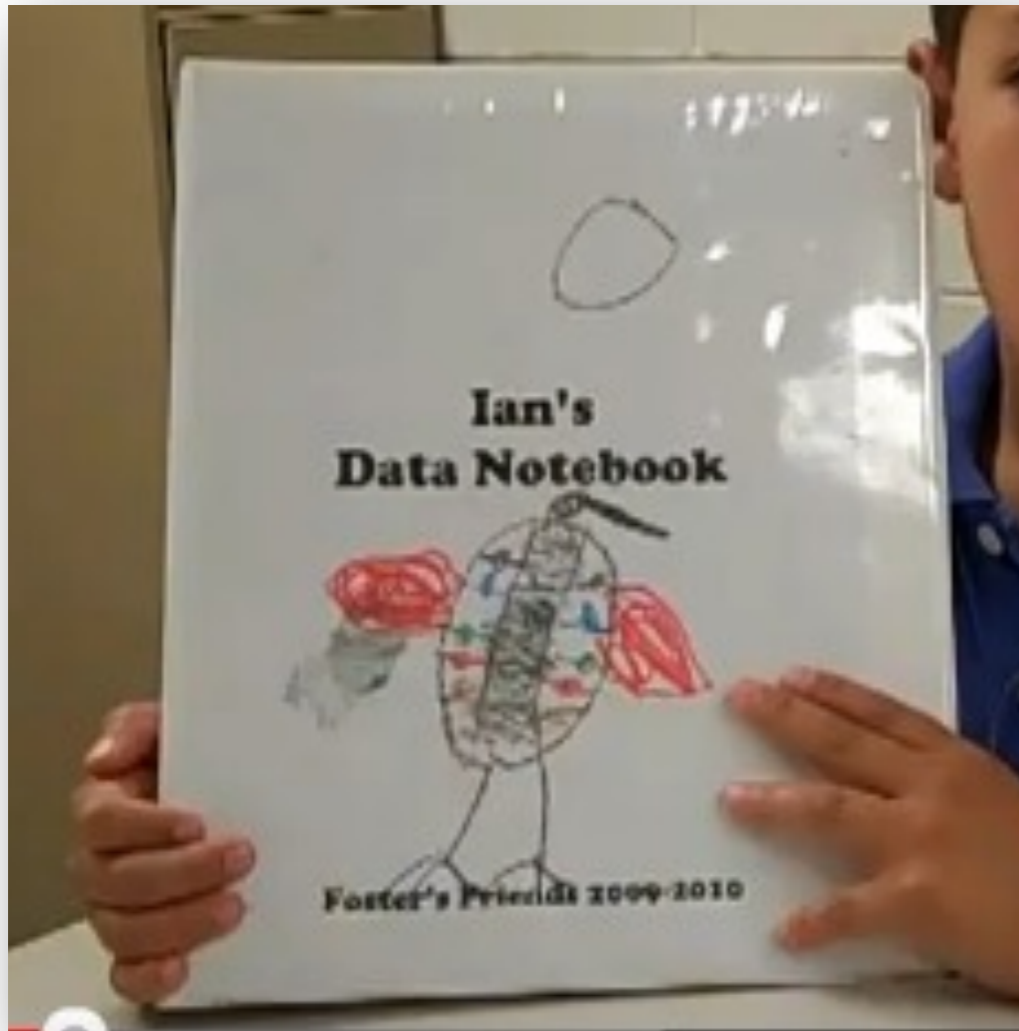




# Data Notebooks



# Cover Page



# Mission Statement

Data Notebook 2008-2009

## Mission Statements

*The best way to predict your future is to create it.*  
- Stephen Covey

Class Mission Statement

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My Personal Mission Statement

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Student Signature: \_\_\_\_\_  
Peer Signature: \_\_\_\_\_  
Parent Signature: \_\_\_\_\_  
Teacher Signature: \_\_\_\_\_

AT&T 9:19 PM 65%  
Lisa's Data Notebook

Math Reading Science

Mission Statement Updated on Aug 13, 2012

Class Mission Statement

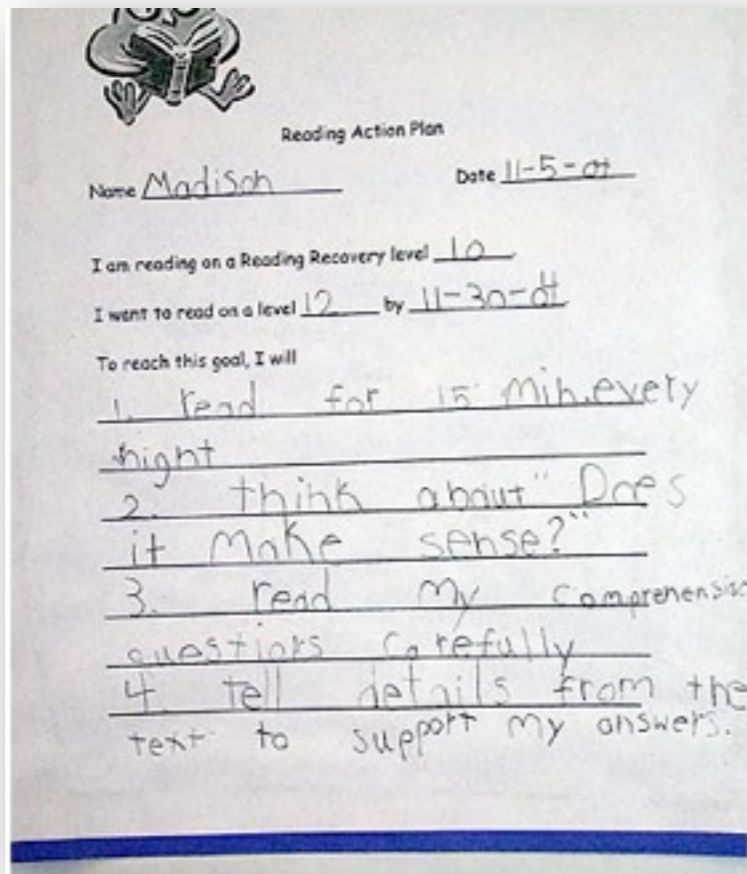
Our class mission is...


Personal Mission Statement

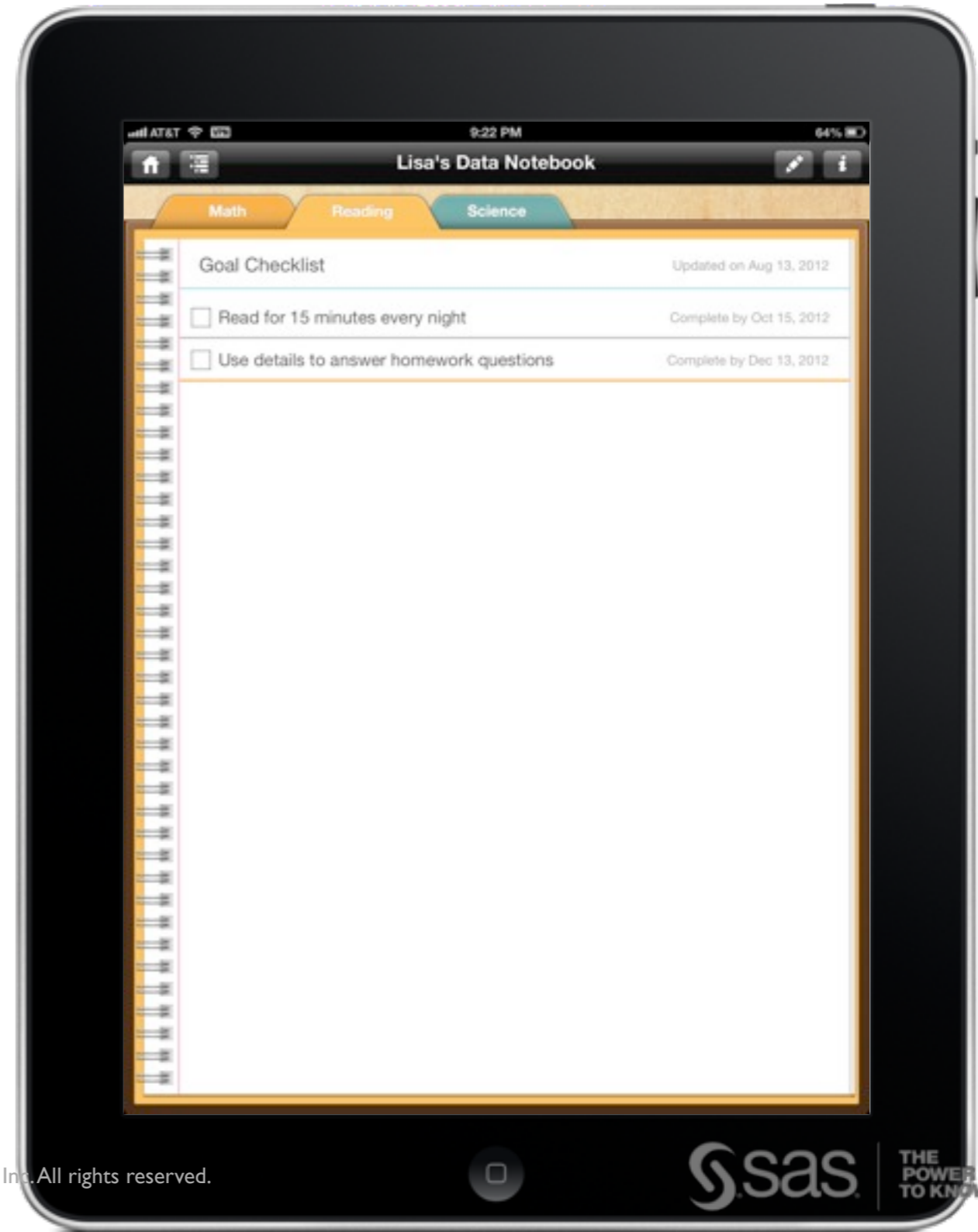
My personal mission is...

sas THE POWER TO KNOW

# Goal Statement Checklist



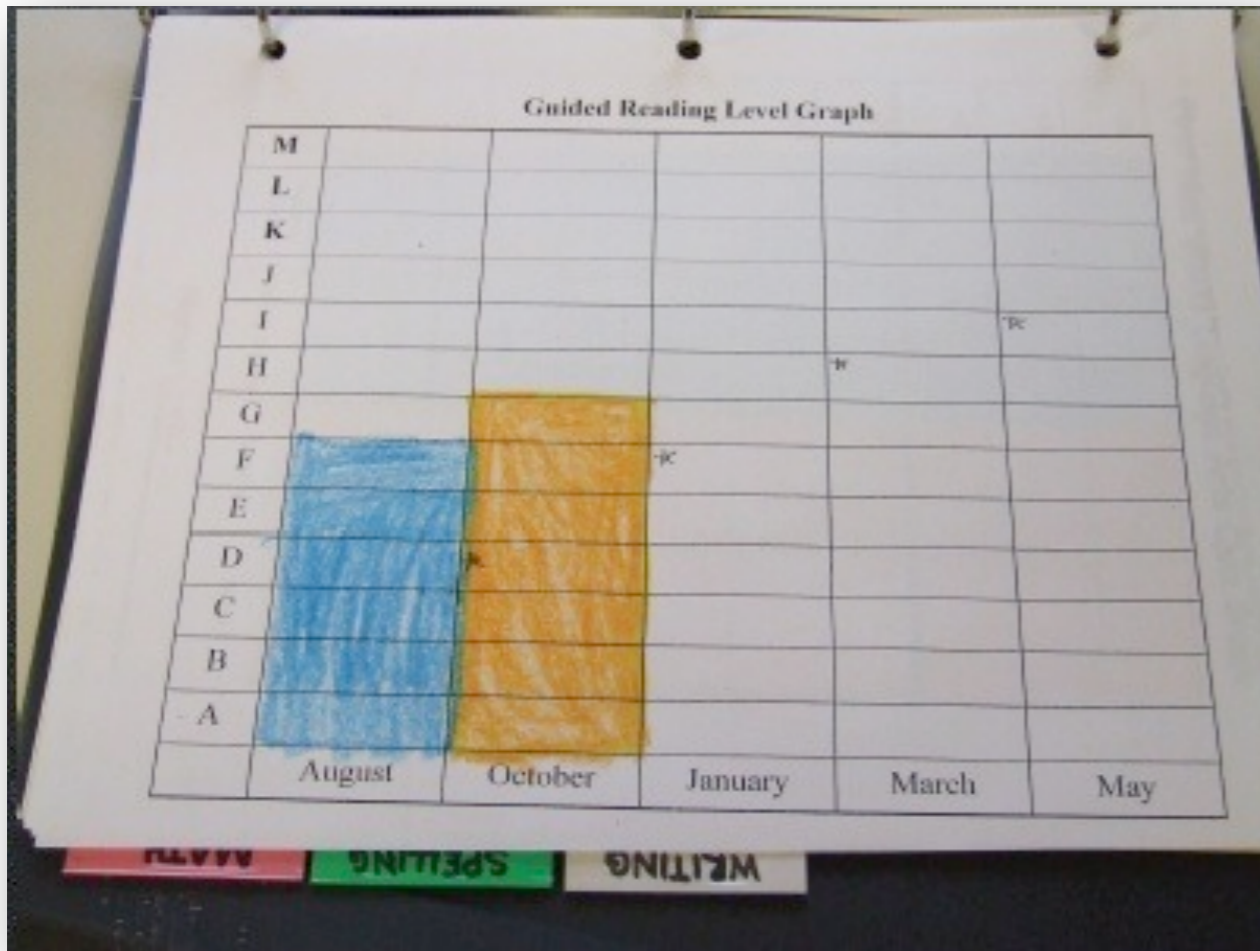
  
Reading Action Plan  
Name Madisch Date 11-5-07  
I am reading on a Reading Recovery level 10  
I want to read on a level 12 by 11-30-07  
To reach this goal, I will  
1. read for 15 min. every night  
2. think about "Does it make sense?"  
3. read my comprehension questions carefully  
4. tell details from the text to support my answers.



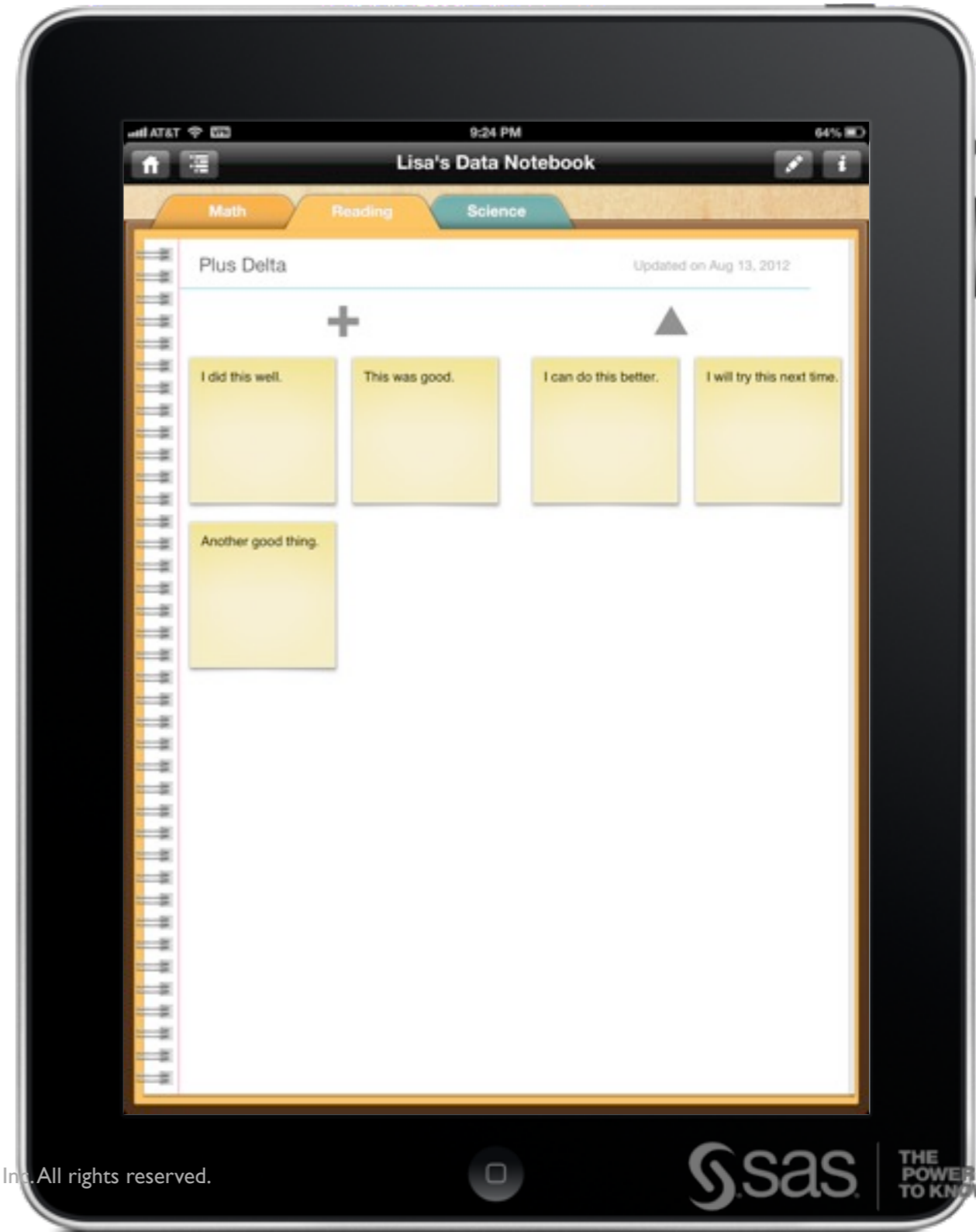
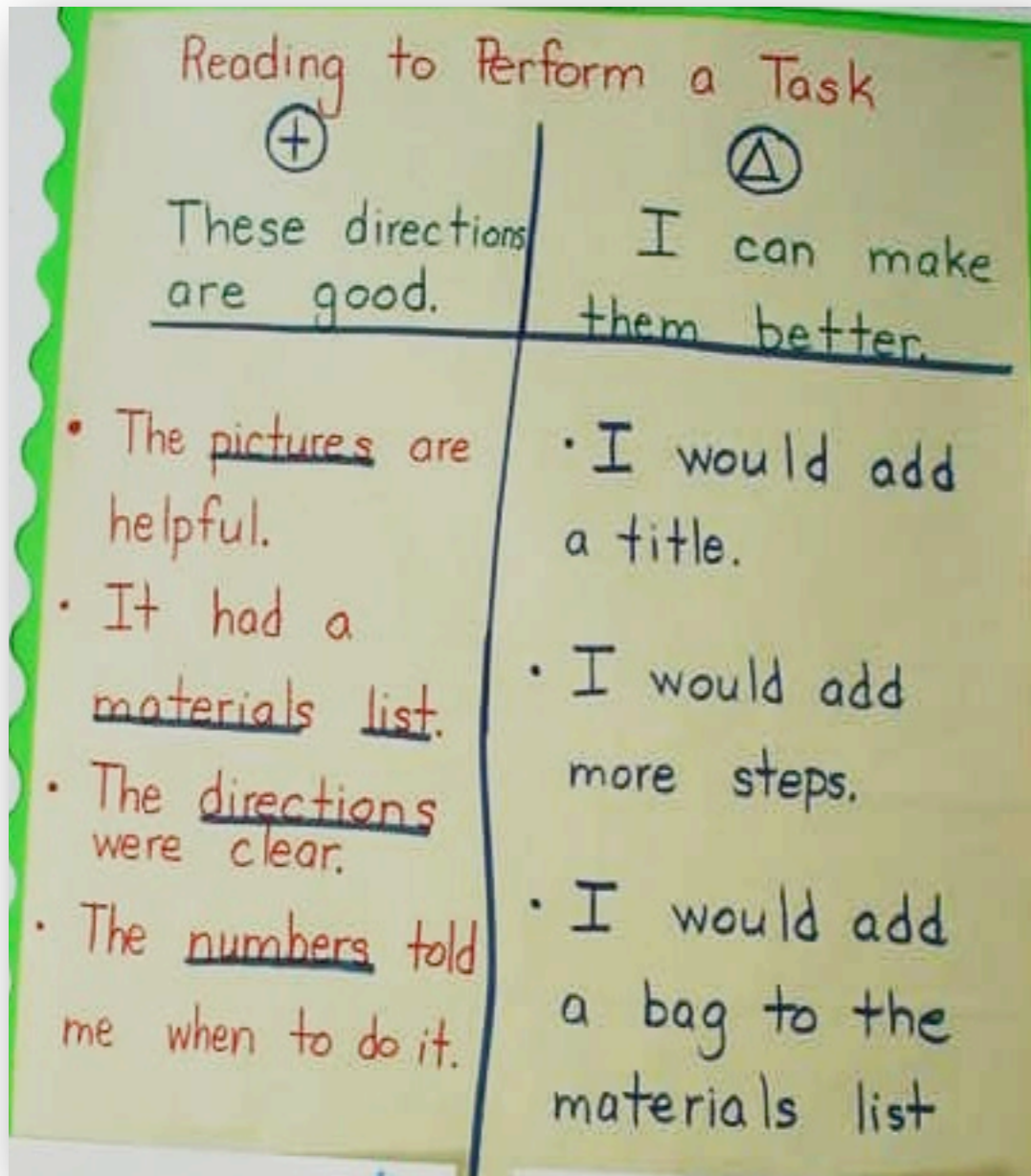
AT&T 9:22 PM 64%  
Lisa's Data Notebook  
Math Reading Science  
Goal Checklist Updated on Aug 13, 2012  
 Read for 15 minutes every night Complete by Oct 15, 2012  
 Use details to answer homework questions Complete by Dec 13, 2012  
sas THE POWER TO KNOW.



# Histogram



# Plus / Delta



# Checklist

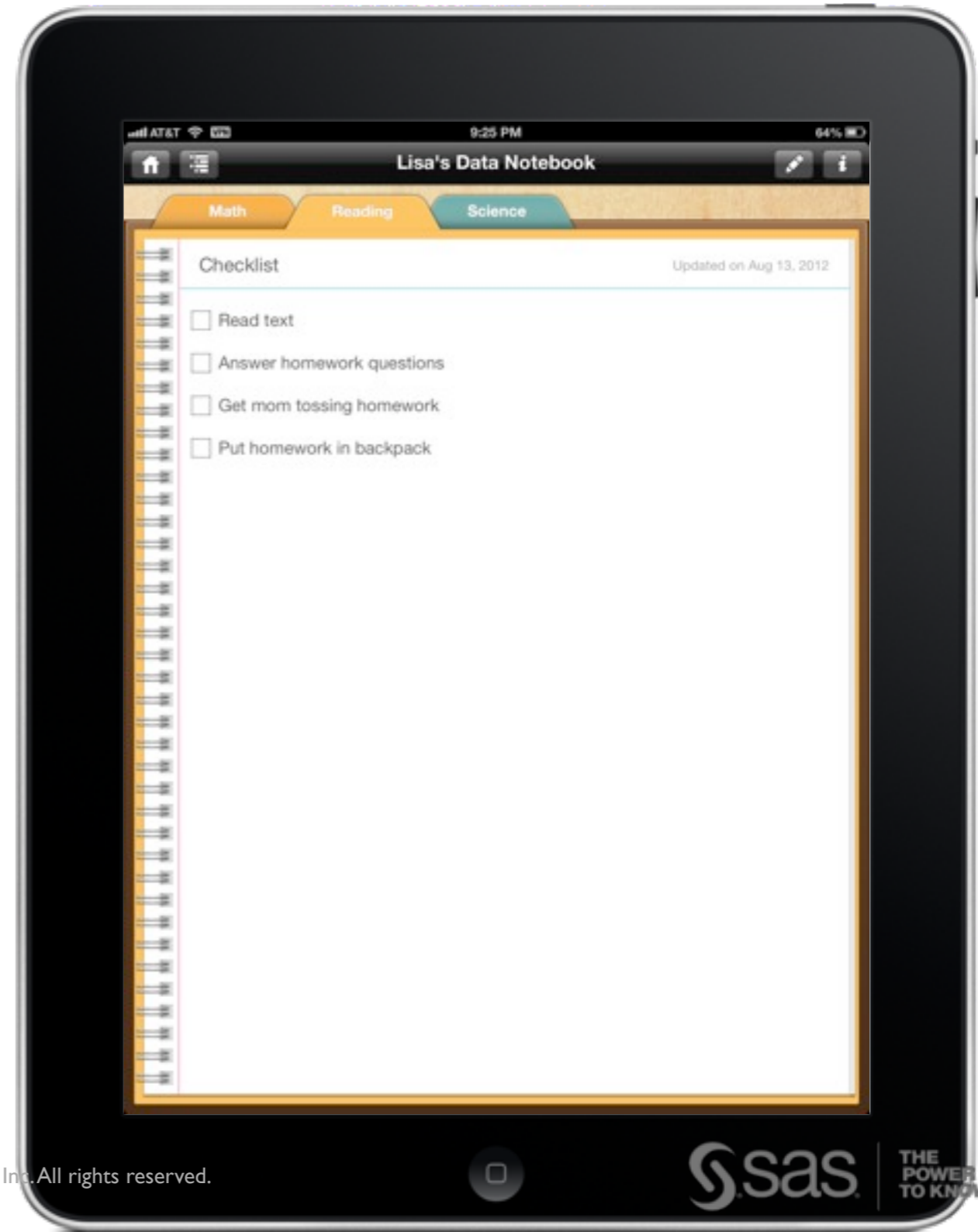
## Checklist

Purpose: The purpose of a checklist is to help keep track of progress in completing tasks.

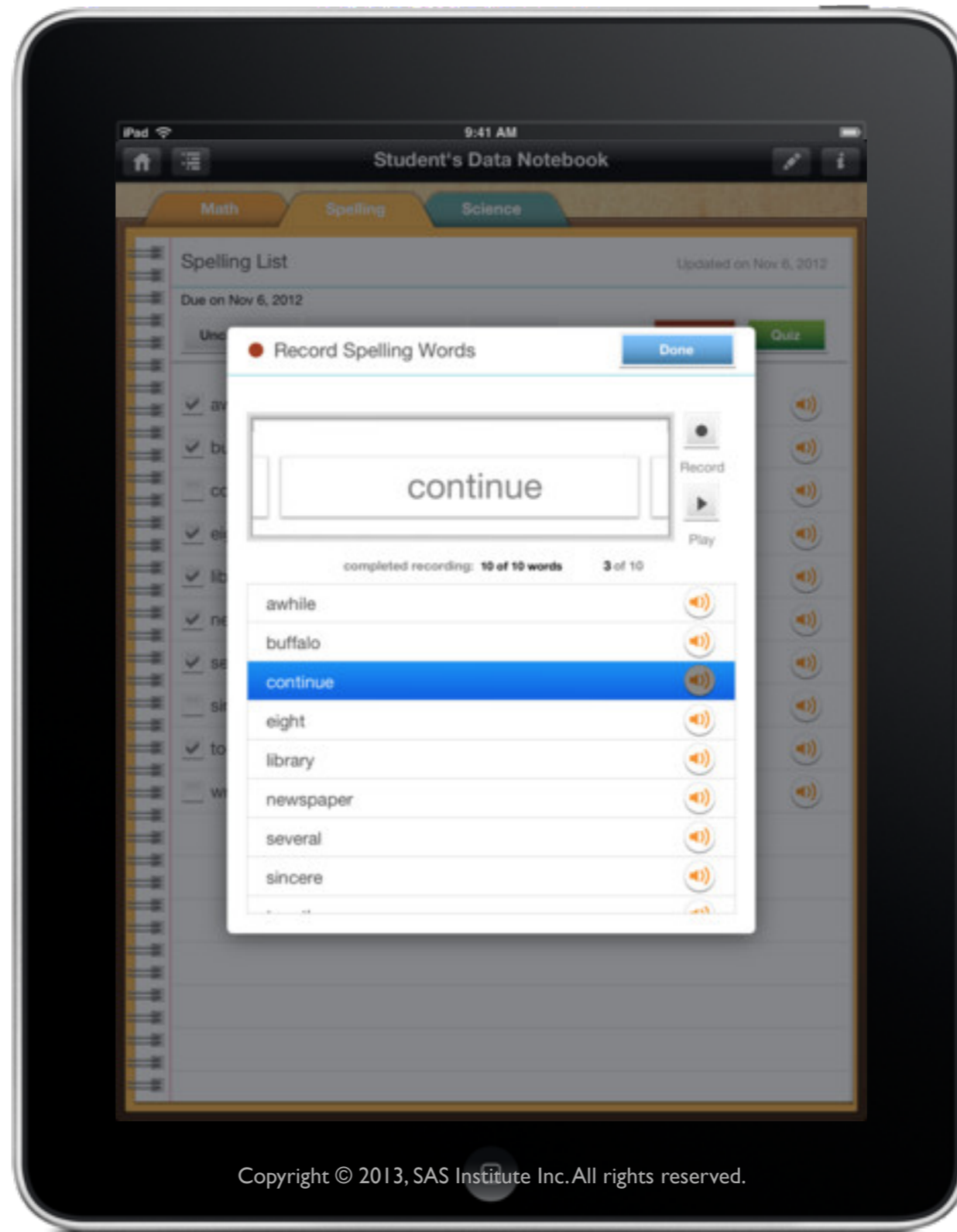
Centers	When Completed
Word Work	
Poem	
Writing	
Listening	
Game	
Word Wall	
Drama	
Free Choice	

### Work Completed with the Substitute Teacher

Subject	None	Some	All
Warm-up			
Reading work			
Math work			
Writing			
Science			
Social Studies			

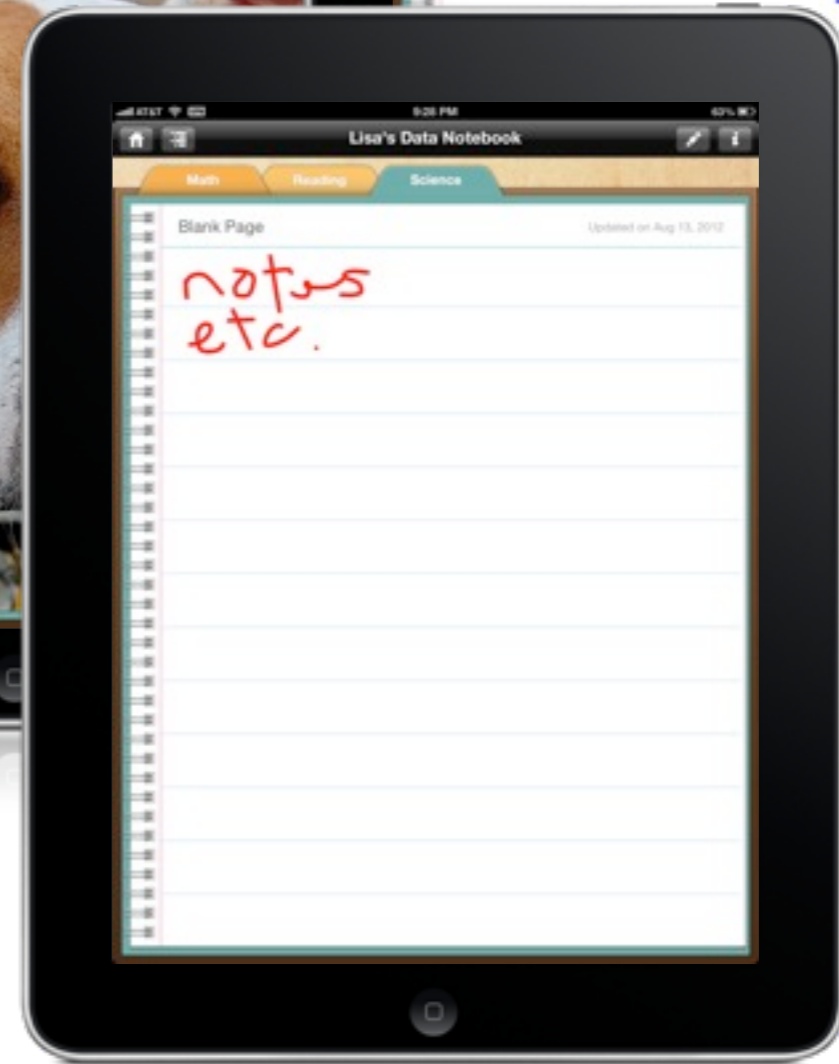
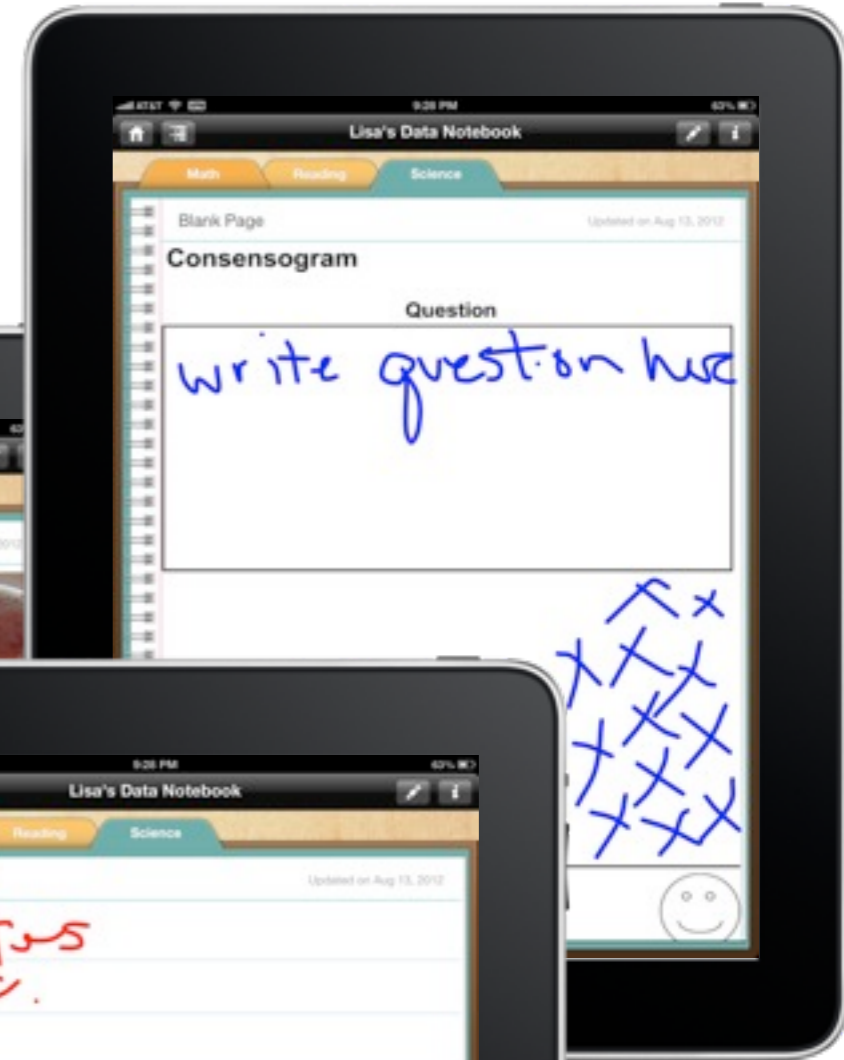
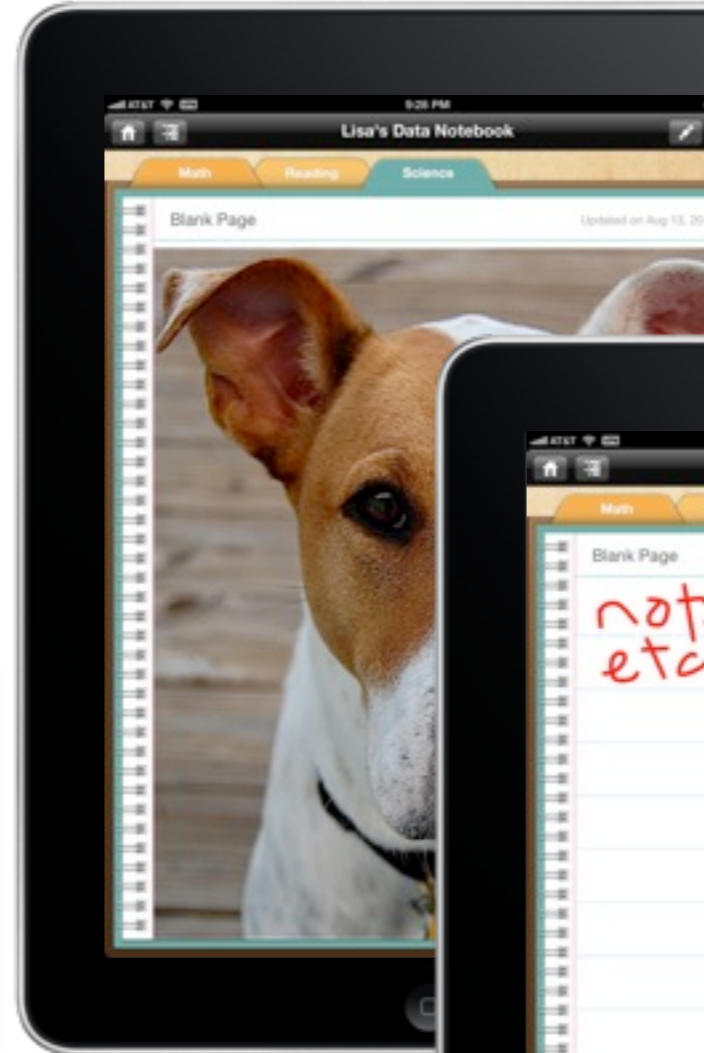


# Spelling

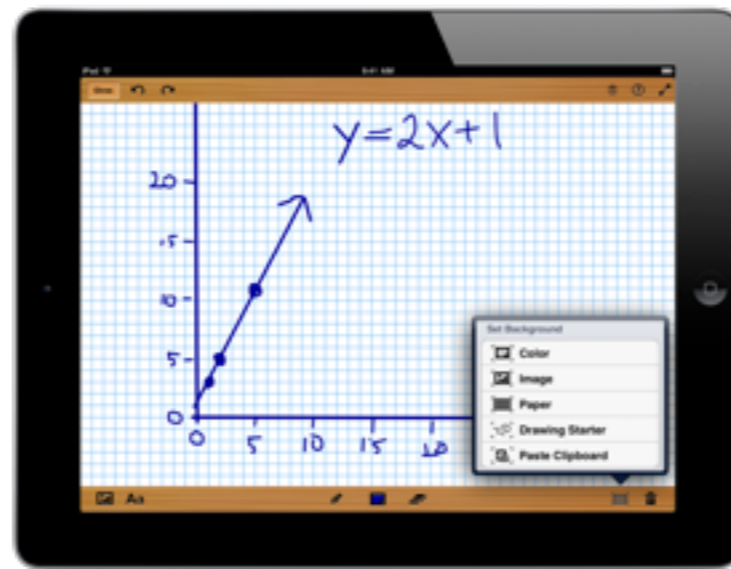




# Text & Scratch



# ... but wait, there's more





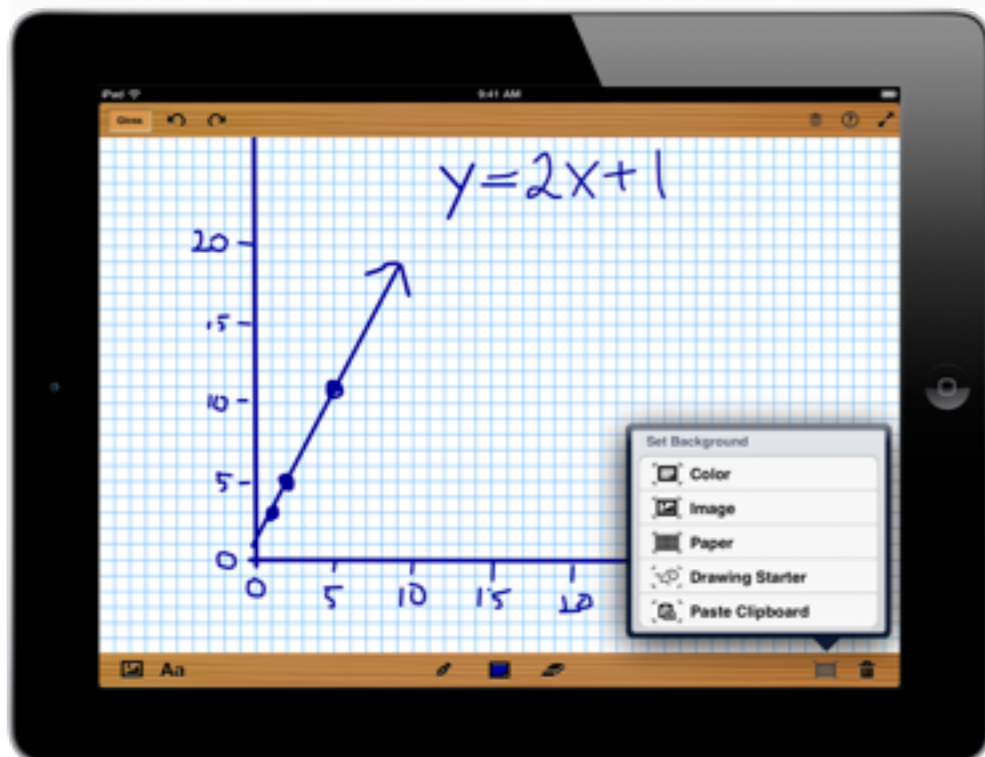
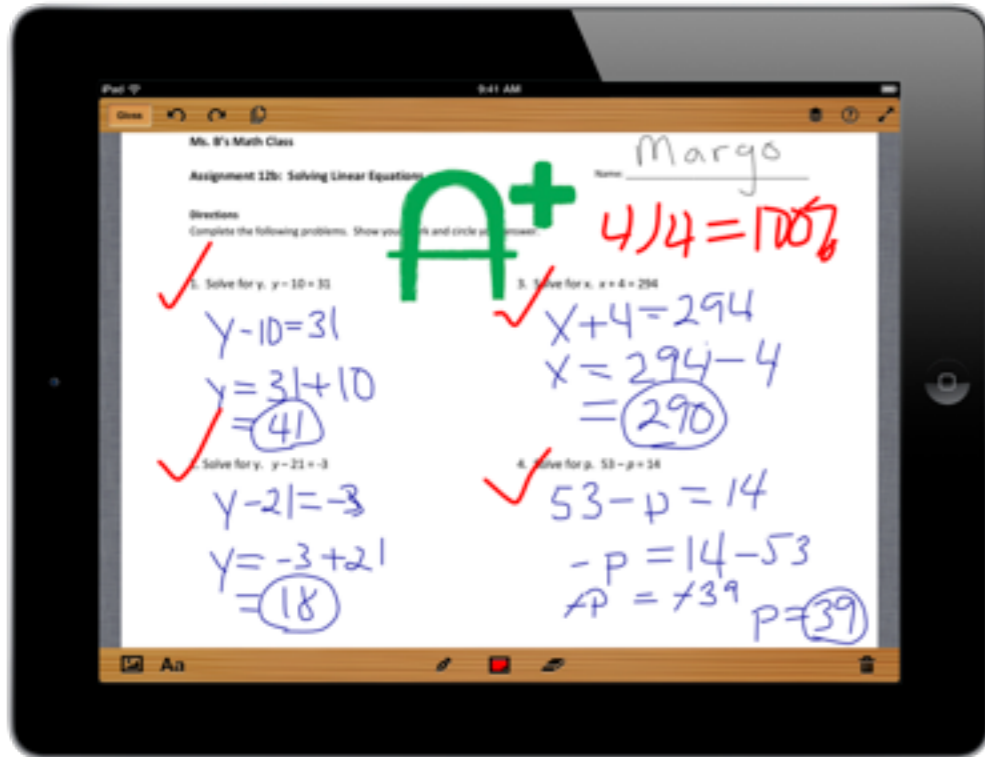
# Read Aloud



- A reading app for emergent and early readers
- Combines books with interactive exercises
- Supports development of print knowledge, letter identification, phonics, spelling, and more
- Multiple modes: Read to Me, Help Me Read, & Read by Myself



# SAS Gloss

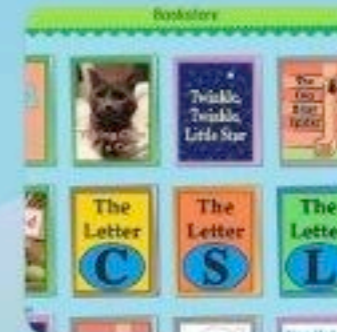
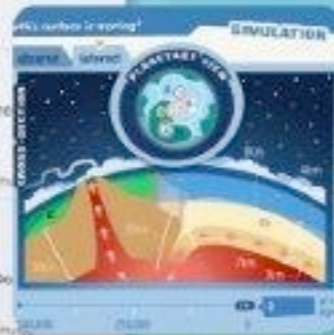




# 1,200+ no-cost interactive resources... used in elementary schools nationwide!

The screenshot shows the 'SAS Curriculum Pathways TEACHER EDITION' website. The top navigation bar includes 'Professional Development', 'Favorites', 'Standards', 'Community', 'Help', 'System Check', and 'Log Out'. A search bar is located at the top left. The main content area displays '287 matches found' and a list of 'Relevant Resources' such as 'Writing Revisor', 'Writing Draftor', 'Writing Planner', 'iContext', 'Exploring Poetry about Nature', 'Exploring Poetry about Families', 'Exploring Poetry about Sports', and 'Punctuation Rules'. A sidebar on the left offers 'Browse Resources' by subject (English Language Arts, Mathematics, Science, Social Studies, Spanish) and 'Narrow Results' by category and type. The SAS logo is visible in the bottom left corner.

## SAS® Curriculum Pathways®



# Conclusion

- SAS provides a wide range of engaging resources for math educators
- From desktop to mobile & from class to home
- No cost, no ads... just learning



**QUESTIONS**

then demos



# Math Stretch Demo & Hands On



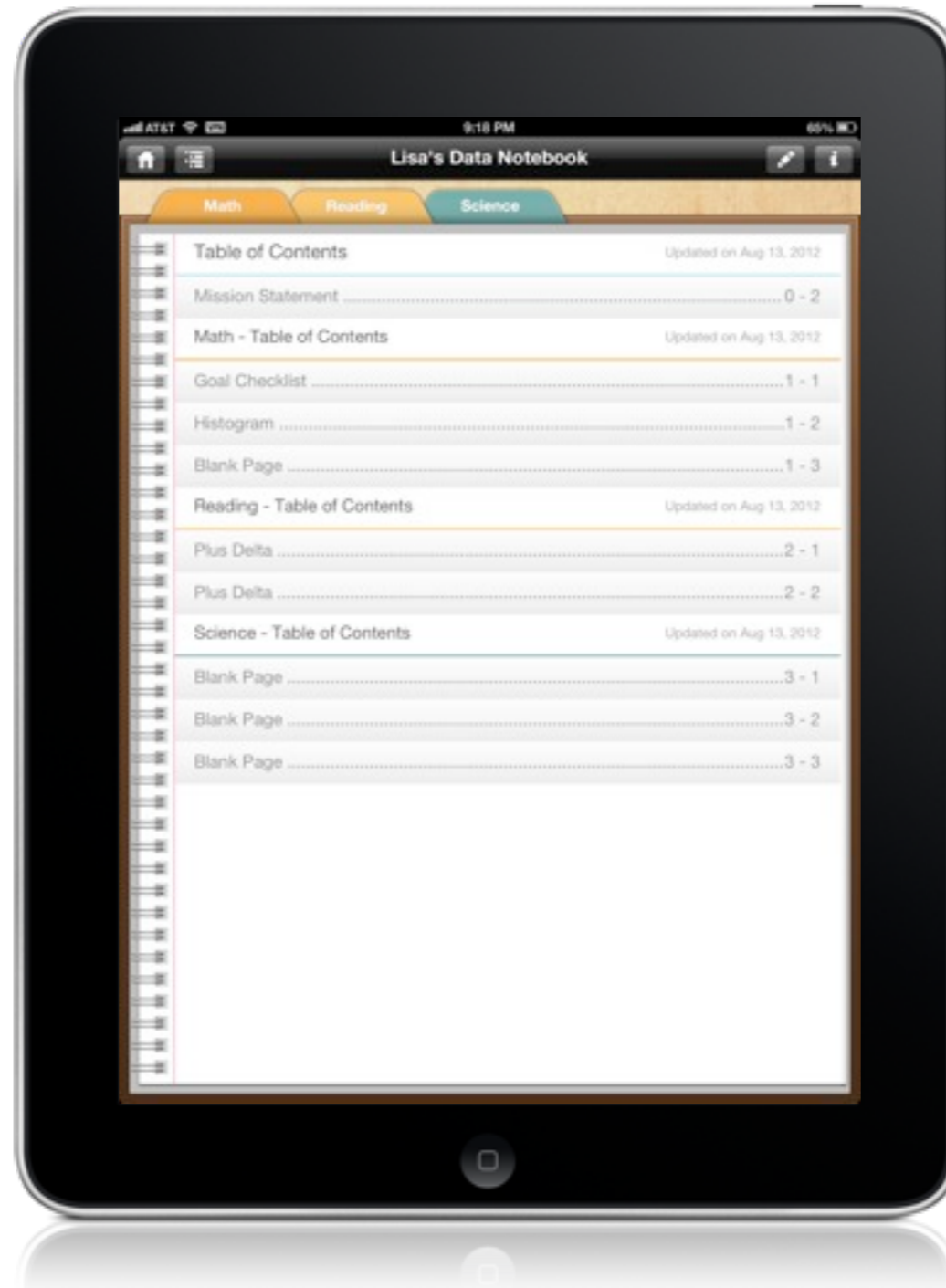
# Flash Cards Demo & Hands On



- Your turn to build a deck.



# Data Notebook Demo & Hands On



# Data Notebook Demo & Hands On

- Create a new data notebook
- Add a 'Math' section
- Add a mission statement to the main section
- In Math section
  - add a histogram with 3 test scores
  - add a Scratch page; Set background to graph paper
  - add a plus/delta page to reflect on a math unit

# Really Concluding

## Contact us

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- [ralph.moore@sas.com](mailto:ralph.moore@sas.com)

## On the Web

- [sascurriculumpathways.com](http://sascurriculumpathways.com)
- [@saseducator](#)
- [facebook.com/sascurriculumpathways](https://facebook.com/sascurriculumpathways)

# Thank you!