Overview

• A Teaching Bridge between Math and Reading
• One-on-One Interviews
• Number Talks
• Instructional Strategies
• Differentiating Instruction
When teaching reading, we want our students to:

- read fluently
- love reading
- develop good word attack skills
- comprehend what they read
- make predictions about what might come next in a story
- retell a story in their own words
- identify what’s important and what’s not as important in what they read
- experience shared reading, guided reading, independent reading, and read alouds

*About Teaching Mathematics*, p. 119–121
When teaching **math**, we want our students to:

- **read fluently** — *have fluency with basic facts*
- **love reading** — *love math*
- **develop good word attack skills** — *understand word problems*
- **comprehend what they read** — *understand concepts*
- **make predictions about what** — *interpret and use patterns*  
  *might come next in a story*
- **retell a story in their own words** — *explain in their own words*
- **identify what’s important & what’s** — *identify what’s important & not as important in what they read*  
  *not in word problems*
- **experience shared reading, guided** — *work in groups and*  
  *reading, independent reading, and*  
  *independently*  
  *read alouds*

*About Teaching Mathematics*, p. 119–121
Goldilocks & the Three Bears

• Once upon a time, there was a little girl named Goldilocks.

• Once upon a time there were three bears who lived together in a house of their own in a wood.

• Once upon a time, Goldilocks was playing in the woods near her home.

• Once upon a time, there was a little girl named Goldilocks who was very, very good, except that sometimes she forgot to do things that her mother told her to.

One-on-One Interviews

General practice for reading

Why not for math?
Read blog: http://marilynburnsmathblog.com/wordpress/we-ask-we-listen-we-learn/
Place Value Interview

• On a sheet of paper, put out 16 cubes. “Here are 16 cubes.”
• Ask the student to write the number 16.
• Gather 6 of the cubes next to the 6 in the 16. “These cubes show what the "6" in the number 16 means?”
• Ask the student: “Show with the cubes what the ‘1’ in the number 16 means?”

To see videos: http://marilynburnsmathblog.com/wordpress/place-value-how-to-assess-students-understanding/
100 − 3
100 - 98
Subtraction Interview Questions

100 – 98
120 – 50
41 – 23
50 – 12
Nomar, Grade 3

Ariana, Grade 3
Number Talks

• Develop new understanding
• Provide practice with computation
• Build flexibility & number sense
• Cement or extend ideas
• Support the mathematical practices

Using 99 + 17 for a number talk:
http://marilynburnsmathblog.com/wordpress/a-mental-math-lesson/
5 + 8 + 5
Connecting Number Talks & Writing

- What did you do first?
- What did you do second?
- Why did you do it that way?

http://rfsdmath.blogspot.com/2015/10/strategy-5.html
4 + 3 + 6
4 + 3 + 6

What I did first I took the 6 and the 4 and I add them together and I got 10. 10 + 3 = 13.

What I did second I had 3 spill over so I added the 10 and the 3 together and my answer was 13. I did it in that order because making 10s is more easy for me to make, then you could add the spill over.
\[4 + 3 + 6 = 13\]

What I did was I took away 1 from the six then I gave that to the four, since I took away the one and gave it to the four that 5+5 which equals 10. So 10+3=13. I think it was efficient because I made a ten then added to ten which is easy to do.

\[\text{Answer}\]

\[\text{is}\]

\[13\]
1. What I did first I took away from the four and add $3+3=6$

2. Second I add the $6+6=12$ so I had one more left out so I added that last one to 12 and got 13.

3. I thought it will be probably faster by doing $6+6=12$ so added 1 and that $=13$ and got that answer.
4 + 3 + 6 = 13

First I stared from the six and split the six into two 3's. So 3 + 3 = 6 then I counted by three in my head so 3 - 6 then I added the 3 and it will be 3 - 6 - 9 the I took the 3 away from the 4 and then it will come to 3 - 6 - 9 = 12 and 12 + 1 = 13 the strategy I used was repeated addition I did it in that order because I know how by threes really good.
I found the answer because I counted up in my head.
Our teaching goal is not to cover the Standards . . .
Our teaching goal is not to cover the Standards . . . but to uncover them.
http://marilynburnsmathblog.com/wordpress/

@mburnsmath

https://mathreasoninginventory.com/

www.mathsolutions.com