### Math Mindset

This is not a test! It is an opinion survey about beliefs and goals honest opinion.

<table>
<thead>
<tr>
<th></th>
<th>Disagree a lot</th>
<th>Disagree a little</th>
<th>Agree a little</th>
<th>Agree a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No matter how much intelligence you have, you can always change it a lot.</td>
<td>![Emoji]</td>
<td>![Emoji]</td>
<td>![Emoji]</td>
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<tr>
<td>2. You can learn new things in math, but you cannot really change your basic level of math intelligence</td>
<td>![Emoji]</td>
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<tr>
<td>3. I like my math work best when it makes me think hard</td>
<td>![Emoji]</td>
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<tr>
<td>4. I like my math work best when I can do it really well without too much trouble</td>
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<tr>
<td>5. I like math work that I’ll learn from even if I make a lot of mistakes</td>
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<tr>
<td>6. I like my math work best when I can do it perfectly without any mistakes</td>
<td>![Emoji]</td>
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<tr>
<td>7. When something in math is hard, it just makes me want to work more on it not less</td>
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<td>![Emoji]</td>
<td>![Emoji]</td>
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<tr>
<td>8. To tell the truth, when I have to work hard in math, it makes me feel as though I’m not very smart.</td>
<td>![Emoji]</td>
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</tbody>
</table>
Bulletin Board Idea

Change Your Words
Change Your Mindset!

Fixed
- I give up
- I can't do math
- I made a mistake
- It's good enough
- I'm not good at this.
- I'll never be as smart as him.
- This is too hard.
- I can't make this any better.
- I'm awesome at this.

Growth
- Mistakes help me improve.
- Is this really my best work?
- What am I missing?
- I'm going to figure out what she did and try it!
- This may take some time and effort.
- I can always improve. I'll keep trying.
- I'm right on track!
Hallway Display Idea

Change Your Words

Change Your Mindset!
We Can Grow Our Brains

We work really hard
We can make mistakes
We try new things
We give our all
We grow our brains

We work really hard
We do all this work
To make our brains grow bigger
We can learn to do anything
What do you know about your brain?

1. __________________________________________
2. __________________________________________
3. __________________________________________
4. __________________________________________
5. __________________________________________
6. __________________________________________
Mistakes are OK!

Draw about a time you made a mistake and tell about how you learned from it.
I Can’t… Yet!

I Can

I Can’t

I Can’t

I Can’t… Yet!
This is too hard.
I made a mistake
I'm so smart.
I just can’t do math.
We can grow our brains!

By. ____________________________
Henry fell off of his bike. What should he do?
Sally came to a tricky word in her book. What should she do?
Ryan made a mistake at his soccer game. What should he do?
Mary was invited to a swim party but she doesn’t know how to swim. What should she do?
Jerry wanted to be the first one done so he rushed through his work. What advice would you give him?
Sarah was practicing how to jump rope. She just couldn't get a rhythm! She began to cry. What advice should we give Sarah?
My Brain Book!

By. ____________
Here's what I know about my brain!

1. __________________________
   ______________________________________
   ______________________________________

2. __________________________
   ______________________________________
   ______________________________________

3. __________________________
   ______________________________________
   ______________________________________

4. __________________________
   ______________________________________
   ______________________________________
A Picture of My Brain!
Label what each part is!
# Brain Growth Tracker

**My brain’s strength(s):**

**My brain’s area(s) for growth:**

---

**What am I doing to help my brain grow?**

<table>
<thead>
<tr>
<th>Day/Week</th>
<th>Actions and Activities</th>
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<tbody>
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</tbody>
</table>
Mistakes are A OK!

Describe a time when you made a mistake. Tell how you learned from that mistake. Did your brain grow? Tell how.
How Can YOU Grow A...

Social / Emotional Brain?

____________________________

____________________________

____________________________

____________________________

Academic Brain?

____________________________

____________________________

____________________________

____________________________

Physical Brain?

____________________________

____________________________

____________________________

____________________________

Day 3
What Did The “Regular” Girl Learn from The Most Magnificent Thing?

Tell What You Have Learned This Week About Your Brain

1. ______________________________________________
2. ______________________________________________
3. ______________________________________________
4. ______________________________________________
# Fostering Growth Mindsets for Mathematics

Student Reflection and Discussion Prompts
Developed by Alyssa Murphy & Michelle Painter,
Mequon-Thiensville School District, Mequon, Wisconsin
Spring 2016

<table>
<thead>
<tr>
<th>Book</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Perfectly Messed Up Story</td>
<td>Patrick McDonnell</td>
</tr>
<tr>
<td>BeautifulOops</td>
<td>Barney Saltzberg</td>
</tr>
<tr>
<td>Everyone Can Learn to Ride a Bicycle</td>
<td>Chris Raschka</td>
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<tr>
<td>Flight School</td>
<td>Lita Judge</td>
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<tr>
<td>How to Catch a Star</td>
<td>Oliver Jeffers</td>
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<td>Ish</td>
<td>Peter H. Reynolds</td>
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<tr>
<td>It’s OK to Make Mistakes</td>
<td>Todd Parr</td>
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<tr>
<td>Ryan the Spy and The Inventor’s Secret (book 2)</td>
<td>Jason Rago</td>
</tr>
<tr>
<td>Ryan the Spy and The Superhero Secret (book 1)</td>
<td>Jason Rago</td>
</tr>
<tr>
<td>Ryan the Spy and The Super Spy Squad Secret (book 4)</td>
<td>Jason Rago</td>
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<tr>
<td>Ryan the Spy and The Treasure Hunter’s Secret (book 3)</td>
<td>Jason Rago</td>
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<tr>
<td>Sink or Swim</td>
<td>Valerie Coulman</td>
</tr>
<tr>
<td>Sky Color</td>
<td>Peter H. Reynolds</td>
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<tr>
<td>Someday</td>
<td>Eileen Spinelli</td>
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<tr>
<td>Stuck</td>
<td>Oliver Jeffers</td>
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<tr>
<td>The Dot</td>
<td>Peter H. Reynolds</td>
</tr>
<tr>
<td>The Girl Who Never Made Mistakes</td>
<td>Mark Pett and Gary Rubinstein</td>
</tr>
<tr>
<td>The Most Magnificent Thing</td>
<td>Ashley Spires</td>
</tr>
<tr>
<td>What Do You Do With an Idea?</td>
<td>Kobi Yamada</td>
</tr>
<tr>
<td>Your Fantastic Elastic Brain</td>
<td>JoAnn Deak and Sarah Ackerley</td>
</tr>
</tbody>
</table>
Name_________________________

How does Louie react in the beginning of the story?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What does he realize at the end of the story?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

How can we use what Louie learned to help us when things get messed up, or we make a mistake?

______________________________________________________________________
______________________________________________________________________
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______________________________________________________________________
______________________________________________________________________
Name______________________________

Turn the “oops” below into a BEAUTIFUL OOPS.
Think about what the little girl went though to ride her bicycle. Was she able to ride it right away? Did she give up?

Now think about something that you want to do, but you don’t know how to do it yet. Draw a picture of that in the box below.

Draw a picture of what it might look like as you are putting in a lot of effort to learn how to do what you want to learn to do.

Now draw a picture of what it might look like as you have accomplished your goal of learning something new.
Name__________________________

How does the teacher in Flight School show a fixed mindset?
___________________________________________________
___________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

In the book, Penguin isn't able to fly on his own, but he IS able to fly. Why is that important, and what can we learn from that?
______________________________________________________________________
______________________________________________________________________
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In the box below, draw a picture of you and a friend helping each other reach a goal.
Give an example from the story on how the boy shows a growth mindset:

_______________________________________________________________________
_______________________________________________________________________
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At the end of the book the boy gets a star, but it’s not exactly the star he set out to get. How can what happened with the boy help us keep reaching for our goals?

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What is a goal that you have right now, and what can you do to work towards that goal?

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_______________________________________________________________________
Name_________________________

How does Leon hurt Ramon?
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_______________________________________________________________________
_______________________________________________________________________

What does Ramon do then?  _______________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

How does Marisol help Ramon have a growth mindset?  ______________________________
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_______________________________________________________________________
_______________________________________________________________________
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_______________________________________________________________________

What can you do to be more like Marisol? _______________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
Name___________________________

This is how I feel when I make a mistake...

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Here are some words that I can tell myself if I make a mistake...
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_____________________________________________________________________
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1. How does Lewis react to the way his invention worked?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Why do you think he reacts this way?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. How did the adults react?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. An adult says, “From failure you learn, from success...not so much.” What does that mean?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5. How can that phrase help us when we fail at something?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Name_________________________

Which inventor had a growth mindset, Inventor Happy or Inventor Serious? ___________________________________________

How do you know? ___________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

The book says, “Mistakes are like helpers. They show you what doesn’t work so you can learn and get one step closer to the answer.”

What does this mean to you?
_______________________________________________________________________
_______________________________________________________________________
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So the next time you make a mistake, what can you say to yourself?
_______________________________________________________________________
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Name__________________________

What is the Superhero’s Secret?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

The book says, “What is easy now used to be hard. It only became easy because you practiced.” What is something that is easy for you now, but used to be hard?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

What is something right now that you think is really hard? ___________________________

_______________________________________________________________________

_______________________________________________________________________

Draw a picture of what you can do to make it become easier.
Name____________________________________

What is the Super Spy Squad Secret? _______________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

In the box below, draw a picture of yourself working to get better at something.

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

Why do you think it is more important to focus on improving at something than focusing on the end result?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________
Name__________________________

What word is repeated over and over again in this story? Why?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

Captain James uses his sword to write “Believe to Succeed” in the sand. What does he mean by this?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

Look at the quote on the right by Henry Ford. What do you think this means?

Whether you think you can or think you can’t - you are right.

- Henry Ford
Name________________________

Who has a growth mindset in the book, Ralph or Morris?
How do you know?
________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

In the box below, draw a picture of you practicing something you don't know how to do...yet!
Name___________________________

How does Marisol show a growth mindset?
_______________________________________________
_______________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________

In the box below, draw a picture of the sun, but pretend you don’t have anything yellow to use. Or maybe you want to draw the water, but you have no blue. What about the grass, but you have no green. Be creative…how will you solve your problem?
Name_________________________

What is something you want to be someday? In the box below, draw a picture of yourself doing just that!

What can you do TODAY to help you reach your “someday” goal?

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_______________________________________________________________________
How does Floyd show determination in this book?

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Look at the quote to the left. How can this quote, and what Floyd did in Stuck help you when something doesn’t work the way you want it to work?

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_______________________________________________________________________
Name_________________________

Describe a time that you felt like Vashti.
_______________________________________________________________________
_______________________________________________________________________
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_______________________________________________________________________

How did Vashti’s teacher help her have a growth mindset?
_______________________________________________________________________
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The next time you feel like you can't do something, what can you say to yourself?
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
_______________________________________________________________________
Why do you think Beatrice Bottomwell is so afraid to make a mistake?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

Have you ever felt like that?  ____________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

What did Beatrice learn?  ________________________________________________

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

How can the lesson Beatrice learned help you when you make a mistake?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________
Stop after reading after the girl smashes her finger.

What advice can you give the girl in the story?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What does the girl in the story learn about persevering?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

______________________________________________________________________
How did the main character of the story show a growth mindset?

_______________________________________________________________________

_______________________________________________________________________

_______________________________________________________________________

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_______________________________________________________________________

The author says, “And then, I realized what you do with an idea… You change the world.” What does that mean to you?

_______________________________________________________________________

_______________________________________________________________________

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