Self-Regulated Learning: 

Teaching students to understand and drive their learning

Guide for Classroom Teachers and Advisors
About Mindprint Learning

Mindprint offers online solutions for schools, classrooms, tutoring centers, clinicians and parents.

The Mindprint solution is designed to meet every child’s unique learning needs with the Mindprint Assessment, Unique Learning Profile and Toolbox. The Mindprint Assessment was developed by neuroscientists at the University of Pennsylvania’s Perelman School of Medicine and normed on over 10,000 children. The Mindprint Assessment can be taken on any computer at any time, whether in the school computer lab, a clinician’s office, or the comfort of home. The results of this confidential Assessment provide a clear understanding of the child’s learning strengths and needs. The results are presented in the Unique Learning Profile: a detailed explanation core areas of cognition including complex reasoning, executive functions, memory and speed along with personalized recommendations from our educational experts. The Mindprint Toolbox includes a broad selection of free learning strategies along with teacher reviews of high-quality educational games, apps and tools with specific recommendations based on the child’s unique combination of strengths and needs.

Mindprint’s solution can be used for general screening for learning differences and giftedness. It is also at the core of many schools’ personalized learning solutions, differentiated instruction and social-emotional learning curricula.

Find out more about Mindprint Learning.
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Introduction
What is self-regulated learning?
Self-regulated learning is a process by which students direct and monitor their own learning. The process includes students understanding how they learn best and taking responsibility of their learning progress. Students become self-regulated learners by understanding the neuroscience of how learning happens, developing a clear understanding of their own capabilities and needs, using strategies to learn effectively, and possessing the mindset and motivation to keep growing and improving.

Why is self-regulated learning important?
We know that when students take responsibility for their own learning, they are more intrinsically motivated, leading to a virtuous cycle of continuous effort and improvement. Meta-studies which evaluate the relative effectiveness of instructional approaches show that self-regulation (metacognition, taking feedback, and self-monitoring) were shown to be more effective than any other pedagogy or intervention by a significant margin. (See Figure 1)

The reason self-regulated learning is so effective is that it has universal applicability, regardless of ability or past achievement. Unlike strategies such as spaced repetition which will have the greatest impact for students with weaker memory, or manipulatives for students who need more hands-on, visual representations, self-regulation is equally important for all students. Every student has relative strengths and needs, and every student benefits from taking feedback and learning how to improve, regardless of his or her starting point.

Self-regulated learning also addresses a more practical constraint -- teachers could not possibly have the time to personalize instruction for each and every student every day. In addition, all the achievement data in the world cannot accurately inform a teacher of who wants to learn more, who understands but cannot focus, and who could learn if the material were just presented in a different way. Teachers need students to inform them.

This guide is intended for educators to nurture self-awareness and metacognition in their students so students have a desire to learn, understand what they need to succeed, and are comfortable speaking up when they need guidance and help.
*Metacognition, self-regulation, and feedback are shown to have the highest monthly gains in academic achievement outcomes by a significant margin.
How to Use this Manual

Unlike academic skills which are taught, self-regulation is a skill that is nurtured over time with ongoing positive reinforcement. This guide will help you develop the skills students need to implement self-regulated learning through a series of mini-lessons that can supplement your existing curriculum.

In Section One you will be given the tools to teach and instill the key concepts, vocabulary and mindset needed for successful self-regulated learning. Section Two provides a straight-forward framework for implementing student-led learning once you have developed a strong foundation in Section One.

Each chapter is intentionally brief and designed to focus more on student engagement than pedagogy. In each chapter you will find explanations of key concepts, teaching guidance, activities and visual aids.

Overview
This is a brief description of the concepts covered in the chapter.

Key Vocabulary
These are the key vocabulary terms students should learn in the lesson. A more comprehensive online glossary of terms to support self-regulated learning can be found here.

What Teachers Need to Know
Key points every teacher wants to consider before introducing the concepts and lessons to students.

What Students Need to Know
Each lesson has up to three key takeaways students should understand at the end of the chapter.

Instruction
Suggested activities and approaches for reinforcing chapter concepts. Each item is followed by a combination of letters (E, M, H) to describe the most suitable audience. E=Elementary, M=Middle Grades, H= High School

- Direct instruction: Suggestions for introducing concepts and teacher-led discussion.
- Activity: Opportunities for students to gain hands-on experience with the lesson concepts. Blank activity sheets are provided in the chapters. Student examples can be found in Appendix C.
- Coaching: Most of the concepts in this manual require ongoing support and fidelity. These are suggestions so teachers can continue to instill these concepts beyond the mini lessons.

Mindprint Strategies for Action Plan
These are one page strategies associated with the lesson concepts. In contrast to Chapter 6’s Use Strategies, which should be student-specific, these strategies can be used for all students. Some of these strategies are instructional (T) and teachers can add them to the Teacher Action Plan. Others are for the Student Action Plan (S). You can add these to the appropriate Action Plans on the Mindprint website and refer to these throughout the year. The strategies in many cases provide additional details to the concepts provided in this manual.
**Connection to Standards**
This self-regulated learning manual is not designed to be a curriculum, but rather an integrated approach to teachers’ existing practices. Each chapter ties in to existing standards that are referenced at the end of the chapter. A complete list of those referenced standards can be found in Appendix A.
Section One: Foundation for Self-Regulated Learning

Using this manual, you will guide your students to be self-regulated learners through the Set Goals – Use Strategies – Reflect & Adapt process found in Section Two. However, self-regulated learning is unlikely to be successful if students are unprepared or unwilling to rise to the challenge.

Section One will help you cultivate the mindsets in your students that are a pre-requisite for effective self-regulated learning: understanding the science of learning, developing a growth mindset, cultivating intrinsic motivation and knowing your strengths and weaknesses.

Figure 2: Self-Regulated Learning

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

- Step 1: Set Goals
- Intrinsic motivation
- Beliefs about learning
- Knowing strengths & weaknesses

- Step 2: Use Strategies

- Step 3: Reflect/Adapt
Chapter 1: Science of Learning

Figure 3: Brain Malleability

normal brain malleability influenced by experiences
physiological “effort” required to enhance neural connections

Source: P. Levitt (2004), Harvard University, Center for Developing Child
Overview

Neuroscience proves that everyone has great capacity for learning throughout their lifetimes. However, that does not mean that we all learn the same way or start from the same place. Everyone has a different combination of learning strengths and needs, which means that some skills and learning will come more easily than others. For skills that come less easily, students might need to practice more or try different approaches. You want students to know that neuroscience clearly shows that every student has the ability to learn with practice and effort.

Key Vocabulary

**Dopamine:** A brain chemical that is released by positive emotions and strengthens synapses.

**Neurons:** Another name for brain cells. The typical brain has over 10 billion neurons.

**Neuroplasticity:** Scientific explanation of how the brain changes and develops over time based on practice, experience and maturity. Neuroplasticity shows that while the brain is most malleable during early childhood, the brain continues to develop throughout adolescence and adulthood with practice and effort.

**Neuroscience:** A branch of science specifically devoted to how the brain develops and acquires new information.

**Synapse:** The connection between neurons. The number and strength of synapses determine depth of understanding and likelihood of recall. Synapses grow stronger with repeated exposure and practice.

What Teachers Need to Know

- When students understand the scientific evidence that practice and effort determine how much you know (not only genetics), they are more likely to work harder because they believe they can succeed.
- A very basic overview of neuroplasticity, as provided in this section, is typically sufficient.
- While basic neuroplasticity can be presented in a very brief lesson, it is important to reinforce these concepts consistently in daily language and with “teachable moment” opportunities.
- Understanding neuroplasticity can be equally important for high achievers and struggling learners:
  - High achievers need to understand that regardless of any innate talents they might possess, their continued success depends on hard work and effort.
  - Struggling learners should know that they are capable of learning but sometimes they might need to work harder than their peers. They also might discover areas where they are ahead of their peers and do not need to work as hard.

What Students Need to Know

- The brain is like a muscle -- it grows when it is exercised by strengthening synapses. You grow your brain through practice, taking on challenges, and a good attitude -- all of which you can control.
- Everyone can learn if they work hard. Some skills will be easier and some will require more effort. Each person’s “harder” and “easier” skills are different.
- If you don’t practice, even if you learned easily, synapses will weaken and you might forget or not be able to apply the information when you need it. Everyone needs to practice.
Figure 4: Science of Learning

The Science of Learning
WHAT EVERY STUDENT SHOULD KNOW

Brain cells are called neurons
Your brain has over 10 billion neurons!

Whenever you learn something new, neurons come together to form a synapse or connection. That connection enables you to understand and remember.

When you don't practice, the synapse weakens, and you might forget.

When you practice in different ways and study related information, more neurons are recruited and existing connections strengthen.

Caring matters! When you care, your mind releases dopamine, which strengthens the connections.

1. Everyone can learn if they try! You have billions of neurons to work with!
2. When you don’t practice you can forget, even if you learned it easily
3. The more you practice and CARE, the more you will learn

Remember!

How do your students learn?
Instruction

- **Direct instruction**: Discuss the *Science of Learning* infographic with an emphasis on the importance of effort and practice in growing your brain and reaching your learning goals. *Appendix C* provides cut outs to introduce this graphic in pieces. (*E, M, H*)

- **Activity**: *Building My Brain* - Students act out, draw a comic, or make a poster of what happens in the brain when they learn and practice. Use a real-life example. Include synapses and neurons in your presentation. Older students can write about a time when they worked hard and succeeded. (*E, M, H*)

- **Coaching**: Hang the *Science of Learning* graphic in your room. When students remember something unexpected, you can comment with, “Those synapses must be really strong.” If they have difficulty you can say, “I guess we just need to practice and strengthen those synapses. Good thing we have lots of brain cells to work with.” (*E, M, H*)

- **Coaching**: Create a “class brain” for the classroom wall. Whenever a student displays growth mindset, have him or her add a “synapse” to the picture. This could be a drawing, pins with string, etc. (*E*)

**Mindprint Strategies for Action Plan**

- *Growth Mindset: The Basics* (*T, S*)
- *Helping the Perfectionist* (*T*)
- *Handling Peer Interactions for Students with Learning Differences* (*T*)

**Other Resources**

- *Engaging Brains: How to Enhance Learning by Teaching Kids about Neuroplasticity* edutopia.org
- *You Can Learn Anything* Khan Academy
- *35 Strategies to Developing a Growth Mindset*

**Connection to Standards**

- *ASCA Mindsets & Behaviors – Standard M 5. Belief in using abilities to their fullest to achieve high-quality results and outcomes*
- *ASCA Mindsets & Behaviors – Standard M 6. Positive attitude toward work and learning*
Student Activity: Building My Brain

Name: ___________________

Think of a time when you learned something very challenging. It could be a lesson in school, a sports skill, or a project you made at home.

Act out, draw a comic, make a poster, or write about what was happening in your brain as you were learning and mastering the skill. Be sure to discuss synapses and neurons in your presentation.
Chapter 2: Beliefs about Learning

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals

Intrinsic motivation

Step 2: Use Strategies

Beliefs about learning

Knowing strengths & weaknesses

Step 3: Reflect/Adapt
**Understanding Growth Mindset**

**Overview**

Having a growth mindset is key to self-regulated learning. If students approach learning with a growth mindset, they believe they are in control of improving their performance and achieving their goals. Over time, this leads to improved self-confidence and a resilience that helps them continue to strive and grow even in the face of a setback. Conversely, for students with a fixed mindset, achievement might be viewed as beyond their control because “I’m not smart enough” or “I'm just not good at this.” They might not put in the required effort because they do not believe they will be successful. For self-regulated learning to be successful, students must be willing to put in the needed effort without consistent prodding. It needs to come from within.

**Key Vocabulary**

**Mindset:** A concept developed by Stanford Professor Carol Dweck showing that your beliefs about your ability to learn can have a significant impact on achievement.

**Fixed Mindset:** Belief that one's capabilities and talents are mostly fixed and will not change significantly with effort.

**Growth Mindset:** Belief that capabilities can be developed through effort and an ongoing willingness to try new strategies, take feedback and adapt.

**What Teachers Need to Know**

- While there are some aspects of growth mindset that can be taught, growth mindset should be viewed as a set of thought processes that must be continuously nurtured and developed.
- Instilling growth mindset requires consistency and ongoing positive reinforcement for good effort, taking risks and persevering until you succeed.
- Growth and improvement requires an understanding of HOW you work best, what specific strategies will enable you to succeed, and a willingness to try new approaches until you achieve success.

**What Students Need to Know**

- Your mindset, or how you view your ability to learn and grow, will have a big impact on your ultimate success, regardless of your starting point.
- If you want to get better, you need to be open to taking feedback and making adjustments. The most successful students are those who are open to feedback and willing to adjust, regardless of innate talents.
- Growth mindset is not only about working hard, but also about working smart. The process you will learn will help you know **how** to work more efficiently, focus your efforts, and continue to grow provided you are open to feedback and change.
Figure 5: Metacognition-The Key to Growth Mindset
Instruction

- **Direct instruction:** *What is Growth Mindset (E, M, H)*
- **Activity:** *Sharing & Storytelling* - Share or write about a time when you faced a problem and overcame it despite the odds. *(E, M, H)*
- **Activity:** *I Can Help Myself Grow* - Fixed vs Growth Mindset poster as class activity *(E, M, H)*
- **Activity:** *Everyone Makes Mistakes* - Have students find a quote from someone famous that addresses growth mindset and write about it. *(E, M, H)*
- **Activity:** *I Can be Famous* - Have students read a biography about a famous figure and reflect on how they are similar or different to that person. *(E, M, H)*
- **Activity:** Have students watch and discuss this [Ted Talk: Write Your Story, Change History, by Brad Meltzer](https://www.youtube.com/watch?v=2kYzjBxLxOg) with the message dream big, work hard, stay humble. *(M, H)*
- **Coaching:** When a student takes a risk, point it out either privately or publicly and celebrate it, even if the student might not have been entirely successful. For elementary-age students, you might give students a sticker each time. *(E, M, H)*

**Mindprint Strategies for Action Plan**

- *Let Students Know You Believe in Them* *(T)*
- *Have Students Re-affirm Self-Worth* *(T, S)*
- *Share Personal Experiences* *(T)*
- *Teach How to Speak Up About Needs* *(T, S)*
- *Encourage and Learn from Mistakes* *(T)*

**Other Resources**

- *Articles on Growth Mindset*
- *Brainology/Mindset Works Free Resources*
- *Write Your Story, Change History, Brad Meltzer*

**Connection to Standards**

- *ASCA Mindsets & Behaviors – Standard M 2. Self-confidence in ability to succeed*
- *ASCA Mindsets & Behaviors – Standard M 5. Belief in using abilities to their fullest to achieve high-quality results and outcomes*
- *ASCA Mindsets & Behaviors – Standard M 6. Positive attitude toward work and learning*
- *McRel International Online Standards Compendium, Self-Regulation, Standard 4, Level IV, 1, 3*
- *McRel International Online Standards Compendium, Self-Regulation, Standard 5, Level IV, 1, 2, 3, 5, 8*
Direct Instruction: What is Growth Mindset

Teacher-led Discussion:

- Review the Science of Learning lesson as appropriate.
- Growth mindset is about continuous improvement and understanding that we have the power to strengthen our brains by putting forth the effort, taking feedback, and using the right strategies.
- Making mistakes is a necessary part of growth and improvement. No one tries new things and gets them right the first time. If you are not making mistakes, you are not stretching your mind and growing. Everyone in this room, in the world, has plenty of opportunity for growth. So if you’re not making mistakes, you aren’t doing your job as a learner, and I’m not doing my job as a teacher.

Teacher Example:

Give a personal example to the class about something you learned by working hard and using strategies. The more personal and the more details the more likely your story is to resonate.

- Explain what you wanted to accomplish and why it was important to you
- Highlight how you put forth effort
- Highlight how you had to use a combination or try different strategies to achieve your goal
- Include a mistake you made and how that helped you grow. If it is funny, even better. It is crucial for students to accept mistakes with good humor.

Student Activity: Have students fill out the following Sharing & Storytelling worksheet and then share in pairs, triads, or class discussion.

Student Activity: Teachers create class poster I Can Help Myself Grow! with the Fixed Mindset column all or partially filled in. Include subject-specific items as appropriate. Students fill in the Growth Mindset column and any other ideas for Fixed Mindset. Hang in the classroom and refer to the poster for ongoing coaching.

Student Activity: Everyone Makes Mistakes - Have students find a quote from someone famous that addresses growth mindset. Have them explain how that quote is relevant to something they’ve done in the past or want to do in the future. Then students can write, draw a picture or make a video depicting that quote.

Student Activity: I Can be Famous - Allow students to choose a biography of someone famous. Have them answer and discuss the questions. Reading a true story can help them appreciate that success requires hard work, overcoming obstacles, and resilience in response to failures.
Student Activity: Sharing & Storytelling

Name: ___________________

In one or two sentences, describe a problem or something new you tried.

List 3-4 things you did to solve the problem or overcome a challenge. How did you work hard, practice or use strategies to succeed?

1. 
2. 
3. 
4. 

Mistakes happen. List 1-2 mistakes or things that went wrong along the way and what you did to correct them.

1. 
2. 

What did you learn from the experience? How have you changed or improved as a result?
**Student Activity: I Can Help Myself Grow!**

<table>
<thead>
<tr>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instead of...</strong></td>
<td><strong>I can say...</strong></td>
</tr>
<tr>
<td>I can’t do it</td>
<td></td>
</tr>
<tr>
<td>This is too hard</td>
<td></td>
</tr>
<tr>
<td>I’m bad at -------</td>
<td></td>
</tr>
<tr>
<td>It didn’t work. I give up!</td>
<td></td>
</tr>
<tr>
<td>That’s so easy for me</td>
<td></td>
</tr>
<tr>
<td>Add your own:</td>
<td></td>
</tr>
</tbody>
</table>
**Student Activity: Everyone Makes Mistakes**

Select a quote from someone famous that addresses growth mindset. You will find some options below or find your own. How is that quote relevant to a past experience you have had or a goal you hope to achieve? Make a picture, video or write about why the quote is meaningful to you.

“Nothing great was ever achieved without enthusiasm.” *Ralph Waldo Emerson*

"You miss 100% of the shots you don’t take." *Wayne Gretzky*

“I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.” *Michael Jordan*

"I have not failed. I have just found 10,000 ways that won’t work." *Thomas Edison*

“Insanity: doing the same thing over and over again and expecting different results.” *Albert Einstein*

“Success is only meaningful and enjoyable if it feels like your own.” *Michelle Obama*

“Success is not final, failure is not fatal: it is the courage to continue that counts.” *Winston Churchill*

“There are no secrets to success. It is the result of preparation, hard work, and learning from failure.” *Colin Powell*
Student Activity: I Can be Famous

Name: ___________________

Choose a biography of someone you would like to learn more about. After you finish reading, answer the following questions.

What was the person’s original life goal? Did they meet their goal? Surpass it? Achieve a different goal?

What major obstacles did the person need to overcome to become successful?

What key personal characteristics enabled him/her to achieve the goal?

Who was important in helping him/her achieve the goal?

Why do you think s/he was successful whereas others were not as successful?

What positive traits do you share with this person?
Nurturing Growth Mindset & Risk-Taking

Overview
Students need ongoing reinforcement to sustain a growth mindset. Growing up is hard! They need encouragement to take risks and not fear failure. Much of this reinforcement happens in the way you speak to and support your students.

Key Vocabulary
Grit: Another term for resilience and perseverance coined in this context by Angela Duckworth.
Resilience: The ability to recover from difficulties or setbacks and respond with a positive attitude.
Risk Taking: The willingness to take on challenges despite uncertainty of the result or reward.

What Teachers Need to Know
- It is important to give students opportunities to take risks without fear of being laughed at or getting a bad grade. They need to experience the rewards of risk-taking.
- Word choice is important, but so is sincerity. Teachers should praise effort and outcomes tied to strong effort, but only if the effort is truly praiseworthy. Do not praise all effort and all outcomes, otherwise the praise will no longer be meaningful.

What Students Need to Know
- Growth mindset is about “growth” not just about effort – you grow your brain and work toward your goals by trying, practicing, taking risks, and learning from your mistakes.
- If you catch yourself thinking, “I can’t,” replace it with, “What strategy should I try so I can…”?
- Everyone makes mistakes and experiences setbacks. It is how you respond to disappointments that determines how much you grow, improve, and ultimately, succeed.
Specific, Strengths-Based Feedback

Source: Mindset Works, Inc. Growth Mindset Feedback Tool adapted by Mindprint Learning for Growth Mindset Specific Feedback

**When they struggle despite strong effort...**

- Fixed Mindset: I can’t do this!
- Growth Mindset: You are not there, yet.
- Growth Mindset Specific: You are not there, yet. Since you understand very well with visuals, let’s draw a picture to help you understand.

**When they lack specific skills needed for improvement...**

- Fixed Mindset: I give up!
- Growth Mindset: Let’s practice so we remember.
- Growth Mindset Specific: Let’s practice a different way. Since you remember words easily, try describing what you see so it sticks.

**When they succeed with strong effort...**

- Fixed: Yes! I finished.
- Growth: I am so proud of the effort you put forth.
- Growth Mindset Specific: I am so proud of the effort you put forth. I realize this is hard, but you were successful because you --------.
Instruction

- **Activity:** Have students watch and discuss this *Ted Talk by Harry Potter author JK Rowling* who explains her many failures before her unparalleled success. *(M, H)*
- **Activity:** *Project-based learning* is an approach that supports risk-taking, learning through trial and error and growth mindset. Students learn through inquiry and problem solving. *(E, M, H)*
- **Coaching:** *Speaking the Language of Growth Mindset* -- Guidance for teachers and parents. *(E, M, H)*
- **Coaching:** Create a classroom environment that incorporates student choice, leadership, inquiry, initiation, and independent thinking. Students will develop a greater comfort taking risks than in a more traditional classroom setting. *(E, M, H)*
- **Coaching:** Encourage student inquiry via open-ended questions and modeling curiosity with *What If...* *(E, M, H)*
- **Coaching:** When a student takes a risk point it out either privately or publicly and celebrate it, even if the student might not have been entirely successful. You might offer elementary-age students a sticker each time. *(E, M, H)*
- **Coaching:** Give assignments that will not be graded or offer an opportunity to “re-do.” After successful completion, have students reflect on what they did, why they did it and what motivated them to put forth the effort. *(E, M, H)*

Mindprint Strategies for Action Plan

- Avoid Stereotype Threat *(T)*
- Provide Balanced Feedback *(T)*
- Provide Feedback Based on Student's Personality & Mastery Level *(T)*
- Positive Self-Talk *(S)*
- Coach Students How to Take Feedback and Adjust Accordingly *(T, S)*

Other Resources

- Brainology/Mindset Works Free Resources
- Buck Institute for Education *(Project-Based Learning)*
- Angela Duckworth’s Grit Scale

Connection to Standards

- McRel International Online Standards Compendium, Self-Regulation, Standard 4, Level IV, 1, 3
- UDL Guideline Principle 3 Checkpoint 7.1 – Optimize individual choice and autonomy
- UDL Guideline Principle 3 Checkpoint 7.3 – Minimize threats and distractions
- The ASCA Mindsets & Behaviors - B-SMS 5. Demonstrate perseverance to achieve long- and short-term goals
- 2016 ISTE Standards for Students – 3 Knowledge Constructor 3.d. Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions
Coaching: Speaking the Language of Growth Mindset

Offering regular specific feedback and encouragement is essential to fostering a growth mindset. Feedback should be honest, balanced and constructive. Just as students need to have self-awareness of their individual strengths and needs to know how to work effectively, the feedback that we give them as educators also needs to be specific so they understand not only what needs to improve but also how to improve.

Points to keep in mind when providing feedback:

- Praise the student's effort, not the outcome. but **be specific** about the effort, including identifying strategies they used effectively. "Great job, you worked really hard," does not tell the student enough. Instead, "You spaced out your studying and didn't cram for the test this time. That was a great approach and I think that helped you get a better grade."

- Help the student find and use strategies **based on their strengths** to help in an area of need. "You are studying really hard for this vocabulary test. Since you remember things so well with pictures, try finding a picture for each word that will help you remember and put it on a flashcard."

- **Model positive thinking** and verbalize your own use of strategies out loud. "I did not get out the door on time this morning, but tomorrow I'm going to plan out my morning using a checklist and that will help me get organized."

- Help your students view setbacks or **failures as a stepping stone** to future success. Every successful person has stories of the failures they had to overcome along the way. Offer your students the tools and support to help them overcome obstacles. Remind students that when something does not work out, it is not the outcome but how they respond that really matters.

- Provide relevant examples of your own mistakes and failures. Stories can be the most powerful and sincere way to reach students.
Chapter 3: Intrinsic Motivation

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals

Step 3: Reflect/Adapt

Intrinsic motivation

Beliefs about learning

Knowing strengths & weaknesses

Step 2: Use Strategies
Overview

Motivation plays a key role in the process of successful learning. External factors like grades and pleasing others can work as short-term motivators and even can help to push students toward long-term success. However, extrinsic motivators typically start to lose value after elementary school and it is intrinsic motivation that drives a student’s success. Intrinsic motivators develop from our own unique passions, interests and reasons for wanting to learn and work hard. Successful outcomes driven by intrinsic motivation lead to self-confidence and enthusiasm to continue. Conversely, successful outcomes driven by extrinsic motivators often lead to additional stress and performance pressure.

Key Vocabulary

Extrinsic motivation: Behavior that is driven by external rewards such as grades and praise. This type of motivation arises from outside the individual, often from a parent, teacher, or material reward.

Intrinsic motivation: Behavior that is driven by internal rewards, such as feeling of fulfillment, pleasure, interest.

What Teachers Need to Know

- Extrinsic motivators like grades, a gold star, or candy can help younger students be compliant and learn. However, those rewards are far less effective in higher grades.
- The best way to develop intrinsic motivation is to help students identify their personal interests, strengths and goals. Help them see how working on a given assignment or subject can be tied to achieving their long-term goals.
- When possible, give students choice in projects and assignments. Choice instills ownership and increases the likelihood they will be interested and motivated.

What Students Need to Know

- Ultimately your life satisfaction depends on discovering what motivates you, not satisfying your teachers, parents, or friends.
- When you enjoy what you do, you are far more likely to be successful. Take time to discover what you enjoy. Don't worry about what others are doing or thinking.
Instruction

- **Direct Instruction:** *Motivation* - Discussion of intrinsic vs. extrinsic motivation and the importance of discovering your own interests, passions and goals. *(E, M, H)*
- **Activity:** Watch and discuss the Ted Talk: Hackschooling Makes Me Happy by 13 year old Logan LaPlante. Discuss the role students can play in taking control of their own learning. *(E, M)*
- **Activity:** *My Interests and Passions* - Teachers can use responses to support lesson planning. *(E, M, H)*
- **Activity:** *Classroom Rules/Commandments* – This is a good activity to start the term. Give everyone the chance to contribute and create a poster to hang in the classroom. *(E, M)*
- **Activity:** Allow students to search their Mindprint Toolbox by interest and choose an app or website to play during class or for homework. Afterwards, you can ask them why they chose the app they did and what they learned. *(E, M)*
- **Coaching:** Offer assignments with choice, allowing students to choose their topic and/or their presentation format. Project-based learning is a great approach to support student interest and choice. *(E, M, H)*
- **Coaching:** Incorporate *Genius Hour* into your class curriculum, setting aside an hour a week for students to work on an independent “passion” project of their choice. *(E, M, H)*

Mindprint Strategies for Action Plan

- **Develop Intrinsic Motivation** *(T)*
- **Strategies to Teach Project-Based Learning** *(T)*
- **Tools for Project-Based Learning** *(T)*

Other Resources

- **Mind/Shift Articles on Intrinsic Motivation**
- **6 Tips for Getting Started with Genius Hour** (edutopia)
- **Genius Hour website**
- **Articles on Grit, Growth Mindset and Intrinsic Motivation**

Connection to Standards

- **UDL Guideline Principle 3 Checkpoint 7.1** – Optimize Individual choice and autonomy
- **UDL Guideline Principle 3 Checkpoint 7.2** – Optimize relevance, value and authenticity
- **UDL Guideline Principle 3 Checkpoint 9.1** – Promote expectations and beliefs that optimize motivation
- **The ASCA Mindset & Behaviors - M 3. Sense of belonging in the school environment**
**Direct Instruction: Motivation**

**Teacher-led Discussion:**

- Provide an overview about how incorporating things you enjoy into your learning, or learning to search for those within learning activities, helps make learning more interesting and motivating. When thinking about what you enjoy, students should not only think about hobbies or activities they actually do and like, but also topics, causes and ideas they spend time and like thinking about.
- Give examples of how they can use their interests, such as: an interest in hands-on construction can lead to using blocks/cubes to help with solving math problems; an interest in drawing leads to drawing when taking notes; an interest in animals can be taken into consideration when choosing books to read or a research topic.
- Discuss the importance of “feeling” your interests rather than focusing on grades or what friends are doing.
- Brainstorm a list of extrinsic vs. intrinsic motivators and discuss them in class.
- Be prepared that this conversation could easily evolve into a discussion of the importance of grades versus learning and the stress that students might be feeling.

**Teacher Example:**

- Give an example of a passion of your own and relate it to choices you’ve made in your own learning.
- Consider explaining how your passions or interests led you to teaching a specific subject, working with children, or pursuing a hobby.
- Talk about how you discovered your passion—was it something you always just knew or how did you go about discovering it.

**Student Activity: My Interests and Passions** - Have students brainstorm a list or write a few paragraphs on what they are interested in and why. Teachers consider how you might help the students use and apply their passions in class projects or assignments throughout the term.

**Student Activity: Classroom Rules/Commandments** - Have the class brainstorm ideas for class rules either independently or as a group. As a class, narrow down or prioritize the rules that will be most important for successful, self-regulated learning. Post the final rules in the classroom. Giving students some control over the classroom environment is a first step in taking control of their overall learning.

**Student Activity:** Allow students to spend time searching their Mindprint Toolboxes individually. Let them choose an app or website based on their interests. Afterwards, discuss why they chose it, if they enjoyed it, and what they learned.
**Student Activity: My Interests and Passions**

Use the space below to write a list of the activities, topics and thoughts that interest you or that you would like to learn more about. If you have time, write about how you would like to apply those interests in this class.
**Student Activity: Classroom Rules/Commandments**

Everyone take a few minutes to brainstorm our class rules for the semester. We will discuss and prioritize those rules and use them throughout the semester.
Chapter 4: Knowing One’s Strengths & Weaknesses

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals

Step 2: Use Strategies

Step 3: Reflect/Adapt

Intrinsic motivation

Beliefs about learning

Knowing strengths & weaknesses
Metacognition & Self-Awareness

Overview

Students cannot effectively take responsibility and ownership of their learning unless they have good self-awareness (metacognition). Developing self-awareness takes time, but teachers and parents can continuously reinforce the need for students to think about their thinking – Why did I try that approach? Why did I do well on that test? How did I study? Did it work? Without metacognition, students might have a positive mindset and work hard, but they will not know how to work most effectively and efficiently. Over time, even students with the best mindsets could get discouraged if they are not experiencing success despite their hard work.

Key Vocabulary

Metacognition: Understand one’s own thinking. Metacognition includes an awareness of learning processes and strategies you use as well as an understanding of your personal strengths and needs.

Self-Awareness: Ability to recognize and self-assess one’s own feelings, thought processes and behaviors.

Self-Monitoring: Measuring, evaluating, and adjusting one’s own behavior, thoughts and feelings in relation to expected age appropriate norms.

What Teachers Need to Know

- Students need to grow into the habit of thinking about their thinking and learning. It is important for students to develop self-awareness both with what they understand and what they do not understand and why.
- Metacognitive thinking is not only important in academic learning but for all of life’s experiences.
- Metacognition leads to empathy—the better you understand yourself, the more you can relate to others and understand their perspectives.
- Metacognitive thinking is not easy. It requires time and adult support through ongoing, objective feedback.

What Students Need to Know

- When you focus not just on the outcome but on why you did well or not, you are more likely to improve in subsequent attempts.
- When you understand your own feelings, it will be easier to make friends and relate more easily to your classmates during group work or social situations.
- Remind yourself that everyone makes mistakes. What differentiates those who are most successful is how they respond to their mistakes.
“Studies show that people are terrible at understanding their abilities.”
Carol Dweck

*Students have a surprisingly consistent perception of how they expect to perform, regardless of how they actually perform. The top quartile thinks they will perform somewhat worse than they actually do. The lowest performing group thinks they will do significantly better than they actually do.*
Instruction

- **Direct Instruction:** *What is Metacognition* (E, M, H)
- **Activity:** Self-control and self-awareness are closely aligned. Watch and discuss *Ted Talk: Don’t Eat the Marshmallow* as the start of a discussion on self-awareness. (M, H)
- **Activity:** *This is What I’m Thinking* - Discuss with students individually. (E, M, H)
- **Activity:** *Dialogue Journal* between student and teacher as a written discussion throughout the term. (E, M, H)
- **Coaching:** Have students use one of the many apps available that allow them to show and record their thinking (e.g. ThinkingKit, Storyboard That) (E, M, H)
- **Coaching:** Teachers model metacognitive thought processes out loud as they teach. Talk through your thinking and problem solving steps: “Hmmm. Where did I make my mistake? I tried this but it didn’t work…” (E, M, H)
- **Coaching:** Point out when a student is using metacognition. Repeat what the student said and label it as “using metacognition”. You might even have a “metacognitive thinking” board and post examples when they arise in class. This might come up if a student is reflecting on why they had difficulty on an assignment or a test. (E, M, H)
- **Coaching:** Teachers use *exam wrappers* after quizzes or tests to help students reflect. (M, H)
- **Coaching:** *Exit Slip* - Reflection about a class period or activity. Select relevant prompts to include. (E, M, H)
- **Coaching:** *23 Metacognition Questions & Statements* - Teachers refer to the prompts on the image. (E, M, H)

**Mindprint Strategies for Student’s Action Plan**

- **Metacognition** (S)
- **Instill Ownership** (T)
- **Dialogue Journal** (T, S)
- **Exam Wrapper** (T)

**Other Resources**

- *Mindprint Homework Wrappers by Skill*
- 5 Strategies on Teaching Students to Use Metacognition teachthought
- *Nurturing Self-Awareness in the Classroom* edutopia
- *Exit Slips* Robert Marzano of ASCD

**Connection to Standards**

- CASEL Core SEL Competencies Self-Awareness
- UDL Guideline Principle 3 Checkpoint 9.3 – Develop self-assessment and reflection
- McRel International Online Standards Compendium, Self-Regulation, Standard 2, Level IV, 6
Direct Instruction: What is Metacognition

Teacher Background:

We know that metacognition is one of the most important skills in the process of building self-regulated learning and driving student success. It is important to place sufficient emphasis on developing it in students. Take this seemingly abstract concept and make it accessible to students simply by defining it for them and then practicing and developing it in the context of everyday learning. Well-developed metacognition develops over time. It is best to simply introduce the concept and expect that a deeper understanding will come with application and practice.

Teacher-led Discussion:

- Start with the definition of this seemingly complicated word and describe it simply as: “metacognition is thinking about your thinking” or more detailed, “thinking about your thinking to improve your learning.”
- Highlight that while everyone might understand a concept, everyone comes to that understanding in their own way.
- Understanding your own processes will help make it easier for you to learn new things.

Teacher Example:

- Give a personal example of how you misunderstood something because you approached a problem from a different way than someone else.
- Work through a problem on the board and discuss how you are thinking about it. If you make a mistake, how do you think about correcting it? On an ongoing basis, remember to think aloud. Ask the class if anyone was thinking about the problem differently or has an alternate way to solve the problem.
- Teachers can model metacognition by asking themselves the questions in Figure 8 aloud while they are offering instruction. They can ask students these questions when providing feedback and instruction. Over time, students will begin asking themselves these questions.

Student Activity: This is What I’m Thinking – Have students fill out this sheet independently after a relatively brief exercise, so they have the mental energy to focus on the metacognitive task and are not tired from learning. Plan to do this activity several times, so students grow more accustomed to thinking about their thinking and ways to improve. Discussing students’ responses with them individually is optimal. For ongoing coaching, prompts can be posted on a class poster and copies can be printed for students to complete during assignments.

Student Activity: Dialogue Journal – Each student should have his/her own journal. The frequency of writing and responding depends upon the nature of the class and how often it meets. If a class meets every day, it might make sense for the student to write in the journal 1-2 times per week. Teachers give a specific prompt and guidelines about what is expected (e.g. one sentence answer or a one page reflection). To inspire metacognitive thinking and reflection, think about the best prompts to encourage students to think about their academic experiences and learning in a way that is most relevant and comfortable. Teachers should expect to respond to each student promptly and model the types of
responses they expect in their answers. Teacher responses could include questions for the student to reflect further.

**Student Activity: Exit Slip** - Include up to three prompts that are relevant to the class or lesson. Depending on your goals and time, you can expect one-word fill in or prompt students to answer “why”. This daily reflection can be modified to be a weekly reflection. You can use it as a group dice game, where each prompt corresponds to a number on the die. Students take a turn rolling and sharing based on the roll.
**Student Activity: This is What I’m Thinking**

Name __________________________

**Respond to at least 2 of the following prompts:**

I’m wondering…

I’m picturing…

I am reminded of…

I understood it best when…

I liked when…

**Respond to at least 2 of the following prompts:**

I have questions about…

I want to go back to…

I am confused about…

I had difficulty when…
**Student Activity: Dialogue Journal Prompts**

Provide students with one or two of the following prompts each time you ask them to write in their journals. Students might enjoy selecting or personalizing their journals at the beginning of the term.

**Today I learned…**

**Today I was most interested in…Why?**

**One thing I did differently today was…How did it turn out?**

**One risk I took today was…How did it turn out?**

**Something that was hard for me was…Why? How did you take on the challenge?**

**I didn’t understand…What did you do?**

**I have more questions about…How will I answer those?**

**I used a new strategy today…What was it? How did it go?**

**Next time I will try…**
Student Activity: Exit Slip

Name________________
Date________________

Think about your work in class today and respond to at least two of the following:

Today I learned....

I want to investigate further...

I am still wondering...

I am proud of...

Next time I will do this differently...

I keep thinking about...

I was surprised by...

I did not understand...
Coaching: 23 Metacognition Questions & Statements

Figure 8: Metacognition Questions & Statements

*These questions and statements are a good reference for teachers to encourage metacognitive thought processes while students work. It is not designed for teachers to give to students.
Types of Strengths & Needs

Overview

The most successful learners have a realistic understanding of their strengths and needs in three key areas: academic skills, personal skills, and cognitive skills. Historically, teachers are accustomed to focusing on academic skills to help students learn. However, we now know that it is beneficial to take a much broader view of what each student needs to be successful. Students need to be emotionally prepared for learning if we want them to learn efficiently.

Key Vocabulary

Academic Skills: Learned knowledge such as how to structure an essay, key dates in history, and algebra.

Cognitive Skills: Skills that explain how you learn most efficiently including memory, reasoning, and attention. These skills develop and mature throughout adolescence and into early adulthood.

Habits of Mind: In the category of personal skills, habits of mind involve one’s disposition or feelings toward tasks. It encompasses terms including resilience, mindset and grit.

Personal Skills: Skills that explain how you feel and interact with people and the environment. Like cognitive skills, these skills develop and mature throughout adolescence and into adulthood. Sometimes they are called social-emotional or “soft skills” in contrast to the “hard skills” of academic knowledge.

Whole Child: A body of research that shows the importance of understanding all of a student’s skills, social, personal and cognitive, as well as academic, to help him or her learn effectively.

What Teachers Need to Know

- Academic success ultimately depends on addressing not only a student’s academic needs, but their cognitive and personal needs as well.
- Every student has a unique combination of cognitive and personal needs that can affect their academic success.
- It is key to understand each student’s starting point across skills and help them grow from there.

What Students Need to Know

- Everyone has strengths and needs. It is important that you celebrate your strengths but also acknowledge that there are areas where you need help so you can grow and improve.
- Even straight A students have skills they can grow and improve. No one is strong in every skill. Similarly, even if you have weaker skills, you have strengths too. It is important that you discover and celebrate your strengths.
- Once you understand and acknowledge your strengths and needs, you will find ways to use your stronger skills to help you succeed.
Figure 9: Sweet Spot of Learning

- Cognitive Skills
- Academic Skills
- Personal Skills

Successful learning happens here!
Figure 10: World Economic Forum Top 10 Skills in 2020

Top 10 skills

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

Source: Future of Jobs Report, World Economic Forum
Figure 11: WEF Skills Application
Instruction

- **Direct Instruction**: Discuss *Sweet Spot of Learning* graphic including a quick definition of the three types of skills (academic, cognitive, personal) or use the *Sweet Spot of Learning activity*. *(E, M, H)*
- **Direct Instruction**: Discuss students’ career aspirations and how they will need the skills identified in the [World Economic Forum top skills](iste.org). The Mindprint adaptation helps teachers prepare. *(M, H)*
- **Activity**: *This is Me* - Give students the opportunity to reflect on how they perceive themselves across skills. *(E, M)*

Mindprint Strategies for Student’s Action Plan

- **Develop Weaker Skills Using a Student’s Strengths** *(T)*
- **Understand the Causes of Test Anxiety** *(S)*
- **Help Students Based on Personality & Mastery Level** *(T)*

Other Resources

- [World Economic Forum](iste.org)
- [10 Ways to Nurture the Top Skills of the Future](iste.org)
- [Self-Regulation Using Cognitive Data is Key to Personalization](edCircuit)

Connection to Standards

AMI, This We Believe, The 16 Characteristics of Successful Schools, Essential Attributes, An education for young adolescents must be: Empowering, providing all students with the knowledge and skills they need to take control of their learning.
**Student Activity: Sweet Spot of Learning**

Brainstorm the most important skills that belong in each circle of the diagram. Highlight the skills you think are most important to your academic success.
Student Activity: This is Me

In the following space, brainstorm a list of adjectives that describes you. Include your most positive traits as well as traits you’d like to improve upon (e.g. sometimes frustrated, poor speller). When you are done, create a word cloud with your words. Use one color for your positive traits and a different color for the traits you’d like to improve upon. Pick a shape for your word cloud that best reflects how you view yourself.

Having trouble thinking of words to describe you? Ask yourself these questions:
What makes me happy? What is my favorite subject? What activities do I enjoy? How would my friends, parents, teachers describe me? What could I do better in school? At home? What do I find difficult?

My Positive Traits: (minimum of 10)

Skills I Want to Develop: (minimum of 5)
Figure 12: This is Me

- best sister
- quick
- strong runner
- modest
- don't like math
- good sense of humor
- smart
- focused
- unlikely
- independent
- picky eater
- shy
- caring
- funny
- kind
- easily upset
- sensitive
- short
**Academic Skills**

**Overview**

Academic skills refer to content knowledge learned in school. Some academic skills are cumulative, like math, while other academic skills students might learn once and then not re-visit unless they are in an area of interest, such as specific events in history. This chapter focuses on helping students develop academic skill mastery for cumulative knowledge building.

**Key Vocabulary**

**Automaticity**: Ability to know and recall information without effort, computing or deliberating. Automaticity is usually the result of repetition and practice.

**Complex Reasoning**: Ability to analyze information and solve problems.

**Fluency**: Ability to read or produce an answer to a problem quickly, accurately, automatically, and expressively.

**Spaced Repetition**: A learning technique that incorporates leaving time between repeated review/study of previously learned material to help your brain practice, absorb, and recall information.

**What Teachers Need to Know**

- There are certain foundational skills that are important for students to have before they can master a subject and use complex reasoning. Other skills and knowledge will be important to know but not essential that students have automaticity. Examples of foundational skills include math facts and sight words. Each subject has its own foundational skills or vocabulary which will require automaticity.
- If you find that students are struggling to learn a new skill, it is important to go back and consider if they have automaticity in the pre-requisite skills or if the difficulty is in their reasoning (a cognitive skill).
- For students who do not seem to be living up to potential or do better in one subject over another, this can be a good opportunity to understand why these differentials exist. Are there key foundational skills missing that are interfering with the student’s performance or growth or is there a different type of underlying challenge (e.g. cognitive or personal)?

**What Students Need to Know**

- Much of what you will learn in school is cumulative. Therefore, it is important that if you do not understand something you take the time to learn it, even if the test has passed. In many cases you will need to build on that knowledge for future classes.
- Spaced repetition and practice are essential to learning and remembering foundational skills. Even if you learned something easily, it is important that you continue to practice and reinforce it so you are able to recall that information when you need it. Remember what you learned about neuroplasticity in [Chapter 1](#).
Figure 13: The Forgetting Curve

*On average we remember only 25% of what we learned after 2 days unless it is actively reinforced.

**Instruction**

- **Direct Instruction**: *Overview of Academic Skills* and learning. Show and explain *The Forgetting Curve*. *(M, H)*
- **Activity**: *Academic Skills Beyond Grades* - Help students think about what they truly enjoy learning rather than depending on their grades to tell them. *(M, H)*
- **Activity**: Teacher asks questions from past tests. Students compare their answers on the original test to the most recent one to see how we all forget and how important it is to reinforce learning. *(M, H)*
- **Activity**: *Create a Study Schedule* for a test the following week. After the test, discuss if spaced repetition was effective. *(M, H)*
- **Activity**: Have students select up to three strategies from their Personalized Toolbox (for either Math or Reading) and add those strategies to their Action Plans. After a week of using the new strategy in assignments and homework, discuss if this new strategy is working. Continue this throughout the course. *(M, H)*
- **Coaching**: Interleave problems throughout the course, always including questions from previous tests or assignments mixed in within the new material. *(E, M, H)*

**Mindprint Strategies for Action Plan**

- **Interleave Worked and Unworked Problems** *(T)*
- **Spaced Repetition** *(S)*
- **Math Study Skills and Instructional Strategies** *(S, T)*
- **Reading Study Skills and Instructional Strategies** *(S, T)*

**Other Resources**

- **Articles on Math & STEAM**
- **Articles on Speaking, Writing & Spelling**
- **Articles on Reading**
- **Let’s Not Forget the Forgetting Curve**

**Connection to Standards**

- **21st Century Student Outcomes 1. Content Knowledge and 21st Century Themes**
- Ties in with key shifts in Common Core State Standards: *Regular practice with complex texts and their academic language*
Direct Instruction: Academic Skills

Teacher Background:
Communicate to your students the importance of building automaticity of certain foundational skills, along with employing spaced repetition as a way of practicing and retaining these skills. Improved learning efficiency will leave students with more mental energy for complex reasoning tasks. Students will understand why and how to put forth the effort to continue to improve in school.

Teacher-led Discussion:

- Begin with a quick explanation of academic skills, so they can later distinguish them from cognitive skills. Academic skills are what you learn in school. Refer to the Sweet Spot for Learning activity you completed and add to it as appropriate.
- Most of what you learn in school is cumulative. You want to be aware of what you did not understand and make sure you take the time to learn it or ask for help, even if the test has passed. Otherwise it will be harder when that information is addressed in other contexts.
- Show and explain the Forgetting Curve. Remind students that even if they understand and learn new material easily, it does not guarantee they will remember it when they need it. The “Forgetting Curve” shows that most people begin to forget in just 20 minutes. So if you feel confident that you remember the material 15 minutes after you studied, see what you can recall after 2 hours or the next day.
- Consistent practice and repetition is essential to learning and remembering information. We do this most effectively through spaced repetition, or repeated study/review of material leaving time in-between studying. (The opposite of cramming.)

Student Activity: Academic Skills Beyond Grades - While students often evaluate their academic capabilities and progress by tracking their grades, this metacognitive exercise can help them learn about themselves and perhaps see trends or solutions that grades alone can’t tell them.

Student Activity: Study Schedule - Students can use this planning worksheet to space out their studying for a test.
**Student Activity: Academic Skills Beyond Grades**

Grades rarely tell the entire picture of what you know or what you are capable of. Forget your past grades. Think about the following questions. Answer at least one.

Name__________________________

Is there a subject or topic that is tough for me? Do I want to improve? Why?

Is there an area or subject I'm very interested in? What do I want to learn?

Is there a topic I understand, and yet don’t do as well as I expect on the tests or assignments? Why do I think that is?
**Student Activity: Study Schedule**

Write your study plan for how you will prepare for the test.

Name_______________________

<table>
<thead>
<tr>
<th>Day</th>
<th>What I will cover</th>
<th>Time Needed</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Tuesday</td>
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<tr>
<td>Sunday</td>
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</tr>
</tbody>
</table>

**Notes/Reflections:**
Cognitive Skills

Overview

Cognitive skills drive your learning efficiency. They often determine your learning preferences and explain why you might learn some things really easily and why other tasks require more effort. No one is equally strong across cognitive skills. Understanding your relative strengths and needs can go a long way in improving your self-awareness and helping you study and learn more efficiently.

Key Vocabulary

Cognitive Skills: Skills underlying how you learn rather than what you know.

Complex Reasoning: The higher order reasoning skills that determine how you understand information. Includes verbal reasoning (what you read or hear), abstract reasoning (making sense of numbers, objects or patterns), and spatial perception (visualizing objects in space).

Executive Functions: The skills needed for focusing and organizing your work, belongings, or time. Includes attention, working memory and flexible thinking.

Memory: The ability to store information for a period of time and then retrieve it later when needed. Includes verbal memory and visual memory.

Processing Speed: The rate of responding to information you hear or see. Includes visual motor, auditory and visual.

What Teachers Need to Know

- Every student has a unique combination of cognitive strengths and needs.
- Most cognitive strengths and needs are not easily observable. Sometimes strengths mask weaknesses and vice versa. Students are unlikely to be able to communicate their difficulties with these skills unless they have received formal instruction or coaching.
- Cognitive strengths and needs are not necessarily predictors of academic achievement. However, if you understand a student’s strength and needs you can alter your instruction to support a student who is struggling or a student who needs more of a challenge.

What Students Need to Know

- Everyone has strengths and needs. No one is strong or weak in every skill.
- You can use your awareness of your cognitive skills to help you learn more easily. You are likely to discover that the study strategies that work best for your friend are not the right ones for you and vice versa.
- Once you discover your strengths, use them to make work easier and more enjoyable.
### Figure 14: Overview of Cognitive Skills

<table>
<thead>
<tr>
<th>Skill</th>
<th>What it is</th>
<th>When you use it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Motor Speed</td>
<td>Using your eyes and hands at the same time to complete a task</td>
<td>Typing; playing video games; sports that depend on eye-hand coordination</td>
</tr>
<tr>
<td>Processing Speed</td>
<td>Reading, hearing or seeing something, thinking about it, and responding</td>
<td>Answering a question in class; finishing a test in the allotted time; taking the recommended time to complete a homework assignment</td>
</tr>
<tr>
<td>Attention</td>
<td>Focusing and completing a task, even if you don’t like it</td>
<td>Listening carefully in class; completing homework without being frequently distracted</td>
</tr>
<tr>
<td>Working Memory</td>
<td>Juggling all the information you need to solve a problem or complete a task</td>
<td>Listening to your teacher while taking notes; packing up everything you need for school or home; following directions from your coach, teacher or parent</td>
</tr>
<tr>
<td>Flexible Thinking</td>
<td>Taking feedback and doing something differently, even if you think you were right the first time</td>
<td>Figuring out how to correct your test or paper from what your teacher wrote without asking more questions; compromising after a disagreement with your friend or sibling</td>
</tr>
<tr>
<td>Verbal Reasoning</td>
<td>Understanding what you read or hear</td>
<td>Understanding all different themes of the book you are reading; understanding when your teacher explains something new in history or language arts</td>
</tr>
<tr>
<td>Abstract Reasoning</td>
<td>Understanding patterns or puzzles</td>
<td>Figuring things out by observing; understanding math and science concepts that you can’t always see or touch such as gravity, atoms or algebra</td>
</tr>
<tr>
<td>Spatial Perception</td>
<td>Visualizing objects and how they move even if you can’t touch them</td>
<td>Picturing how pieces of a puzzle would fit together even before you touch them; being able to imagine how you would draw a picture or build something</td>
</tr>
<tr>
<td>Verbal Memory</td>
<td>Remembering what you heard or read</td>
<td>Remembering a conversation, someone’s name, or the specific details of a book you read</td>
</tr>
<tr>
<td>Visual Memory</td>
<td>Remembering what you saw</td>
<td>Remembering the details (color, size, shape) of pictures you saw, objects you’ve held, or places you’ve been</td>
</tr>
</tbody>
</table>
Instruction

- **Direct Instruction: Cognitive Skills** (Also see Overview of Cognitive Skills and Appendix B). *(E, M, H)*
- **Direct Instruction: Teacher-led Conferences** – After taking the Mindprint assessment, meet individually with each student to discuss his or her unique learning profile. *(M, H)*
- **Activity:** Have students print out and read primers on their strongest and weakest skills. Add strategies to their Action Plans as needed. *(M, H)*
- **Activity: How I Use My…** worksheets – Have students complete one for a strength and one for a weakness. Sheets for each cognitive skill can be found in Appendix B. *(E, M)*

Mindprint Strategies for Action Plan

- **Student Primers** to explain and develop each cognitive skill (S, T):

<table>
<thead>
<tr>
<th>Cognitive Skill</th>
<th>Strength</th>
<th>Skill to Support</th>
</tr>
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<td>Working Memory</td>
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<td>Abstract Reasoning</td>
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<tr>
<td>Visual Memory</td>
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</table>

Other Resources

- Articles on Cognitive Ability and Psycho-educational Testing
- Mindprint Observation Checklist: Identify Areas of Concern

Connection to Standards

- 21st Century Student Outcomes 4. Life and Career Skills. Initiative and Self-Direction
- Bloom’s Taxonomy – Cognitive Domain: Applying, Analyzing, Synthesizing, Evaluating
**Direct Instruction: Cognitive Skills**

**Teacher Background:**

Most students do not have a good understanding of their cognitive skills. When completing the *Sweet Spot for Learning* activity, you will gain a sense of what your students know about cognitive skills and what you will need to explain. It will be important to help students build a basic understanding of cognitive skills and their role in learning. Students should understand that everyone has a unique combination of cognitive strengths and needs, which they will learn about when they review their Mindprint profile, and that with the use of appropriate strategies, weaker cognitive skills can be supported and improved. Cognitive strengths provide an opportunity to shine.

**Teacher-led Discussion:**

- Refer back to the *Sweet Spot for Learning*. Discuss that academic skills refer to what you know, while cognitive skills explain HOW you learn. That includes how quickly you work, how you remember information, how you solve problems and make decisions, and how you organize and focus. Cognitive skills might explain why you might not understand and help us determine what we can try differently so you do understand.
- Introduce the 10 core cognitive skills and give examples of how they use those skills in learning, in the classroom, during homework, etc. The *Overview of Cognitive Skills* or *Appendix B* have full definitions and examples for your reference. Encourage students to give their own examples if they think of them. Consider making a poster for each skill as you go so students can see each skill and examples side-by-side. Let students know you don’t expect them to learn or memorize these definitions now – they will get to know these skills as they learn about their own learning profiles.
- Let students know that you will be meeting with them to go over their learning profile with these cognitive skills. Discuss how each person learns differently, with a unique combination of cognitive strengths and needs. It is your unique combination of skills that will tell you how you learn best and how to pinpoint the best strategies to make learning easier and more enjoyable.

**Direct Instruction:** *Teacher-Led Conference for Sharing the Mindprint Profile with a Student* - Meet individually with each student to understand his or her unique learning profile.

**Student Activity:** Have student print out and read primers on their strongest and weakest skills. Add strategies to their Action Plans as needed.

**Student Activity:** *How I Use My* …worksheets. Have students complete one for a strength and one for a weakness. See the sample: *How I Use My Flexible Thinking*. A template for each cognitive skill can be found in *Appendix B*. 

---

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### Instruction: Teacher-Led Conference Sharing the Mindprint Profile with a Student

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Description</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-11, Some older struggling learners</td>
<td>Verbally discuss results</td>
<td>• Write down the student’s top two strengths and one or two areas for support to visually reinforce what you will say</td>
</tr>
<tr>
<td>11-13</td>
<td>Share the summary chart</td>
<td>• Print out the summary green, blue, purple chart</td>
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<td></td>
<td></td>
<td>• Do NOT include the footnotes with percentiles</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Allow the child sufficient time to read and digest the chart while you are sitting nearby ready to answer questions</td>
</tr>
<tr>
<td>13+, some younger gifted learners</td>
<td>Share the entire report</td>
<td>• Allow students to read the report independently before meeting</td>
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<tr>
<td></td>
<td></td>
<td>• Encourage them to self-reflect while they read</td>
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### Suggested Talking Points

1. If the student wants to speak first, let him. In general, do your best to let the child talk while you listen. Let the child explain why he or she thinks this report does or does not describe him or her. Maybe the score reflects performance on an off day. Or maybe it’s an opportunity for you to help improve the child’s self-awareness. Maybe you have a less confident student who does not appreciate his or her strengths. Or maybe you have an over-confident student and this can be a good way to talk about areas where there is room for improvement. Use the report as a starting point for discussion and long-term growth, not as a summary of who the child is or is not.

2. Always start with stronger skills. Think of concrete examples of when the skill has played a role in the child’s success in school, in social situations, or on a team. *Print out the primers for the student’s strengths so they understand the importance of these skills.*

3. Keep in mind that skills in the expected range are good skills. These are areas where the student should be comfortable. While these might not be the student’s “go to” skills, the great news is that these skills should not interfere with successful learning. Be sensitive that gifted students might feel that all of their skills should be strengths. This is NEVER true. No one has all strengths.

4. *Never tell a child he/she is bad* at a skill. Rather, describe it as a skill that might cause difficulties at times. Talk openly about where that skill becomes important in and outside of school and what strategies the student can use to make learning easier. *Be prepared with 2 or 3 strategies for the student to use. The student primers are a great place to start.*

5. If the child is reluctant to discuss the results, *don’t push too hard*. While an open and honest discussion is important, consider when it is appropriate to postpone part of the discussion for another day.

6. Consider *openly discussing your own strengths and weaknesses*. This will further emphasize to the child that everyone has areas of strength and room for improvement. Talk about how you use your strengths and times when your weaknesses got in the way. Ideally, have some examples or stories of how you overcame some of your weaknesses in life and still were able to accomplish a goal.
Student Activity: How I Use My Flexible Thinking

Flexible Thinking Definition:
Taking feedback and doing something differently, even if you think you were right the first time

Examples:
- Figuring out how to correct your test or paper from what your teacher wrote without asking more questions
- Compromising after a disagreement with your friend or sibling
- Coming up with multiple solutions or options for a challenging problem

Name________________________

I use my flexible thinking when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
**Personal Skills**

**Overview**

Personal needs can have an enormous impact on learning. If a student does not come to the classroom emotionally ready to learn, chances are efficient learning will not happen. Personal skills cover a broad range of skills. We have already covered growth mindset. The other three factors that tend to have the biggest impact on students’ academic performance are anger, anxiety and collaboration skills so we address them here. However, each student will come to the classroom with his or her own combination of personal strengths and needs that will influence their learning. When practical, help them understand and address these needs.

**Key Vocabulary**

**Adrenaline**: A hormone that is released in the body of a person who is feeling a strong emotion (such as excitement, fear, or anger), causing the heart to beat faster and giving the person more energy.

**Anger**: A natural response to unexpected or disappointing circumstances. However, students that demonstrate consistent anger might be disguising other feelings or emotions.

**Anxiety**: A feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome.

**Collaboration**: Working with others to share ideas or make something.

**What Teachers Need to Know**

- When students act angry or uncooperative it might be their way of masking other emotions or challenges. Try to break-through and understand the root cause of the anger.
- While a little anxiety can be a good thing, too much anxiety impedes learning. The skill that is often most affected is working memory.
- One key source of anxiety is when there is a mismatch between expectations for a student (from teachers, parents or the student) and the student’s abilities and achievement.
- Health management can play an important role in helping students manage anxiety and stress. Promoting healthy habits such as a good night’s sleep, eating a balanced meal, and getting daily exercise can help.
- One of the most important life skills is how to work well with others. Give students opportunities to work in groups and manage the challenges, perhaps without a grade attached. The more practice they have, the better they will learn to adapt to others’ styles and habits. Consider grouping students with different cognitive strengths and weaknesses so they begin to understand that everyone thinks differently and there can be more than one way to learn or approach a problem.
What Students Need to Know

- Everyone feels anxious at times. Classmates who say they don’t care or they aren’t nervous might very well be feeling anxious but do not want to admit it. You are not alone in feeling anxious or stressed.
- Anger and anxiety can really interfere with your learning if you don’t understand the root cause of your feelings and develop good coping mechanisms. There are strategies that will help, some as easy as using a stress ball. Share your concerns with a trusted adult who can help you find the best supports.
- One major source of anxiety is fear, whether it is fear of the unknown or fear of making a mistake. Really, the best way to overcome this type of anxiety is to jump in and try the task. The more you practice, the better you get and the less anxious you will be. Avoiding the task is only likely to make you more anxious.
- Many students do not enjoy group projects. Differing personalities and concerns about grades are just two of the reasons. However group work is exactly the type of challenge you will face in the “real world”. Learning how to find common goals and interests and giving everyone the opportunity to actively participate will minimize conflicts and maximize performance. This is a skill you will continue to use in the real world.
Figure 15: Anger Iceberg

Icebergs are large pieces of ice found floating in the open ocean. What you can see from the surface can be misleading. Most of the iceberg is hidden below the water.

Angry

This is how anger works. Often when we are angry, there are other emotions hidden under the surface.

The Gottman Institute
Figure 16: Performance Anxiety: Yerkes-Dodson Law
Figure 17: Beating Test Anxiety

Under performance is...
a mismatch between overall abilities and academic performance, usually caused by difficulties in one or more cognitive skills

Skills that Determine Academic Performance

Cognitive Skills = How a Child Learns Best
Examples are...
Processing, Memory, Complex Reasoning, Executive Functions

Academic Skills = What a Child Knows
Examples are...
Reading Comprehension, Math, Science

Habits of Mind = Why a Child is/not Living up to Potential
Examples are...
Mindset, Resiliency, Anxiety

What Mindprint Does
Identify the cognitive weakness
Give strategies to support the weakness
Play to cognitive strengths
So you can be...
Self-aware, Confident, and Resilient!
Instruction

- **Direct Instruction:** *Understanding Personal Skills* - Discuss the importance of personal skills. Use Figures 15-17. *(E, M, H)*
- **Activity:** *Have students write down their positive traits before a big test.* *(E, M, H)*
- **Activity:** On the Mindprint website, have students print out and read the group primer for their strongest and weakest skills. Add strategies to their Action Plans as needed. *(M, H)*
- **Activity:** *Group Reflection* – After a group project have students individually reflect on the group’s performance. If appropriate, have the group reconvene and discuss their reflections. *(E, M, H)*
- **Activity:** *Track Your Wellness* - Have students track their sleeping, exercise and eating. *(E, M, H)*
- **Coaching:** Incorporate stretching, movement and mindfulness into daily classroom routines. *(E, M, H)*
- **Coaching:** Take a deliberate approach to your student groupings. Consider when you want to group students with similar strengths or similar needs. At other times, consider grouping students with dissimilar skills so they grow to appreciate the strengths and needs of others.

**Mindprint Strategies for Action Plan**

- **Wellness Strategies** *(T, S)*
- **Strategies to Reduce Anxiety** *(T, S)*
- **Primers for Working in Groups:** *(T, S)*

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<thead>
<tr>
<th>Processing Speed</th>
<th>Quick</th>
<th>Slow</th>
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<td>Strength</td>
<td>Skill to Support</td>
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<td>Working Memory</td>
<td>Strength</td>
<td>Skill to Support</td>
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<td>Flexible Thinking</td>
<td>Strength</td>
<td>Skill to Support</td>
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<td>Complex Reasoning</td>
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<td>Spatial Perception</td>
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<td>Strength</td>
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<td>Verbal Memory</td>
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<td>Skill to Support</td>
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<tr>
<td>Visual Memory</td>
<td>Strength</td>
<td>Skill to Support</td>
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**Other Resources**

- **Games, Websites and Apps for Group Work**
- **Wellness Apps**
- **What Causes Mindblanks During Exams** *(The Edvocate)*

**Connection to Standards**

- **UDL Guideline Principle 3 Checkpoint 9.2** – Facilitate personal coping skills and strategies
- **ASCA Mindsets & Behaviors Self-Management Skills B-SMS 3. Work independently**
- **ASCA Mindsets & Behaviors Self-Management Skills B-SMS 7. Demonstrate effective coping skills when faced with a problem**
- **21st Century Student Outcomes 4. Life and Career Skills**
- **CASEL Core SEL Competencies Self-Management**
- **McRel International Compendium, Health, Standard 4, Level II - 2, Level III – 1**

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Direct Instruction: Understanding Personal Skills

Teacher Background:
Regardless of how capable a student is, they need to come to the classroom ready to learn if they are to be successful. Introduce how important personal skills are in learning. Understanding one’s strengths and difficulties in this area is as important as academic and cognitive skills for life success.

Teacher-led Discussion:
- Personal skills include how we collaborate (cooperate) and communicate (listening, social language) with others. It also includes how we feel (happy, sad, comfortable, anxious), how we approach work (mindset), how we make decisions, and our character traits. Teachers, give examples of each skill as you go through them. Encourage examples from students.
- In the context of learning in school, the personal skills that tend to have the most impact on performance are growth mindset, anger, anxiety, and collaboration.
- We are going to spend some time thinking about our feelings and what makes us anxious or frustrated.
  - What is anxiety
  - How can some anxiety help our performance (adrenaline)
  - How can anxiety affect us, interfere with our learning
  - What are things we can do to help work through anxiety or frustration? Make a list with the class.
  - What have you tried? What has helped? What have adults suggested? Refer to Mindprint strategies to reduce anxiety.
- Share the Performance Anxiety graphic and explain the negative effects of anxiety and stress. Discuss the importance of exercise, enough sleep, and good eating habits in reducing stress.

Student Activity: Use Group Reflection to have students reflect on the group’s performance. Have the students fill out the sheet independently, perhaps at home. If appropriate, have the group reconvene and discuss their reflections.

Student Activity: Use A Day in the Life of a Teen to show what students’ days should look like. Have students complete the Track Your Wellness chart and ask them to reflect on the hours they spent. What would you like to try to change? What would you like to change but is not in your control?
Figure 18: Why Are Teens So Stressed?

Why are Teens so Stressed?
A Day in the Life of a Teen

What should a teen's day look like?

What many teen days actually look like!

Source: National Sleep Foundation, "Adolescent Sleep Needs and Patterns" visit us at www.mindprintlearning.com

ZZZ = sleep  ⓞ = school  ✓ = homework  🏃 = extra curriculars  ⏯ = media  ⏱ = food
**Student Activity: Group Reflection**

Reflect on what went well in your group compared to what you wish had gone better. Do not use other students' names in your reflection.

Name________________________

What was your favorite part of working in this group?

Do you think this group exceeded the performance of what you could have done independently? Why or why not?

What are specific areas where this group could have done better?

If you were the group’s coach or leader, what would you suggest they do differently on the next project?
# Student Activity: Track Your Wellness

Name: ______________________________

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<th>Thurs</th>
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<td><strong>Reading, play, hanging out, other</strong></td>
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Section Two: 3-Step Process to Self-Regulated Learning

With a strong foundation, your students are ready to drive their own learning. The following chapters will take you through the process of teaching students to set meaningful goals, choose strategies they will need to succeed, and monitor and adapt their approach as necessary. While all students’ goals, and subsequently their approach to learning, will be different you can use this structure to support all students.

Students drive learning

Teachers coach them to the finish line
Chapter 5: Set Goals

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals

Step 2: Use Strategies

Step 3: Reflect/Adapt

Intrinsic motivation
Beliefs about learning
Knowing strengths & weaknesses
Overview

Now that the students have identified their strengths and needs, the next step is to help them set goals that will connect their capabilities to what they want to achieve in a manageable and realistic way.

What Teachers Need to Know

- Goals should be specific, measurable, achievable and relevant.
  - Goals should include a timeframe (a week, a month, a marking period) and some way to determine if the goal was met at the end of the timeframe.
  - Goals should be a stretch but achievable. This is known as the zone of proximal development or the "Goldilocks Principle". Are these goals achievable based on the student's strengths and needs? Are they too easy so the student won't grow? Are they too challenging and the student could easily be discouraged?
  - Goals should reflect the student's intrinsic interests and should take into consideration academic, cognitive and personal strengths and needs.
  - Keep in mind that you want students to improve in all areas. Nurturing a strength could be as important as developing a weaker skill. Improving a social skill could be as important as improving a grade.

- Limit the number of goals. Too many goals can be unmanageable. The "Rule of Three" is a reliable benchmark. In some cases, one or two goals might be sufficient.
- Effective goal setting is dependent on self-awareness, planning and flexible thinking. Goal setting might be harder for students with weaker executive functions (attention, working memory or flexible thinking).

What Students Need to Know

- The best way to achieve what you want in school (and in life) is to set goals for yourself. Life doesn't just happen by accident. If you are intentional about what you want to achieve, you are far more likely to succeed.
- Your goals can extend beyond grades or making the sports team. Think more broadly about the person you want to be.
- Goals aren’t permanent. They depend on what is going on in your life at a specific point in time and what is important to you.
Figure 19: The Goldilocks Principle

Goldilocks Principle

*Goals should be in the zone of proximal development, a stretch but achievable, based on the student’s academic, cognitive and personal skills.*
**Instruction**

- **Direct Instruction**: Teachers introduce the importance of *Goal Setting*.
- **Activity: Goals We Can Measure** – This is a warm-up exercise that provides practice turning non-measurable goals into measurable goals. *(E, M)*
- **Direct Instruction/Activity: Individual Goal Setting** – This is the most detailed and time-consuming exercise in this guide. Allow for sufficient preparation and time. *(E, M, H)*
- **Direct Instruction/Activity: Individual Goal Setting (Alternative Version)** – You can download an excel Goal Setting Spreadsheet as an alternative, self-guided approach to the three step process. *(M,H)*
- **Coaching**: Place the goals in an accessible, visible spot – on student binder, top of folder, hang in classroom and refer to as appropriate *(E, M, H)*

**Mindprint Strategies for Action Plan**

- **Specific, Achievable Goals** *(S)*
- **Recommendations for Games or Apps using a search by Interests** *(S)*

**Other Resources**

- **Articles on Interests & Passion**
- **Student Interest Survey for Career Clusters**
- **Scholastic Student Interest Survey Grade 5+**
- **SMART Goal Setting** *(edutopia)*

**Connection to Standards**

- **UDL Guideline Principle 2 Checkpoint 6.1 – Guide Appropriate Goal-Setting**
- **CASEL Core SEL Competencies Self-Management**
- **2016 ISTE Standards for Students – 1 Empowered Learner 1.a. Articulate and set personal learning goals**
- **McRel International Online Standards Compendium, Life Skills, Self-Regulation: Standard 1 Sets and Manages Goals, Level IV 1-11**
Direct Instruction: Goal Setting

Teacher Background:
With the foundational elements of self-regulated learning having been addressed, it is time to target specific areas for improvement. Each student should have specific goal(s) that reflect their unique profiles. Unlike your goals for the class, these goals should be student-specific and developed by the student with teacher support.

Teacher-led Discussion:
- Begin at the end—Why are we doing this? Remind students that the ultimate objective is for them to take control of the learning process, but that you will be there to support them along the way. Generate enthusiasm for the idea that they will be in control, not someone else telling them what they must do. But remind them that the process only works if they take responsibility.
- Show students the Self-Regulated Learning model. Take this opportunity to review the strong foundational skills they have been developing on the inside the circle: establishing growth mindset or beliefs about learning, understanding their intrinsic motivations and identifying their areas of strength and need in academics, cognitive and personal skills.
- Review the 3 Step Process you will take to develop self-regulated learning.
- Emphasize the importance of goals being specific to students’ own unique combination of strengths, needs and interests. Acknowledge that this can be challenging at first, but that it will get easier over time.
- Provide reassurance that goals can and most likely will change or evolve. This is a fluid process – making adjustments is expected.

Student Activity: Goals We Can Measure - This preparation exercise helps students understand how to create specific, measurable goals. It offers good practice for students who might have difficulty thinking of goals. It allows them to focus on the process of effective goal setting rather than the goal. Guide students through this activity as a class or have them work in small groups.

Student Activity: Individual Goal Setting - This lengthy template provides a step-by-step sequence for brainstorming, prioritizing and choosing goals that are relevant, specific and measurable. Appendix C has a corresponding teacher guide to support you as you coach students through this work. Anticipate this activity to be challenging for students and some might be resistant, so be prepared to support some students as needed.

You might consider this as an at-home exercise first and then let students discuss their completed worksheets with a friend in class if they choose. Given the personal nature of the content, students should be able to select their partner or choose not to collaborate. Working at home will protect students’ privacy and ensure they are creating their own goals and not focused on what others might be thinking.
Activity: Goals We Can Measure

Before individual goal-setting, get students thinking about how to write goals that can be measured. This can be done in small groups or as a class discussion. Begin with an example and then offer a series of goals that cannot be measured. Ask students to re-word the goals to make them measurable:

<table>
<thead>
<tr>
<th>Prompts</th>
<th>Make it Measurable</th>
<th>How I Will Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will do better in Math</td>
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<td>I will get organized</td>
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<td>I will work faster</td>
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</table>
**Activity: Individual Goal Setting**

Name__________________

Keeping in mind my strengths and needs:

<table>
<thead>
<tr>
<th></th>
<th>My Strongest Skill</th>
<th>Skills I need help with….</th>
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<tbody>
<tr>
<td>Academic Skills</td>
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<tr>
<td>Cognitive Skills</td>
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<td>Personal Skills</td>
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What do I want to achieve in __________ over the next ________?  
(subject)  
(time period)

**Step 1: Brainstorm** (At least __ goals)

<table>
<thead>
<tr>
<th>Brainstorm Ideas</th>
<th>Why is this goal important to me?</th>
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Mindprint Learning
Step 2: Are My Goals Realistic and Specific?

Look at your list and evaluate:

- Is the goal specific?
- Is the goal realistic?
- Is your goal written in the “positive”? (What you want to do, not what you don’t want to do.)
- Does the goal relate to a specific skill? Which one and how?

Re-write your goals to make them positive, realistic and specific in the given timeframe. If there are goals that you can’t make realistic or that really aren’t important to you, you can leave them off the list.

Realistic and Specific Goals:
Step 3: How will I decide if I achieved my goal? How will I measure if I am successful?

For each goal, decide on an objective measure.

<table>
<thead>
<tr>
<th>Realistic &amp; Specific Goals</th>
<th>How I will measure my performance?</th>
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Step 4: Prioritize your goals.

Number your goals above in order of importance to you, “1” being the goal you want to work on the most.
Step 5: My Goals!

Write your final goal(s) and how you will measure them below.

<table>
<thead>
<tr>
<th>My Goals</th>
<th>My Goal Measures</th>
</tr>
</thead>
<tbody>
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Chapter 6: Use Strategies

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals
Intrinsic motivation

Step 2: Use Strategies
Beliefs about learning
Knowing strengths & weaknesses

Step 3: Reflect/Adapt
Overview

Once students have set goals, they need to select the specific strategies that will help them reach those goals. If you decide to use the Mindprint Toolbox to identify strategies, you will find that the Personalized Toolbox will enable students to easily narrow down their options based on their goals (e.g. class participation, getting organized, etc.), strengths, and needs. Ideally, students will include study strategies for homework time as well as strategies to use during class.

Keep in mind that using new strategies often requires changing old habits which is never easy. Students might need support from teachers or parents, ranging from gentle reminders to more formal instruction. While you want to encourage students to ask for help, it will be important to try to anticipate where they might need you and be prepared to support them.

Key Vocabulary

Parenting Strategies: Approaches parents can use to help students with homework or other academic, cognitive or personal tasks.

Study Skills: Approaches that students take to improve their performance at home and in the classroom.

Teaching Strategies: Research-backed instructional approaches that teachers can use with students to cultivate strengths and support areas of need.

What Teachers Need to Know

- All strategies in the Mindprint Toolbox are evidenced-based and effective. You will want to focus on helping students select the strategies that will be most practical and beneficial for them based on their current needs, goals, and environment.
- It is best to limit students to no more than three new strategies at a time to increase the likelihood that they will follow through and be successful.
- Teachers can play a critical role in narrowing down options, but it is important for the students to ultimately choose the final strategies to increase the likelihood of follow-through.
- You might want your class to focus in a particular area, such as group work, growth mindset, or health and wellness and have groups of students try a particular strategy. Use the Customized Search tab in the Teacher’s Mindprint Toolbox to easily identify options.
- Some of the strategies will require teacher or parent support to get started. Consider if you want to steer strategy choices based on these factors.

What Students Need to Know

- The process of finding the strategies that will work best for you will require some trial-and-error. Don’t expect it to be perfect the first time. Fortunately, there are plenty of options in the Mindprint Toolbox.
- Start with two or three strategies you believe will work best for you, given what you’ve tried in the past, your after-school schedule, etc.
- You might need help getting started with some of these strategies. Just ask.
Figure 20: Student Driven Learning
Instruction

- **Direct Instruction**: *What are Strategies* - Discuss the importance of deliberate strategy selection and how to find the best-suited strategies. *(E, M, H)*
- **Direct Instruction/Activity**: *Strategy Selection* - Teachers guide students in identifying strategies using the Mindprint Personalized Toolbox. If teachers have specific areas where they want students to focus, they should instruct students which search criteria to use. Alternatively, teachers can print out a list of strategies for students to select from. *(E, M, H)*
- **Direct Instruction/Activity**: *Developing Metacognition* - This activity guides students to choose strategies from a selection of common metacognitive strategies. Teachers can select a strategy and help the class understand why the strategy is useful and how to apply it. Teacher demonstration, modeling, and following up with student practice are all important. *(E, M, H)*
- **Activity**: *Strategy Action Plan* - After choosing strategies, students can use this worksheet to make a plan for using strategies and tracking progress. *(E, M, H)*
- **Activity**: *I Haven't YET* - Gives students a visual motivator once they have chosen their strategies. *(E)*
- **Activity**: *Create a Contingency Plan* – This practice exercise helps students grow comfortable anticipating challenges and handling them appropriately. *(E, M, H)*
- **Coaching**: *Assignment/homework wrappers* that include the chosen strategies *(E, M, H)*

Mindprint Strategies for Action Plan

- **Offer Limited Options** *(T)*
- **Create Contingency Plans** *(T, S)*
- **Homework Wrappers by Cognitive Skill** *(T, S)*

Other Resources

- **Getting Started with the Mindprint Toolbox**

Connection to Standards

- **UDL Guidelines Principle 2 Checkpoint 6.2 – Support Planning and Strategy Development**
- **2016 ISTE Standards for Students – 1 Empowered Learner 1.b. Students build networks and customize their learning environments in ways that support the learning process**
Direct Instruction: What Are Strategies

Teacher Background:
You will want to have a brief discussion highlighting where students are in the process of Set Goals-Use Strategies-Reflect & Adapt, which is now choosing the right-fit strategies to help them meet their goals.

Teacher-led Discussion:

- Strategies are simply approaches to help you work more efficiently and effectively. You are using strategies all the time to help you learn and work, whether you are aware of it or not. Examples include:
  - Organizational strategies: writing assignments in your notebook, checking off assignments as you complete them
  - Study strategies: flashcards, having a parent quiz you, saying words out loud
- Explain the process students will now take of hand-picking strategies based on what they know about themselves as learners and the goals they set.
  - Encourage students to choose 2 or 3 strategies initially. Prepare them that this process involves some trial and error, and they might need to try a few strategies before finding what feels right.
  - Anticipate that some of the strategies will be new to both teachers and students. Where appropriate be prepared to review them and help students practice.

Student Activity: Strategy Selection – This exercise guides students through the strategy selection process in several steps with the option of using their Mindprint Personalized Toolbox or thinking of their own strategies. Teachers can also print a list of strategies for their students.

Student Activity: Strategy Action Plan – After choosing strategies, students should have a written action plan and both teacher and student should have a copy. Students can use the template provided, or teachers can support students in customizing an action plan that is best-suited for the student’s planning and organizational needs.

Student Activity: I Haven’t Yet - Worksheet can be used after students have chosen their strategies to give them a visual reminder of their goals and strategies framed with a growth mindset approach. Students can keep these papers in their assignment binders or consider hanging one up on the wall for inspiration.

Student Activity: Developing Metacognition - Students will see quotes for 11 key metacognitive approaches they can use to improve their self-awareness and performance. Have students identify the quotes that resonate the most and add the corresponding strategies to their Mindprint Action Plans. They can use the strategies even if they do not have a Mindprint profile or have not set their specific goals.

Student Activity: Create a Contingency Plan - This worksheet provides students with low-stakes practice in handling disappointment and planning for what to do when things do not go as planned. While important for all students, it might be particularly beneficial for anxious students or those with weaker flexible thinking.
**Activity: Strategy Selection**

Name__________________

1. Pick one goal from Step 5 of Goal Setting Worksheet

<table>
<thead>
<tr>
<th>My Goal</th>
<th>My Goal Measures</th>
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</table>

2. Look in your Mindprint Personalized Toolbox under “Study Strategies” to find what strategies might help you meet your goal. Feel free to identify your own strategies too.

The following are categories you can search to find the right tools:

- **Practice Academic Skills**
- **Develop Cognitive Skills**
- **Teaching Strategies**
- **Parenting Strategies**

**Students: Study skills for home and school**

Select one or more:
- **Focus & Organizational Strategies**
- **How to Memorize**
- **Prep for standardized tests or exams**
- **Speaking & Class Participation**
- **Logic & Strategic Reasoning**
- **Reading & Writing**
- **Math, Science & Computing**
- **Health & Wellness**
3. Make a List of strategies you think of or find in your Mindprint Toolbox.

4. Choose up to 3 strategies you will use. If you have difficulty deciding, use the template below to help you think through which strategies will be best.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>How Will It Help Me?</th>
<th>When Will I Use It?</th>
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</table>
# Student Activity: Strategy Action Plan

**My Goal:**

**My Goal Measures:**

<table>
<thead>
<tr>
<th>Strategies I will use to reach my goal</th>
<th>Where I need help/Other comments</th>
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<tbody>
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**Teacher Comments:**

**My Strategy Use:**

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<tr>
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<th>Strategy 1</th>
<th>Strategy 2</th>
<th>Strategy 3</th>
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<td>Mon</td>
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<td>Tues</td>
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<td>Friday</td>
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<tr>
<td>Weekend</td>
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</table>
Student Activity: I Haven’t Yet

Name: __________________

I haven’t

________________________________________

________________________________________

YET…

But if I _____________________________

________________________________________

I will be able to!

Mindprint Learning
Use these statements to help students think about their learning. Encourage students to pick the three strategies they will find most useful, read about them, and add them to their Mindprint Action Plan.

“I draw pictures or diagrams to help me understand this subject”
Math: Draw Pictures when Solving Problems
Logic & Reasoning, Memorization: Visualization Techniques

“I make up questions that I try to answer about this subject”
Logic & Reasoning: "W" Questions to Encourage Deeper Analysis
Focus: Ask Questions

“When I am learning something new in this subject, I think back to what I already know about it”
Logic & Reasoning, Memorization: Make Connections to Previously Learned Information
Logic & Reasoning: Activate Prior Knowledge
Logic & Reasoning: Diagramming Similarities and Differences

“I discuss what I am doing in this subject with others”
Logic & Reasoning, Speaking: Peer Teaching
Logic & Reasoning: Study Groups
Logic & Reasoning, Speaking: Convince a Skeptic

“I practice things over and over until I know them well in this subject”
Memorization: Spaced Repetition
Memorization: Mix-Up Content to Improve Learning & Retention

“I think about my thinking, to check if I understand the ideas in this subject.”
Logic & Reasoning, Reading: Restate / Stop & Summarize
Logic & Reasoning, Memorization: Use Labels and Images
Memorization: Re-write/Re-read Class Notes

“When I don’t understand something in this subject I go back over it again.”
Logic & Reasoning: Read the Problem to an Adult
Logic & Reasoning, Reading: Restate / Stop & Summarize
“I make a note of things that I don’t understand very well in this subject, so that I can follow them up.”
Behavior: Save up Questions
Test-Taking: Prepare for Teacher Review Sessions

“When I have finished an activity in this subject, I look back to see how well I did.”
Logic & Reasoning, Growth Mindset: Daily Reflection
Focus: Use Lists to Check Work
Growth Mindset: Self-Assess Knowledge

“I organize my time to manage my learning in this subject.”
Focus, Organization: Keep a Nightly Routine & Schedule
Organization: Have a System
Focus, Organization: Project Outline

“I make plans for how to do the activities in this subject.”
Logic & Reasoning, Test-Taking: How to "Explain Your Answer"
Test-Taking: Create Your Own Study Guide
**Student Activity: Create a Contingency Plan**

One strategy to increase your likelihood of success is to anticipate what could go wrong and be prepared with a back-up plan. Think about an important project, sporting event, or activity you have coming up. You want to be sure it is a success. How will you plan for the unexpected?

Name___________________

What is the event?

List one or two things that could go wrong?

How will I prepare for the “just in case”?
Chapter 7: Reflect & Adapt

Self-Regulated Learning
Adapted from Butler 1997, Pintrich 2000, Winnie & Hadwin 1998

Step 1: Set Goals
- Intrinsic motivation

Step 2: Use Strategies
- Beliefs about learning
- Knowing strengths & weaknesses

Step 3: Reflect/Adapt
Overview

Students should expect that goals are rarely met on the first attempt. Reflecting on performance and adapting accordingly is an important piece of self-regulated learning. If you are working on longer-term goals, you do not want to let the entire term pass before discovering that goals will not be met. If goals are short-term, maybe only a week, it might be fine not to have formal check-ins.

Key Vocabulary

Adapting: Adjusting to new circumstances based on feedback.

Self-Monitoring: Measuring, considering and adjusting one’s own behavior, thoughts and feelings.

Self-Reflecting: Being introspective and willing to learn more about oneself in order to improve.

What Teachers Need to Know

- Students should always be evaluating their effort as well as their performance. That is essential to instilling a growth mindset.
- While accurate student self-reflection is the ultimate goal, many students will need your help to decide what is working and what might need adjusting.
- Some students might need more hands-on coaching in how to take feedback, reflect upon it and apply it effectively. Anticipate students with weaker flexible thinking to need extra support.

What Students Need to Know

- Don’t be discouraged if you don’t meet all your goals with the first strategies you chose. It’s typical to need to try several different strategies before you find the ones that are most effective for you.
- One of the most important aspects of this process is a willingness to take feedback from your teacher, peers or parents.
- Be honest with yourself. If you have a hard time taking feedback try not to respond immediately when someone gives you feedback. Try to listen. If you feel you need to respond later, that’s fine.
Figure 21: Definition of Insanity

INSANITY: (n.)
Doing the same thing over and over and expecting different results.
**Instruction**

- **Direct Instruction**– *Let’s Talk about Reflection* - What is reflection and how can it help you? *(E, M, H)*
- **Activity: Assignment Wrapper** – Teachers can use this worksheet as an example for creating wrappers based on the specific assignment or based on individual student goals. Other sample *homework wrappers* are available on Mindprint. Teachers can also offer blank wrappers and allow students to customize them based on their goals and the strategies they chose. *(E, M, H)*
- **Activity: Interim Reflection** - Students fill out worksheet and then meet with a partner of their choice to share. *(E, M, H)*
- **Activity**: If a strategy requires a more concrete regular activity, create a way to track it. For example, if the goal is to participate in class 3 times per week, print a calendar and check it off each day. *(E, M, H)*
- **Coaching**: Encourage students to take 5 or 10 minutes at the end of class or at home before bedtime a few times a week to quietly self-reflect. This can be more informal and might be better for students who do not enjoy writing. *(E, M, H)*
- **Coaching**: Model reflection. Share out loud your thoughts on how a lesson or discussion went and what you might change for the next session. Reflection could be related to time management, class participation or connecting information to previous topics. *(E, M, H)*
- **Coaching**: Encouraging students offering “shout outs” at the end of class where they share something positive that a classmate did that day. Add that to a “shout out” wall to encourage positivity and a supportive environment. *(E, M, H)*
- **Coaching**: Ongoing use of assignment wrappers. *(E, M, H)*

**Mindprint Strategies for Action Plan**

- **Self-reflect** *(S)*
- **Assignment Wrapper** *(S, T)*
- **Give Balanced, Specific Feedback** *(T)*
- **Coach Students How to Take Feedback** *(T)*
- **Prompt Feedback** *(T)*

**Other Resources**

- Articles on Flexible Thinking
- Books by Dr. Ross Greene on Inflexible Children
- The Developing Engagement with Feedback Toolkit, Higher Education Academy
- 7 Reflection Tips for Assessment, Empowerment, and Self-Awareness edutopia

**Connection to Standards**

- UDL Guideline Principle 2 Checkpoint 6.4 – Enhance capacity for monitoring progress
- UDL Guideline Principle 3 Checkpoint 9.3 – Develop Self-assessment and reflection
- McRel International Online Standards Compendium, Self-Regulation, Standard 2, Level IV, 2, 3, 6
- McRel International Online Standards Compendium, Thinking and Reasoning, Standard 6, Level III, 5
Direct Instruction: Let’s Talk about Reflection

Teacher Background:
Introduce the importance of self-reflection through a class discussion. Help students appreciate that reflection is open-ended and there is no one right way to approach it.

Teacher-led Discussion:
• Start out the discussion with an open-ended question: What is reflection? What are we doing when we reflect?
  o It might help to have the students jot down a few words on a paper and then share them with the class to make a mind map on the board. Answers might include: thinking, thinking about what you did, thinking about why you did it.

• Ask Why – Why do we reflect?
  o Again, make a map with students’ answers. Answers might include: so we can get better, so we can remember what we did, so we can decide what to do differently, so we know what to do next, so we can think about a mistake.

• Connect this brainstorm to how they will be reflecting on their use of strategies and how the strategies are helping them achieve their goals.
  o Remind students that reflecting and adapting is a key part of the learning process. You need to think about what you are doing in order to know/decide if it is working or not. You will likely need to try several different strategies before finding the best ones to reach your goals, and that takes reflection and shifting.

Student Activity: Assignment Wrappers Teachers can provide students with a “wrapper” or checklist of ideas to think about before an assignment so they are most likely to focus on using optimal learning strategies. After they complete the assignment, they are asked to reflect on whether they used the strategies and if they were helpful. The included assignment wrapper is an example to guide teachers. Teachers can create specific wrappers based on each student’s strengths and needs or use more generalized wrappers for the class based on the academic subject. Alternatively, teachers can have students create their own wrappers using the strategies they chose in the previous chapter. To make the wrappers manageable, typically a list of 3 to 5 items is best.

Student Activity: Interim Reflection worksheet can be filled out by the student to reflect on their goal progress and use of their chosen strategies. Then they can meet with a peer of their choice to discuss. Students can use this worksheet for each of their goals. Be sure students have had sufficient time to learn and apply the strategies.
Student Activity: Assignment Wrapper (example)

FRONT PAGE

While reading I can:
- Think about how the topic/material connects to what I already know or we are learning in class
- Make a mental picture (mind movie) of what I am reading
- Highlight main ideas, details and key vocabulary words
- Stop and summarize to myself the main idea after reading each paragraph
- Write down questions as I go so I can go back later or ask in class tomorrow
- When I finish, can I summarize the key takeaways in a few bullets

If I’m having difficulty I can:
- Read text aloud to myself or an adult
- Use visual note taking or draw a visual timeline to help me understand sequence of events and facts
- Look at the pictures and diagrams in the text for clues

BACK PAGE

While reading I:
- Thought about how the topic/material connected to what I already know or we are learning in class
- Made a mental picture (mind movie) of what I am read
- Highlighted main ideas, details and key vocabulary words
- Stopped and summarized to myself the main idea after reading each paragraph
- Wrote down questions and went back to them and/or will ask tomorrow in class
- Summarized the key takeaways in a few bullets after I finished

When I wasn’t certain I:
- Read text aloud to myself or an adult
- Used visual note taking or drew a visual timeline to help me understand sequence of events and facts
- Looked at the pictures and diagrams for clues

Where do I need help? Or, I’d like my teacher to know…
**Student Activity: Interim Reflection**

Name: _________________________

My goal was:

How I’m doing:

- I met/am on track to meet my goal
- I might meet my goal, but there’s a chance I won’t
- I’m unlikely to/didn’t meet my goal

If you might not meet your goal, things to think about

- Were you able to focus the entire time? *See attention strategies*
- Did you have trouble following instructions or following through? *See attention or working memory strategies*
- Did you have trouble remembering what you needed? *See memory strategies*
- Did you have trouble finishing? *See organization strategies*
- Did you have trouble understanding? *See critical thinking strategies*

Which of my strategies helped, and are there any I should adapt or abandon?

<table>
<thead>
<tr>
<th>Strategy 1</th>
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<tbody>
<tr>
<td><strong>I used this strategy when...</strong></td>
</tr>
<tr>
<td><strong>It helped me...</strong></td>
</tr>
<tr>
<td><strong>It wasn’t useful when...</strong></td>
</tr>
<tr>
<td><strong>I will continue to use it, but adapt by...</strong></td>
</tr>
<tr>
<td><strong>I will not use this strategy but will find another one. (Write new strategy into your action plan)</strong></td>
</tr>
</tbody>
</table>

103
<table>
<thead>
<tr>
<th>Strategy 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I used this strategy when...</td>
<td></td>
</tr>
<tr>
<td>It helped me...</td>
<td></td>
</tr>
<tr>
<td>It wasn’t useful when...</td>
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<tr>
<td>I will continue to use it, but adapt by...</td>
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<tr>
<td>I will not use this strategy but will find another one. (Write new strategy into your action plan)</td>
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</table>

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<th>Strategy 3</th>
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<tbody>
<tr>
<td>I used this strategy when...</td>
<td></td>
</tr>
<tr>
<td>It helped me...</td>
<td></td>
</tr>
<tr>
<td>It wasn’t useful when...</td>
<td></td>
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<tr>
<td>I will continue to use it, but adapt by...</td>
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<tr>
<td>I will not use this strategy but will find another one. (Write new strategy into your action plan)</td>
<td></td>
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</tbody>
</table>
Appendix A: Standards Addressed
Appendix: Standards Addressed

The Mindprint learning modules tie in to well-known and accepted learning standards and rubrics. You can find them within each chapter. Regardless of the standards you are using, more broadly, the concepts and intended outcomes of this guide provide the tools to reach the overarching goal of preparing our students for subsequent school years, careers and life as self-regulated learners.

List of Rubrics and Standards Addressed in the Mindprint Guide to Self-Regulated Learning

- AMLE: This We Believe – The 16 Characteristics of Successful Schools
- The ASCA Mindsets & Behaviors for Student Success: K-12 College- and Career-Readiness Standards for Every Student
- Bloom’s Taxonomy
- CASEL
- McRel International Online Standards Compendium
- UDL (Universal Design for learning) Guidelines
- 21st Century Skills
- 2016 ISTE Standards for Students

Note on Common Core State Standards: While this guide is not a curriculum to teach academic content, the outcome of the self-regulated learning model is reflected in the Common Core State Standards’ description of a student who meets their ELA Standards as able to “demonstrate independence” and “more broadly, they become self-directed learners, effectively seeking out and using resources to assist them...”
Appendix B: Cognitive Skills
**Visual Motor Speed**

**Definition:**
The rate at which a student can see and physically respond to visual stimuli. Athletes usually have excellent visual motor speed. In school, students with weaker visual motor speed might have trouble typing, copying assignments from the board, or efficiently handling hands-on activities.

**Examples:**
- Overall speed in typing or writing
- Copying assignments from the board
- Efficiency with other hands-on tasks, such as sports

**Growth Mindset Language to Support a Weakness**
- Do your best to finish and don’t worry about anyone else. You can come back and finish later.
- It’s more important that you are accurate than fast. Focus on your accuracy.

**Growth Mindset Language to Nurture a Strength**
- Great, you finished early! Can you use your extra time to go back and check your work?
- Great, you worked very efficiently! Is there a classmate you can see who might need your help?

**Visual Motor Speed Primers:**
- [Making Use of Your Strong Visual Motor Speed](#)
- [Understanding and Developing Visual Motor Speed](#)

**Top Strategies to Support Weaker Visual Motor Speed:**
- [Handwriting Tips and Tools](#)
- [Typing as an Alternative](#)
- [Provide Copies of Class Notes](#)
- [IEP or Classroom Supports for Visual Motor Speed](#)
Processing Speed

**Definition:**
The rate at which a student takes in and analyzes information. Students with efficient processing speed work quickly and accurately.

**Examples:**
- Time to listen, think about and respond to questions or information
- Time it takes to remember/recall what you know
- Time it takes to complete class work, tests, quizzes

**Growth Mindset Language to Support a Weakness**
- Do your best to finish and don’t worry about anyone else. You can come back and finish later.
- Put your efforts into the quality of your work, not on how much get done.

**Growth Mindset Language to Nurture a Strength**
- Great, you have extra time. Can you go back and check your work or are there places you can add more detail?
- Great, you finished early. What else would you like to learn about in your extra time?

**Processing Speed Primers:**
- [Making Use of Your Strong Processing Speed](#)
- [Group Work: Using Your Quick Processing Speed](#)
- [Understanding and Developing Processing Speed](#)
- [Group Work: Adjusting with Slower Processing Speed](#)

**Top Strategies to Support Weaker Processing Speed:**
- [Have a "Must-do" vs a "Can-do" List](#)
- [Timer](#)
- [Skim Text When Appropriate](#)
- [Effective Note Taking](#)
- [Test Taking Strategies](#)
Attention

Definition:
The ability to initiate and maintain focus for learning, work and behavior control.

Examples:
- Staying focused during an activity that isn’t much fun such as homework or a long class lecture
- Staying focused for a long period of time, such as throughout an entire test

Growth Mindset Language to Support a Weakness
- I noticed that you were having trouble staying focused during today’s lesson. Maybe tomorrow you can give me a signal and then you can get a drink of water when you are feeling fidgety.
- You forgot your homework again. Please bring it tomorrow. Let’s highlight that in your calendar so you don’t forget.

Growth Mindset Language to Nurture a Strength
- I can tell by your answers that you really paid attention to the details of the story. I have a great next book for you to try. It’s a little more complex, but I think you can handle it.

Attention Primers:
- Making Use of Your Strong Attention
- Group Work: Using Your Strong Attention
- Understanding and Developing Attention
- Group Work: Adjusting with Weaker Attention

Top Strategies to Support Weaker Attention:
- Eliminate Unnecessary Distractions
- Stretching and Movement Breaks
- Avoid Multi-Tasking
- Organized Space
- Show Your Work
- Slow Down and Use a More Deliberate Approach
Working Memory

Definition:
The ability to mentally juggle information while using it during multi-step tasks.

Examples:
- Ability to do mental math
- Listening to and remembering what the teacher is saying while you take notes
- Ability to remember and follow multi-step directions

Growth Mindset Language to Support a Weakness
- There will be a lot of information covered in class today. Do your best to take good notes, and we will leave time at the end of class to review anything you might have missed.
- You did a good job up until here, but then you missed a step. Tomorrow, we will try using a checklist.

Growth Mindset Language to Nurture a Strength
- Your class notes are very thorough. These will be helpful when it’s time to study for the test.
- You’re good at remembering in your head, but be sure you write down the instructions because some days there will be more steps and you don’t want to miss anything.

Working Memory Primers:
- Making Use of Your Strong Working Memory
- Group Work: Using Your Strong Working Memory
- Understanding and Developing Working Memory
- Group Work: Adjusting with Weaker Working Memory

Top Strategies to Support Weaker Working Memory:
- Visual Reminders
- Avoid Multi-Tasking
- Use Lists to Check Work
- Chunking Information
- Show Your Work
Flexible Thinking

**Definition:**
The ability to shift gears or adjust and change strategies as needed to solve novel or complex problems.

**Examples:**
- Being able to come up with more than one solution to a problem
- Handling unexpected circumstances
- Adapting to changes

**Growth Mindset Language to Support a Weakness**
- It seems you weren’t expecting that question. Take a moment to think if this reminds you of a problem you’ve seen before.
- The first way you tried didn’t work but let’s brainstorm some other ways we can approach this.

**Growth Mindset Language to Nurture a Strength**
- We haven’t seen a problem quite like this before. I see how you tried a couple different ideas. It really worked. No one else came up with that approach.
- You did a great job in helping your teammates work through their differences today. You made sure everyone had a turn to speak. Thank you.

**Flexible Thinking Primers:**
- Making Use of Your Strong Flexible Thinking
- Group Work: Using Your Strong Flexible Thinking
- Understanding and Developing Flexible Thinking
- Group Work: Adjusting with Weaker Flexible Thinking

**Top Strategies to Support Weaker Flexible Thinking:**
- Read the Problem to an Adult
- Create Contingency Plans
- Ease Transitions Between Tasks
- Have a “Must-Do” vs a “Can-Do” List
- Make Connections to Previously Learned Information
Abstract Reasoning

**Definition:**
The ability to draw inferences from objects, images, space or numbers

**Examples:**
- Understanding higher order math
- Solving complex, novel problems

**Growth Mindset Language to Support a Weakness**
- It seemed it really helped your understanding today in class when you asked for some examples. Nice use of strategies.
- This is a tough problem. Let’s talk through it in. Breaking it up into steps will help.

**Growth Mindset Language to Nurture a Strength**
- This new material seems to have clicked for you. Can you help me by explaining it to your group.
- When reading through tonight’s chapter, I want you to think through some examples you have seen of this in the real world. I’m going to ask you to share them with the class tomorrow.

**Abstract Reasoning Primers:**
- Making Use of Your Strong Abstract Reasoning
- Group Work: Using Your Strong Reasoning Skills
- Understanding and Developing Abstract Reasoning

**Top Strategies to Support Weaker Abstract Reasoning:**
- Visualization Techniques
- Describe What You See
- Read Review Questions First
- Make Connections to Previously Learned Information
- Draw Pictures When Solving Math Problems
- How to Double-Check Math Problems
Verbal Reasoning

**Definition:**
The ability to draw inferences from limited information and develop an understanding of an idea by considering its connections to other ideas

**Examples:**
- Reading Comprehension
- Following a complex story line or conversation

**Growth Mindset Language to Support a Weakness**
- You asked really good questions in class today. I think it helped a lot of your classmates understand. Let me know if there is anything else I can answer.
- This sequence of events is confusing – let’s draw it out on paper to see how the events connect to each other.

**Growth Mindset Language to Nurture a Strength**
- I know you understand the meaning of these words. I’d like to see you write more complex sentences the next time and show some of the nuance of your understanding.
- It seems you’ve really grasped the meaning of this story. I have a great next book for you to read if you’re ready for a bigger challenge

**Verbal Reasoning Primers:**
- Making Use of Your Strong Verbal Reasoning
- Group Work: Using Your Strong Reasoning Skills
- Understanding and Developing Verbal Reasoning

**Top Strategies to Support Weaker Verbal Reasoning:**
- Make Connections to Previously Learned Information
- Read Review Questions First
- Stop and Summarize
- Adapt Your Reading Approach for Challenging Text
- Visualization Techniques
Spatial Perception

Definition:
The ability to process and produce material that is visual or exists in a spatial array such as maps, graphs, or symbols

Examples:
- Understanding graphs, charts and maps
- Perceiving relative locations or how objects fit together
- Keeping numbers aligned in math problems

Growth Mindset Language to Support a Weakness
- Your math homework was really well-organized when you did it on graph paper. Did it help when you were solving the problems?
- There is a lot going on in this chart – let’s break it down and talk through it step-by-step.

Growth Mindset Language to Nurture a Strength
- Instead of just working with the numbers, try drawing a picture or visualizing in your mind what is being represented in this word problem.
- In today’s project, there are a lot of interesting materials you can use to build a model with your group.

Spatial Perception Primers:
- Making Use of Your Strong Spatial Perception
- Group Work: Using Your Strong Spatial Perception
- Understanding and Developing Spatial Perception

Top Strategies to Support Weaker Spatial Perception:
- Describe What You See
- Graph Paper for Alignment
- Graph Paper for Drawing/Scaling
- Masking or Fewer Problems Per Page
- Tinted Strips
Verbal Memory

**Definition:**
The ability to store and then recall word-based information at a later time

**Examples:**
- Remembering what was read or said (from class presentations, conversations)

**Growth Mindset Language to Support a Weakness**
- Drawing pictures to pair with each vocabulary word seemed to be a great strategy for helping you remember for the test. Let’s think of other areas you can use pictures or drawing to help you remember.
- There is a lot of material that will be covered on this test. Let’s make a plan to space out your studying over the next week.

**Growth Mindset Language to Nurture a Strength**
- What does this new information remind you of that we discussed last week in class?
- Remember when you study tonight to describe the information on these graphs out loud to help you remember.

**Verbal Memory Primers:**
- Making Use of Your Strong Verbal Memory
- Group Work: Using Your Strong Verbal Memory
- Understanding and Developing Verbal Memory
- Group Work: Adjusting with Weaker Memory

**Top Strategies to Support Weaker Verbal Memory:**
- Keep Reference Books Accessible
- Make Connections to Previously Learned Information
- Use Visual Imagery
- Re-write/read Class Notes
- Review in Random Order
- Spaced Repetition
- Verbal Rehearsal
Visual Memory

**Definition:**
The ability to record and then recall abstract or visual information at a later time

**Examples:**
- Remembering previously seen objects, images or abstract ideas

**Growth Mindset Language to Support a Weakness**
- If remembering this diagram is hard, label it with a written description and use that to study from.
- Let’s discuss the main or most important parts of this picture and focus on describing and remembering those.

**Growth Mindset Language to Nurture a Strength**
- Does this picture remind you of something we learned about last week? What is the same? What is different? Think about that as we dive into this new science chapter.
- It seems to really help you remember when you take the extra time to find an image or draw pictures of the vocabulary words.

**Visual Memory Primers:**
- Making Use of Your Strong Visual Memory
- Group Work: Using Your Strong Visual Memory
- Understanding and Developing Visual Memory
- Group Work: Adjusting with Weaker Memory

**Top Strategies to Support Weaker Visual Memory:**
- Describe What You See
- Spaced Repetition
- Storytelling
- Take Notes By Hand to Improve Retention
- Make Connections to Previously Learned Information
Student Activity: How I Use My Visual Motor Speed

Visual Motor Speed Definition:
Using your eyes and hands at the same time to complete a task

Examples:
- Typing
- Playing video games
- Sports that depend on eye-hand coordination

Name___________________________

I use my visual motor speed when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Student Activity: How I Use My Processing Speed

Processing Speed Definition:
Reading, hearing or seeing something, thinking about it, and responding

Examples:
- Hearing a question, raising your hand and answering in class
- Remembering and completing everything you need to finish a test in the allotted time

Name_________________________

I use my processing speed when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Student Activity: How I Use My Attention

Attention Definition:
Focusing and completing a task, even if you don’t enjoy it

Examples:
- Listening carefully in your least favorite class
- Finishing homework without getting distracted

Name____________________________

I use my attention when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Working Memory Definition:
Juggling all the information you need to solve a problem or complete a task

Examples:
- Being able to listen to your teacher while taking notes
- Packing up and remembering everything you need for school or home
- Following directions from your coach, teacher or parent
- Remembering the digits of a phone number and then dialing the person

Name_________________________

I use my working memory when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Student Activity: How I Use My Flexible Thinking

Flexible Thinking Definition:
Taking feedback and doing something differently, even if you think you were right the first time

Examples:
• Figuring out how to correct your test or paper from what your teacher wrote
• Compromising after a disagreement with your friend or sibling
• Coming up with multiple solutions or options for a challenging problem

Name________________________

I use my flexible thinking when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
**Student Activity: How I Use My Verbal Reasoning**

**Verbal Reasoning Definition:**
Understanding what you read or hear

**Examples:**
- Understanding all the different themes of the book you are reading
- Understanding when your teacher explains something new in history or language arts
- Understanding the conversation when adults are speaking

Name_________________________

I use my verbal reasoning when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Student Activity: How I Use My Abstract Reasoning

Abstract Reasoning Definition:
Understanding patterns, puzzles, or other visual or numerical information

Examples:
- Figuring things out by observing
- Understanding math and science concepts that you can’t always see or touch such as gravity or space

Name ____________________________

I use my abstract reasoning when I...
(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Student Activity: How I Use My Spatial Perception

Spatial Perception Definition:
Visualizing objects and how they move even if you can’t touch them

Examples:
• Picturing how pieces of a puzzle would fit together even before you touch them
• Accurately imagining how you would draw a picture or build something

Name__________________________

I use my spatial perception when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Verbal Memory Definition:
Remembering what you heard or read.

Examples:
Remembering the details of:
• A conversation
• Names and backgrounds of people you met
• A book you read
• What your teacher explained in class

Name ____________________________

I use my verbal memory when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Visual Memory Definition:
Remembering what you have seen

Examples:
Remembering the details (color, size, shape) of:
- Pictures you saw
- Objects you’ve held
- Places you’ve been

Name_______________________

I use my visual memory when I...

(Draw a picture, a short comic strip, or paste a photograph of yourself using this skill. Explain what it is and why the skill is important.)
Appendix C: Student Examples & Teacher Guides
Direct Instruction: Science of Learning

Teachers, cut these out and introduce them to your students one by one:

Brain Cells are Called Neurons

Your brain has over 10 billion neurons!

How You Learn

Whenever you learn something new, neurons come together to form a synapse or connection. That connection enables you to understand and remember.
Practice Matters!
When you don't practice, the synapse weakens, and you might forget
www.mindprintlearning.com

Caring Matters!
When you care, your mind releases dopamine, which strengthens the connections
www.mindprintlearning.com

Variety Matters
When you practice in different ways and study related information, more neurons are recruited and existing connections strengthen
www.mindprintlearning.com

Remember!
1. Everyone can learn if they TRY! You have billions of neurons to work with
2. When you don’t PRACTICE you can forget, even if you learned it easily
3. The more you practice and CARE, the more you will learn
www.mindprintlearning.com
Student Activity: Sharing & Storytelling

Name: ___________________

In one or two sentences, describe a problem or something new you tried. It doesn’t need to be school-related.

I couldn’t fold up my pop-up beach tent to fit into the bag as it was supposed to

List 3-4 things you did to solve the problem or overcome a challenge. How did you work hard, practice or use strategies to succeed?

1. I tried over and over to fold it in different ways to fit into the bag
2. I looked at the instructions and followed each step (helped a little but were confusing)
3. I asked my parents to help
4. I took a deep breath and a short break because I was getting frustrated, hot, tired and the sand kept blowing in my face

Mistakes happen. List 1-2 mistakes or things that went wrong and what you did to correct them.

1. I thought I was following the instructions by twisting it one way and realized it wasn’t working, so I went back to the instructions and looked at the diagram more carefully.
2. Every time I did it incorrectly, it would pop right back up, blowing sand into people’s faces nearby. I decided to move away from others so that wouldn’t keep happening.

What did you learn from the experience? How have you changed or improved?

I finally did it after a bunch of tries and help from parents. The next time, I didn’t totally remember how to fold it so I tried again and this time got it much more quickly.
## Student Activity: I Can Help Myself Grow!

<table>
<thead>
<tr>
<th>Fixed Mindset Instead of...</th>
<th>Growth Mindset I can say...</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can’t do it</td>
<td>I can’t do it yet</td>
</tr>
<tr>
<td>This is too hard</td>
<td>I’m going to need to really think about this</td>
</tr>
<tr>
<td>I’m bad at ---------</td>
<td>I’m going to use some new strategies to help me with reading</td>
</tr>
<tr>
<td>It didn’t work. I give up!</td>
<td>Let me think about what went wrong and see what I can do differently</td>
</tr>
<tr>
<td>That’s so easy for me</td>
<td>That activity went really smoothly. I wonder what will come next and how this activity will help me learn it.</td>
</tr>
</tbody>
</table>

My own ideas:
Student Activity: Classroom Rules/Commandments

Everyone take a few minutes to brainstorm our class rules for the semester. We will discuss and prioritize those rules and use them throughout the semester.

Respect each other

Raise your hand

Ask questions when you are not sure

Be prepared for class

Be kind

Take risks

Support your classmates

Give everyone a chance
**Student Activity: Study Schedule**

Write your study plan for how you will prepare for the test

Name_______________________

<table>
<thead>
<tr>
<th>Day</th>
<th>What I will cover</th>
<th>Time Needed</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Re-read chapter and highlight</td>
<td>20 min</td>
<td>Yes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Re-write notes</td>
<td>20 min</td>
<td>No</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Re-write notes and make note cards</td>
<td>15 min 30 min</td>
<td>Yes</td>
</tr>
<tr>
<td>Thursday</td>
<td>Study with note cards</td>
<td>25 min</td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>skip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>skip</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>Study with note cards</td>
<td>1 hour</td>
<td></td>
</tr>
</tbody>
</table>

**Notes/Reflections:**
Activity: Goals We Can Measure

Before individual goal-setting, get students thinking about how to write goals that can be measured. This can be done in small groups or as a class discussion. Begin with an example and then offer a series of goals that cannot be measured and ask students to re-word the goals to make them measurable:

<table>
<thead>
<tr>
<th>Prompts</th>
<th>Make it Measurable</th>
<th>How I Will Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will do better in Math</td>
<td>I will go from a B- to a B+ this marking period</td>
<td>Track and compare marking period grades</td>
</tr>
<tr>
<td>I will get organized</td>
<td>I will find my homework papers when I need to hand them in</td>
<td>Check mark every day I hand in my homework</td>
</tr>
<tr>
<td></td>
<td>During homework I will have what I need and get up only during breaks</td>
<td>Mark in assignment notebook if I get up for an item during homework</td>
</tr>
<tr>
<td>I will work faster</td>
<td>I will finish my math homework in the scheduled time</td>
<td>Set a realistic timeframe given the math homework assignment and use a timer/clock to track time spent, adjust as needed</td>
</tr>
</tbody>
</table>
**Individual Goal Setting: Teacher Guide**

(This is a multi-step process to be completed over a series of work sessions. Teachers can use the “Student Worksheets” and break up the steps as appropriate.)

**Keeping in mind my strengths and needs:**

<table>
<thead>
<tr>
<th></th>
<th>My Strongest Skill</th>
<th>Skills I need help with….</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Skills</strong></td>
<td>Math</td>
<td>Reading</td>
</tr>
<tr>
<td><strong>Cognitive Skills</strong></td>
<td>Abstract reasoning</td>
<td>Verbal memory, attention</td>
</tr>
<tr>
<td><strong>Personal Skills</strong></td>
<td>Working with peers</td>
<td>Taking risks</td>
</tr>
</tbody>
</table>

Teacher notes: Determine if you want each child to have a personal skills chart. Having personal strengths and needs in mind while goal setting can help students set realistic goals that can help them work in their zone of proximal development, that is, find achievable stretches to help them grow.

- Teachers can create this chart for a student based on past performance
- Teachers can have this as a pre-assignment for students to fill in and then review it with the student. It is important that this chart be objective as most students will not have the strong self-awareness they need to complete this independently.
- This chart is personal, and students’ privacy should be respected above all else

**What do I want to achieve in language arts over the next marking period?**

Teacher notes: Guiding Question Considerations

- **Classroom teachers** might want to create one statement for the entire class.
- **Advisors** will want to help students create an appropriate guiding sentence that is specific to an academic, cognitive, or personal skill and has a specific timeframe.
- Think about how many goals you want students to ultimately have depending on how you filled in the blanks. You will likely want to target 1-3 goals in this exercise.

**Step 1: Brainstorm** (At least 6 goals)

<table>
<thead>
<tr>
<th>Brainstorm Ideas</th>
<th>Why is this goal important to me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go from a B- to a B+ in language arts</td>
<td>B- is my lowest subject grade</td>
</tr>
<tr>
<td>Get all reading homework done at night</td>
<td>It makes me feel nervous going to bed without having finished</td>
</tr>
<tr>
<td>Read more interesting books</td>
<td>I think this will help me pay attention better</td>
</tr>
<tr>
<td>Read a page without thinking of something else</td>
<td>So I won’t have to keep going back</td>
</tr>
</tbody>
</table>
Not get into arguments with my partner in book club

<table>
<thead>
<tr>
<th>Not have reading homework take me so long at night</th>
<th>I want to have a better time with my partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>I always rush the rest of my homework because reading takes me so long</td>
<td></td>
</tr>
</tbody>
</table>

Teacher guidance to provide:
- Decide a minimum number of goals a student should have on his/her brainstorm list.
- Encourage students:
  - This is brainstorming; just get as many ideas down as possible. The longer the list the better.
  - Challenge yourself! You won’t be graded on achieving these goals so think about what you really want to achieve.
  - If you need help thinking of ideas, look at your “skills I need help with…” does this give you any new ideas?
  - Everyone should have different ideas. This is unique to you.
- Ideally students should to have 2-3 ideas for the number of final goals you want them to have (i.e. if you want students to write two final goals, they should brainstorm 4 to 6 ideas below.)

Step 2: Are My Goals Realistic and Specific?

Look at your list and evaluate:
- Is the goal specific?
- Is the goal realistic?
- Is your goal written in the “positive”? (What you want to do, not what you don’t want to do.)
- Does the goal relate to a specific skill? Which one and how?

Re-write your goals to make them positive, realistic and specific in the given timeframe. If there are goals that really aren’t realistic, you can leave them off the list.

Realistic and Specific Goals:

| Go from a B- to a B+ in language arts |
| Get all reading homework done at night |
| Collaborate better with my partner in book club |
| Finish my reading homework more quickly |

Teacher guidance to provide:
- How can I modify what I wrote to make it realistic? Maybe a C to an A isn’t realistic, but is a C to a B realistic?
- If my goal was to improve my grade, how much improvement do I expect to achieve?
- Are my goals framed in a positive way, stating what I want to do? Re-phrase any that state what you do not want to do into what you WILL do.
- Do I care about this goal enough to put in the work needed? If not, leave it off the list.
- Will I have the enough opportunity to achieve this goal? (e.g. if my goal is to do better on a group project, will there be a group project). If not, leave it off the list.
- Is my goal too realistic, i.e. too easy? Can I give myself a bigger challenge?

Step 3: How will I decide if I achieved my goal? How will I measure if I am successful?

For each goal, decide on an objective measure.

<table>
<thead>
<tr>
<th>Realistic &amp; Specific Goals</th>
<th>How I will measure my performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go from a B- to a B+ in language arts</td>
<td>Track and compare semester grades</td>
</tr>
<tr>
<td>Get all reading homework done at night</td>
<td>Mark “Done” in my assignment notebook when I finish</td>
</tr>
<tr>
<td>Collaborate better with my partner in book club</td>
<td>Write a 1-sentence reflection on how the reading session went each time, evaluate after every 3 sessions about how we’re getting along</td>
</tr>
<tr>
<td>Finish my reading homework more quickly</td>
<td>Use a timer to time how long the reading takes and mark it down in my assignment notebook every night; evaluate time spent every Thurs.</td>
</tr>
</tbody>
</table>

Teacher guidance to provide:
- It can be a grade or teacher, peer or parent feedback. It doesn't need to be a number, but you want to know if you improved and if you met your goal.
- You might need to modify your goals again to make sure they are measurable.

Step 4: Prioritize your goals.

Number your goals above in order of importance to you, “1” being the goal you want to work on the most.

<table>
<thead>
<tr>
<th>Realistic &amp; Specific Goals</th>
<th>How I will measure my performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Go from a B- to a B+ in language arts</td>
<td>Track and compare semester grades</td>
</tr>
<tr>
<td>4 Get all reading homework done</td>
<td>Mark “Done” in my assignment notebook when I finish</td>
</tr>
</tbody>
</table>
at night | finish
---|---
3 Collaborate better with my partner in book club | Write a 1-sentence reflection on how the reading session went each time, evaluate after every 3 sessions about how we're getting along
2 Finish my reading homework more quickly | Use a timer to time how long the reading takes and mark it down in my assignment notebook every night; evaluate time spent every Thurs.

Teacher guidance to provide:
- Teachers might want to meet with each student individually to be sure the goals are realistic, challenging and measurable

**Step 5: My Goals.**

Write your top \_3\_ final goals and how you will measure them below.

<table>
<thead>
<tr>
<th>My Goals</th>
<th>My Goal Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go from a B- to a B+ in language arts</td>
<td>Track and compare semester grades</td>
</tr>
<tr>
<td>Finish my reading homework more quickly</td>
<td>Use a timer to time how long the reading and questions take and mark it down in my assignment notebook every night; evaluate time spent every Thurs.</td>
</tr>
<tr>
<td>Collaborate better with my partner in book club</td>
<td>Write a 1-sentence reflection on how the reading session went each time, evaluate after every 3 sessions about how we're getting along</td>
</tr>
</tbody>
</table>

Teacher guidance to provide:
- Make sure each student write in their final goals based on the number of goals you originally determined.
1. **Activity: Strategy Selection**

Name ____________________

4. Pick one goal from Step 5 of Goal Setting Worksheet

<table>
<thead>
<tr>
<th>My Goal</th>
<th>My Goal Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish my reading homework more quickly</td>
<td>Go from approximately 30 minutes per night to 20 minutes per night.</td>
</tr>
</tbody>
</table>

5. Look in your Mindprint Personalized Toolbox under “Study Strategies” to find what strategies might help you meet your goal. Feel free to identify your own strategies too. The following are categories you can search to find the right tools:

   - **Study Strategies**
     - Practice Academic Skills
     - Develop Cognitive Skills
     - Teaching Strategies
     - Parenting Strategies

**Students: Study skills for home and school**

Select one or more

- Focus & Organizational Strategies
- How to Memorize
- Prep for standardized tests or exams
- Speaking & Class Participation
- Logic & Strategic Reasoning
- Reading & Writing
- Math, Science & Computing
- Health & Wellness
6. Make a List of strategies you think of or find in your Mindprint Toolbox.

- Addressing Reading Lapses
- Use Context Clues
- Read Review Questions First
- Adapt Your Reading Approach
- Avoid Multi-Tasking
- Set Page Goals
- Stop & Summarize
- Use a timer

4. Choose up to 3 strategies you will use. If you have difficulty deciding, use the template below to help you think through which strategies will be best.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>How Will It Help Me?</th>
<th>When Will I Use It?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Review Questions First</td>
<td>I will be familiar with the upcoming questions and know what to look for while I read, so I don’t have to go back as much when I do the questions</td>
<td>Every time I have reading homework followed with questions</td>
</tr>
<tr>
<td>Set Page Goals</td>
<td>It will help me break up the reading, remind me to summarize and take breaks, so I can maintain my focus better</td>
<td>For all reading homework assignments</td>
</tr>
</tbody>
</table>
Student Activity: Create a Contingency Plan

One strategy to increase your likelihood of success is to anticipate what could go wrong and be prepared with a back-up plan. Think about an important project, sporting event, or activity you have coming up. You want to be sure it is a success. How will you plan for the “unexpected”?

Name___________________

What is the event?

I’m going on a weekend camping trip with my cousins.

List one or two things that could go wrong?

- It could rain the entire weekend
- My teachers could give me a lot of homework and I will either need to bring it on the trip or be up all Sunday night trying to finish or be worrying about it instead of enjoying myself

How will I prepare for the “just in case”?

I need to remember to pack all of my raingear. I will bring a deck of cards and maybe some other games in case we are stuck in the tent

I will go to my teachers and tell them I have a big weekend coming up and ask if they can give me the assignments in advance so I can get a head start if necessary
**Student Activity: Interim Reflection**

Name: _________________________

**My goal was:** Finish my reading homework more quickly

**How I’m doing:**

- I met/am on track to meet my goal
- I might meet my goal, but there’s a chance I won’t
- I’m unlikely to/didn’t meet my goal

**If you might not meet your goal, things to think about**

- Were you able to focus the entire time? If not, do you need attention strategies?
- Did you have trouble following instructions or following through? If not, do you need strategies for attention or working memory?
- Did you have trouble remembering what you needed? Are there memory strategies that would help?
- Did you have trouble finishing? Do you need strategies for organization?
- Did you have trouble understanding? Do you need strategies for critical thinking?

**Which of my strategies helped, and are there any I should adapt or abandon?**

<table>
<thead>
<tr>
<th>Strategy 1</th>
<th>Read review questions first</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I used this strategy when</strong>...</td>
<td>When I have reading homework with questions</td>
</tr>
<tr>
<td><strong>It helped me</strong>...</td>
<td>Know what the key info is when I read the chapter</td>
</tr>
<tr>
<td><strong>It wasn’t useful when</strong>...</td>
<td>I sometimes forget the question(s) and spend time going back to look</td>
</tr>
<tr>
<td><strong>I will continue to use it, but adapt by</strong>...</td>
<td>Writing the questions or keywords on sticky notes so I can quickly reference them while I am reading the chapter</td>
</tr>
<tr>
<td><strong>I will not use this strategy but will find another one. (Write new strategy into your action plan)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Mindprint Learning
<table>
<thead>
<tr>
<th>Strategy 2</th>
<th>Set Page Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>I used this strategy when...</td>
<td>During reading homework</td>
</tr>
<tr>
<td>It helped me...</td>
<td>Stay focused for set period of time and then I took a break</td>
</tr>
<tr>
<td>It wasn’t useful when...</td>
<td>Sometimes the set page goal interrupted the flow of my reading</td>
</tr>
<tr>
<td>I will continue to use it, but adapt by...</td>
<td>Being flexible about the page goals – if I need to read more or less before taking a break, I will adjust</td>
</tr>
<tr>
<td>I will not use this strategy but will find another one. (Write new strategy into your action plan)</td>
<td></td>
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</table>