

- 2 Online Offerings from CRISS
- 3 Project CRISS in High School Science
- 6 Tech Resources and Ideas
- 6 I See... I Know... And So...
- 8 The Framework for Learning vs. The Framework for Teaching
- 11 The Framework for Learning Posters
- 13 Links

CRISS National Office

STAFF

Debra Franciosi, Ed.D. *Director*

Anna Deese, NBCT Associate Director

Darlene Treweek

Office Manager

40 2nd Street East, #249 Kalispell, MT 59901

1-877-502-7477 info@projectcriss.com

This edition of *Comments from CRISS* focuses on our Frameworks. See how the Framework for Learning applies not only to a multi-day lesson but to each day in the lesson, read about the nuances between the Frameworks, and how our new posters help students remember the Framework for Learning. Additionally, learn about tech tools shared by our trainers and learn how one trainer successfully modeled a new strategy for her students!

News from the National Office

Project CRISS.... ONLINE!

After years of requests, we've started offering the Intro to CRISS online! We have two sessions scheduled: Session 1 will run June 23-26 (4 hours each day – registration ends soon!) while Session 2 runs July 27/28 and August 3/4 (4 hours each day). Click here to access details and registration information for both sessions.

Framework for Learning Posters—Glacier National Park edition

This four-poster set (each 11"x17") includes an overview poster of the Framework for Learning and a poster for Prepare, Engage & Transform, Reflect. The content is appropriate for any classroom and is layered on photographs of Project CRISS's backyard, Glacier National Park. Read about how the images serve as visual analogies for the Framework components on page 12. An order forms is available <a href="https://example.com/here/beauty-served-serve

Early Steps: Learning from a Reader

We need to clear out our stash of Dr. Carol Santa's *Early Steps: Learning from a Reader*. This 1999 book describes an early intervention program designed for accelerating the reading performance of at-risk first graders. If you are interested in purchasing one, they are \$15 each, including shipping. Review the table of contents and print an order form here.

Become a CRISS Certified Trainer

We're offering a fast-track program (no CRISS experience required) for instructional coaches who wish to become Project CRISS certified trainers! This Training of Trainers Institute includes a full 3-day Introduction to Project CRISS workshop followed by a 5-day Training of Trainers. Additional certification requirements include the submission of two lesson plans implemented with K-12 students and an apprenticeship with a CRISS mentor-trainer. An institute will be offered this summer in Montana. Contact us for more information.

Interested in becoming a trainer following our more traditional route? Our Master Trainers are busy gauging regional interest and are <u>scheduling workshops</u> now. Contact us if you're looking for a Training of Trainers in your region or need more information!

Online Offerings

We are offering web workshops that can stand independently or serve as follow-ups for those who already experienced an *Introduction to Project CRISS* workshop. Click here for the schedule, to register, or learn more about each session. Our current offerings include:

Author's Craft: Tools for Assessing Craft and Structure

Challenging Texts and Preserving Inquiry in the Science Classroom

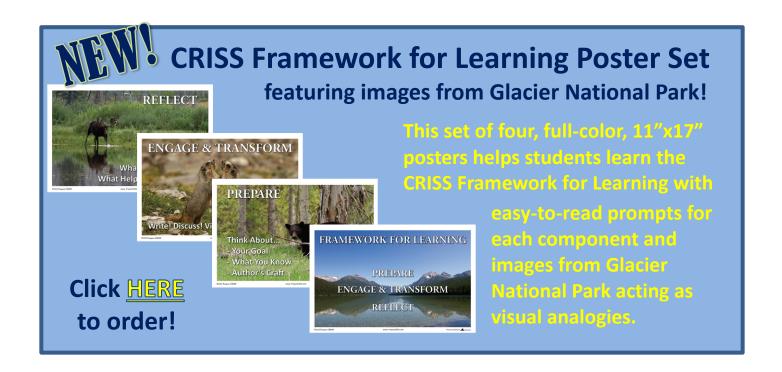
Project CRISS in the Math Classroom

Dealing with Demons: Prepping for the SBAC

High-Impact Vocabulary Strategies

Thought-FULL Engagement with Primary Documents

We have a vocational technology workshop in the works and are happy to look at alternate dates or times for the sessions above – just reach out to us at info@projectcriss.com and let us know your needs! Discounts are available if for schools/districts with 5+ participants in the same session.



The multi-day lesson below demonstrates how the Framework for Teaching applies at different levels. KWL+ is used for the Prepare activity on Day 1 and the content reflection on Day 5. The Engage & Transform section of this lesson spans multiple days—each with its own Framework for Learning. The section with the purple heading identifies the overall Framework of the lesson while the sections with blue headings highlight each daily Framework.

High School Science—Cell Division: Kate Mattern, Anaconda High School, MT

- **Content standard:** How do organisms grow and develop? (*Next Generation Science Standards*, LS1.B; Growth and Development of Organisms)
- **Process goal**: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9-10 texts and topics. (CCSS.ELA-Literacy.RST.9-10.4)
- Use KWL+ to activate background knowledge and identify misconceptions. Students do this quickly
 individually before contributing to a class discussion. (This activity is not only the Prepare for the entire
 lesson but also for in Day 1).
- Day 1:
 - Prepare: See above.
 - E&T: Lecture is chunked with videos and textbook search. Student discussions occur during video/text as they find evidence to include in notes. Students Transform information into notes.
 - Reflection: (Content) What do you know about mitosis? Why do certain organelles change throughout the process? (Process) What activity or resource helped activate your prior knowledge the most?
- Day 2:
 - Prepare: Word Combining challenge using vocabulary from previous day
 - E&T: Students return to text/animations and use a comparison organizer to organize details from each then use Morphemic Analysis to examine critical vocabulary.
 - Reflect: (Content) Now that you have seen an animation and discussed the phases of mitosis, how does
 it compare to what you thought you knew? What have you learned? (Process) How does Morphemic
 Analysis help you recall key information?
- Day 3
 - Prepare: Show pictures of the area (i.e., trees, cracks in sidewalks) and ask students to complete the Sentence Frame: "[Picture] reminds me of [phase] because...".
 - o E&T: Use a variety of materials to create models of each step of cell division with partners.
 - o Reflect: (Content) How does the structure of an organelle relate to its function in mitosis? (Process)
- Day 4
 - Prepare: You Ought to Be in Pictures: Show an image of cell division and have students write from the perspective of an organelle.
 - E&T: Lab activity Use microscopes to compare healthy and cancerous tissues.
 - Reflect: (Content) Write a summary of your findings. (Process) What are your biggest challenges when doing a lab? How do you try to help yourself?
- Day 5
 - Prepare: Free Write What is one thing you found surprising or interesting about yesterday's lab?
 - E&T: RAFT R: An organelle, A: Another organelle, F: Apology letter, T: How you messed up mitosis.
 - Reflect: See below; Day 5's Reflection=Lesson's Reflection

Reflect

- Content: Add information to the KWL+ from Day 1
- Process: What strategy helped you most in understanding mitosis? Explain why. How could you use these strategies in the future?

K: What do you Know about the steps of mitosis? It is a endangotic cell. It turn into a nucici, as of which kas

W: What question do you have? What L: What have you Learned? do you Want to learn?

your learned that I would like cell device a mulitply, the cells device. The rolls -1 cell devide and The cells of differen



half desolved nucleus

OMG what are these things doing to me how am I supost to be 2 nucleuses it imonly one and can I get some morfine this hurts tramundidy

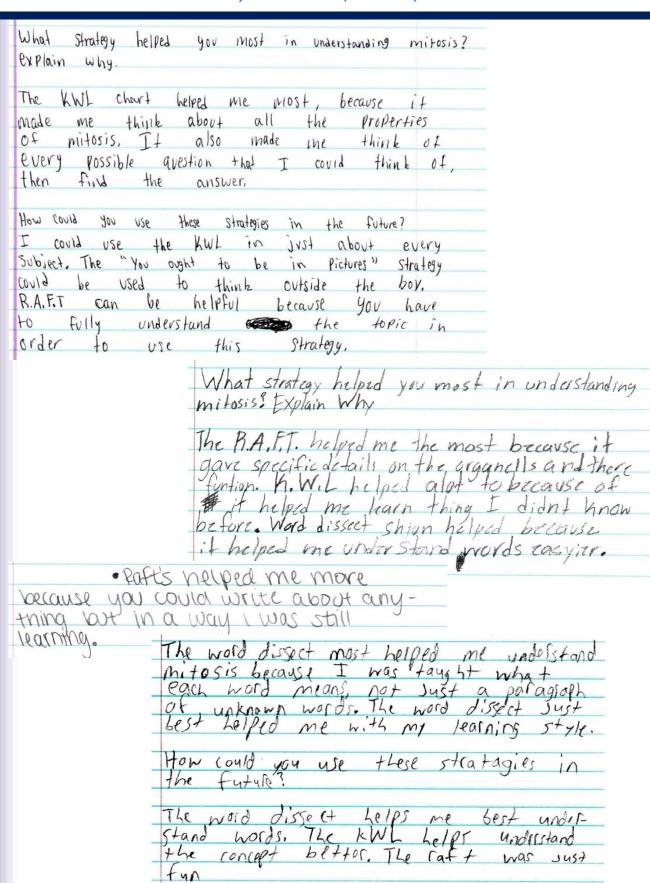
Cromozomes- I wonder what time in going to spit? will I ever go back? to normal? How long does it take? Does it hurt?

Dear, Contriol

Mister Centrial me as a spindle fiber copologize for not doing my job. I know if I didn't slack and stuck on you I would have never let go and drop and mess everything up. I let go because I got a miscaeviation from the nucleus before it disolved completly.

So I thought that I was sapost to let go of the cromesome during Anaphase instead of telaphase. I know that now we are a bud call and have to preform "APOPTOSIS" and we will die in the process but I have to say it was nice sticking

From: Spiral Repor



Tech Resources and Ideas

Do you have resources you'd like to share? Email them to <u>info@projectcriss.com</u>. We're looking to share apps, programs, hashtags, and unique ideas for incorporating tech into classrooms!

Mary Jane Ham, National Trainer, shared Post-It Plus, a free app for iOS devices.
Use them for paperless Pattern Puzzles or to create virtual Concept Maps!

Students come to our classrooms with a wide range of tech acumen. When using a new or infrequently used program, consider making brief videos with a screencasting program (many are free online). Keep the videos short, name them clearly, and post to a private YouTube channel, your own website, or on an internal shared drive. Students can access only those they need and your instructions will be more focused to the task than most you might find in existing online tutorials.

When students use tech, have you ever had lots of hands shoot up in response to errors popping up on their screens? Next time, ask them to take a screen shot and print it out. As you resolve their problem, write out your steps on the paper (or take more screenshots as you go along). Post those screenshots and instructions on the board for other students to reference so you don't have to interrupt the class with instructions that might only apply to a few individuals.

Interested in steering your students towards the creation of more graphically pleasing products? Pull up samples of presentations or web pages of their favorite brands and ask them to identify features each have in common (i.e., one or two fonts, few animations). Create an exemplar product with "bad" graphic design selections and ask students to contrast the two. Alternatively, ask students to find an exemplar presentation they admire and have them submit it with their own work. Ask them to reflect upon what they liked and how they tried to capture the same trends in their own work.

Has your access to the Resource Area of the Project CRISS website expired? Continuing access is \$10 a year for individuals; licensing agreements are available for larger groups. Don't miss out on our resources including blackline masters and student sample work!

Contact info@projectcriss.com to sign-up!

I See... I Know... And So...

This strategy, also referred to as "It Says.. I Say... And So", was adapted from Kylene Beers *When Kids Can't Read* by Christine Mbah of Naperville, IL High School District 219. See how she used it with her Integrated Reading students:

l See	l Know	And So		
What details do you notice in the resource?	What do you already know about what you saw?	What conclusion can you draw?		

What stood out to us at CRISS was how she modeled the strategy. Students started with a familiar picture then worked with a political cartoon before moving on to a full page of text. Using less intimidating content (pictures) allows students to focus on learning the strategy before trying to use a new strategy with new content. At the end of this lesson, students could judge if their inferences were valid based on text evidence and their prior knowledge, and they had confidence to make inferences in the future. Thanks for sharing, Christine!

Here is a sample of one student progressing through the lesson:



I know	And so		
1) to namuly sun =	1) person aldry + wear sur scroen,		
ne yor nurt	2) He must us got hurt.		
3) Marks = he word something to block	wore sandles,		
	1) to natural sun = sun burn 2) Bandage = Pain or he got hurt 3) Marks = he word		

Share your inferences with a partner and decide if the inferences are...

Valid Can verify with evidence	Invalid Can't verify. You've gone too far.			
wearing slippers. He got hurt	terson was at the beach, Splinter			

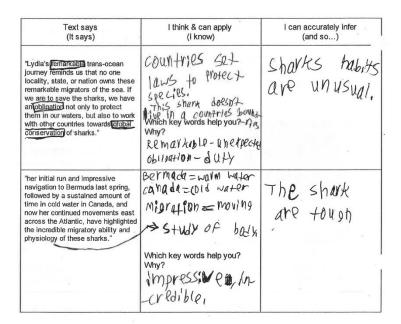


Text says (It says)			
china studying matho India studing science. USA gooting of.	China \$, Fndid, & USA are coun- -tries. China has the most population in the world, then India does, then	china & India have well-low- ated people than the	

Generate question	ıs					
1, IS	U.S.	reall!	be	hind	China	f
		* aware				6
				(Conti	nued or	next page

I See... I Know... And So... (continued)







Generate questions

Why did the author write this?

The author is informing us about the Sharks incredible misratory ability.

What have we discovered vs. what should we learn more about?

Ohl Sharks mistation patterns... other sharks misrations patterns... other sharks my own questions.

Will country shelp out!

Could other species do it?

Be Driven by seasons or food or mating.

1. How has my understanding of making valid inferences changed or developed throughout this lesson?

MY Winderstanding of making valid inferences are cloped throughout this lesson?

MY Winderstanding of making valid inferences are cloped throughout this lesson?

What it is lesson, because I know how to interest in more details.

What one you think you improved your ability to make valid inferences? Please explain.

MY abil

The Framework for Learning vs. The Framework for Teaching

The Introduction to Project CRISS workshop highlights two frameworks: The Framework for Learning and the Framework for Teaching. (Shown at right; on page 8 in the 4e Project CRISS manual). On the surface, they look very similar. Both Frameworks have Prepare, Engage and Transform, and Reflect, while the Framework for Teaching adds a Plan component. That difference indicates the Framework for Teaching is intended as a lesson planning guide, but what does that mean about the common components (Prepare, Engage and Transform, Reflect)?

Once again, it comes down to the cornerstone of CRISS: Metacognition.

The Framework for Teaching is a lesson planning format that ensures students

CRISS Framework for Teaching: CRISS Framework for Learning: The CRISS Strategic Learning Plan (P-PER) The Ingredients of Metacognition (PER) **PLAN** for instruction Determine Enduring Understandings Create Assessments · Assess Student Needs · Select a variety of Content Materials PREPARE PREPARE for student learning for student learning Elicit Background Knowledge Think about Background Knowledge · Set Purposes for Student Learning · Determine Purposes for Learning · Determine Author's Craft Instruction • Identify the Author's Craft **ENGAGE** ENGAGE with Content & Transform Information with Content & Transform Information • Identify Processes to Facilitate Involvement • Be Involved and Actively Persistent and Active Persistence · Write, Discuss, Visualize, and Organize · Identify and Facilitate Learning Activities with Writing, Discussion, Visualization, and Organization REFLECT REFLECT on Teaching & Learning on Teaching & Learning • Facilitate Student Process and Content · Evaluate the Effectiveness of Learning Processes · Evaluate Student Learning · Assess Content Learning Analyze and Evaluate Planning & Instruction. including Modeling

learn new information in a manner that follows the Framework for Learning. (See the article on page 3 for an example of a lesson where each day in the lesson follows the Framework for Learning.) Through reflection on the components of the Framework for Learning and strategies the teacher incorporates and explicitly teaches, students become metacognitive and learn what works best for them as learners. Self-aware learners can independently apply the Framework for Learning to tackle any difficult task: finishing a classroom project, taking a standardized assessment, researching political candidates before a vote, or putting together Ikea furniture. Internalizing the Framework for Learning takes practice and explicit instruction. The practice and instruction is facilitated with the Framework for Teaching.

Ideally, applying the Framework for Learning becomes second nature for most tasks and occurs in fractions of seconds. For example, consider the last time you sat down in a restaurant and saw items on the menu you couldn't even pronounce. Subconsciously, you probably followed the Framework for Learning when you came across unknown dishes. Which of these questions or procedures resonate with you?

Prepare (Before you've identified an unknown dish)

- What background knowledge do I have? Have I been here before? Do I generally like the food? Can I eat the food? What's that smell in the air? What prior experiences do I have with dishes that look or sound like what's on the menu? How have I picked dishes before?
- What's my purpose? I want to find something appetizing that meets my needs and wants. I need to figure out if this dish will do that.
- What's the author's craft? Most menus are organized by the main dish. Can I use the dishes above or below to help me figure out what this might be? Are there pictures? If I crane my neck, can I see what my neighbors are eating? Does their body language and/or atmosphere of this location indicate it'd be acceptable to ask them about their dishes?

9

The Framework for Learning vs. The Framework for Teaching (continued)

Engage and Transform (While you're reading the menu)

- How can I be actively engaged and persistent? Should I just give up as soon as I hit an unknown? Of course
 not! I'm hungry after putting together that Ikea furniture! Can I read or re-read and start eliminating options?
 Do I recognize anything in the name or description that gives me an idea of what this dish is? Is the name
 similar to anything else on the menu?
- Can I use writing, discussion, visualization, and/or reorganization to help me? Maybe I can type the unknown into my smartphone? Should I ask my date? What questions can I ask the server? Should I rank the dishes I'm interested in and then get the opinions of my companions?

Reflect (After reading the menu and eating the meal)

- Did I meet my purpose? Am I happy with the outcome? Can I make an order or should I just leave? Did my
 dish meet my needs or would I do something different next time? Could I try someone else's dish to see if I
 should have ordered something else?
- What did I do that helped me make a decision? Did I rely too much on liking one particular ingredient? Maybe next time I shouldn't order dishes with four chili peppers next to them? Who seems happy with their dish and how did they decide what to order?

The principles behind Prepare, Engage and Transform, and Reflect are research-based and apply to all learners, all scenarios. How they actually look in action depends on the learner and the situation—metacognition is critical to appropriately applying the Framework and any strategies to a task. Students need repeated exposure to, practice with, and reflection on the Framework for Learning to build their own metacognitive skills.

The Framework for Teaching, then, guides teachers in the construction of lessons or units of study which thoughtfully integrate targeted content with the Framework for Learning. As previously mentioned, the Framework for Teaching has the Plan component, which requires teachers establish key learning goals, or enduring understandings and standards; student needs; formative and summative assessments (which usually utilize a CRISS strategy); and content materials. Plan reinforces backward design—it begins with the end in mind and builds the lesson or unit from the desired outcome.

Each subsequent component of the CRISS Framework for Teaching, the principles also found in the Framework for Learning, are now explored from the teacher's perspective. In the beginning, with Prepare, the teacher identifies brief activities (strategies) and/or prompts to activate students' background knowledge, sets focused purpose(s) for delving into the specific content pieces, and evaluates the content for new or challenging structures that may require preteaching. As students become practiced in application of the Framework for Learning, the teacher task evolves to distinguishing when and how students require prompts to prepare – and when they just need time to do so independently.

The Framework for Learning vs. The Framework for Teaching (continued)

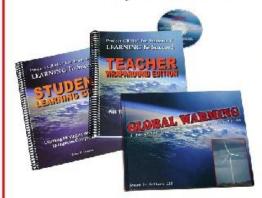
Once students are Prepared for new learning, the teacher facilitates the processes of Engage and Transform. Given that writing, discussing, organizing, and visualizing (creation of visual representations, analysis of existing visuals, or generating mental images) are core activities for learning, the teacher needs to make some decisions – which strategy meshes with the content, acknowledges current student capabilities, and will move students to comprehension of the content? If the content is complex, should there be a sequence of strategies to build student understanding? Which strategies are new and require modeling with something simple first? What will be used to do this? As students progress through the activity(ies), the teacher constantly monitors, repeats modeling as needed, and asks probing questions to ensure students are engaging and transforming at appropriate cognitive levels.

Sometimes teachers leave Reflect until the very last, when, in fact, Reflect should be embedded throughout the lesson. Keeping in mind we're looking at the Framework for Teaching, the teacher has two responsibilities with the Reflect component:

- 1) Identifying appropriate prompts and facilitating student reflection on new content understanding AND developing metacognitive awareness. Never stop at "What did you learn?" Add simple metacognitive process reflection questions such as, "How did creating a Vocabulary Map help you understand the key concepts?" Or "How did discussing the content using specific roles help you learn about XYZ?" (See other reflection question examples on page 18 in the manual.)
- 2) Reflecting on student learning (again, of both content and metacognitive processing). Did students achieve the enduring understandings? Why/why not? What do I need to do now to further their understanding? If I ever teach this again, what should I do differently? Did I do enough modeling for students to understand the strategy or learning process, or did I assume too much about what they already knew? Were the strategies I chose appropriate for the content and for the students' capabilities? Am I giving students enough opportunities to reflect upon their metacognition? Could I have provided more opportunities for students to select a strategy independently?

When teachers are first introduced to Project CRISS, they often think CRISS is all about strategies. Fundamentally, CRISS is about <u>CR</u>eating <u>I</u>ndependent learners. Teaching them the Framework for Learning gives students a tried-and-true structure to support any learning. Using the Framework for Teaching gives teachers a research-based structure to ensure students learn not only the content, but also how to own and direct their learning - whether it's a scientific concept, the process for assembling furniture, or deciphering a tough menu.

Project CRISS for Students II: LEARNING To Succeed



CRISS for Students II: LEARNING To Succeed is a flexible curriculum designed to teach the CRISS learning principles and strategies directly to students in high school or with advanced middle school students. Half of the lessons in the student workbook are based on the CRISS Keys to Learning—learning principles derived from cognitive psychology and brain research. Alternating with these lessons, students apply strategies to untangle the issue of global warming as presented by award-winning science author Sneed B. Collard III in his book, Global Warming: A Personal Guide to Causes and Solutions.

For more information about the CRISS for Students II program and a look at one of the chapters in the student workbook click here.

Project CRISS Framework for Learning Posters featuring Glacier National Park



A framework is a tool that allows us to get our brains around complex ideas so we can view the big picture holistically. The CRISS Framework for Learning provides us with a simple framework to guide students' learning processes as they delve into new content. This classroom poster set provides visual analogies using images from Glacier National Park to assist in teaching students to internalize the CRISS Framework for Learning.

As learners, our brains require some priming – and we're much more efficient learning new information when we PREPARE ourselves to learn. We connect what we already know to what's new, we focus our learning with a specific purpose, and we examine the structure and craft of the new material. To truly learn, we must be persistent, ENGAGE with what we're learning, and TRANSFORM information in ways that help us deepen our understanding for long-term retention. Then, we take what we discover about ourselves as learners and the new content we're studying and REFLECT upon them. This helps us adjust our approach each time we encounter challenging information – whether we're at school, work, or home.

The first poster of the set, the Framework for Learning, provides an overview of the entire Framework. The image, Bowman Lake in the northwest part of Glacier National Park, provides us with a visual representation of the **framework** that connects the creatures of the park – the habitat, or specific environment in which the flora and fauna live their lives. When we see the picture of the lake, we see the big picture for the animals in the subsequent three posters. The second poster, PREPARE, depicts a black bear, *Ursus americanus*, eating some rich roots and grasses. Black bears hibernate during the long Montana winters. From late spring through early fall, they **prepare** themselves for their long sleep by eating as much as they can find. In Glacier, that means they eat plant shoots and buds, berries, nuts, insects and their larvae, honey, carrion, some rodents and fish, and on rare occasion, larger mammals such as deer and moose. The third poster, ENGAGE & TRANSFORM, features two Hoary Marmots, *Marmota caligata*. Marmots are actually big squirrels (8 to 15 lbs) and live high up by the tree line on the mountains of the park where they eat leaves, grasses, and flowers. They also hibernate through the cold winter, but are very active and **engage** with their environment, other animals, and people. They play, wrestle, fight, groom each other, and touch noses. They stick together in colonies and **transform** their habitat by digging large, underground burrows in the rocks (these burrows often become homes for other creatures when the marmots move on).

The fourth poster, REFLECT, shows a bull moose, *Alces alces*, wading into one of the many waterways in Glacier National Park. Moose are active year-round and call almost all parts of the park home. They eat terrestrial plants and fruits, especially tree shoots and flowers, and aquatic plants such as lilies and pondweed. Moose spend most of their time alone in the remote, quiet areas of the park – they may go days and days with only their **reflection** to keep them company!

Click HERE to order your poster set!

Links in this edition:

Framework for Learning Posters

- More information: http://www.projectcriss.com/implementation_support
- Order form: http://www.projectcriss.com/files/order-forms/Implementation Support Material Order Form.pdf

Early Steps: Learning from a Reader

Order form and Table of Contents: http://projectcriss.com/files/order-forms/Early Steps TOC and order form.pdf

Become a CRISS Certified Trainer!

- Montana Institute: http://www.projectcriss.com/events/view/33654
- Calendar page: http://www.projectcriss.com/events?event-type-id=2&Filter

Online Offerings

- Online Intro to Project CRISS registration and information:
 - (June dates) http://www.projectcriss.com/events/view/33666
 - o (July/August dates) http://www.projectcriss.com/events/view/33756
- Information and requirements for becoming a trainer: http://www.projectcriss.com/professional_development/level_II_training
- Web Workshop schedule, information, and registration:
 http://www.projectcriss.com/files/registration/Web workshop winter 2015.pdf

CRISS Hits the Road:

International Reading Association Annual Conference in St. Louis, Missouri, July 18-20, 2015

Engaging Learners with Content in Thoughtful Ways: Common Core & Project CRISS, presented by Dr. Debra Franciosi, Saturday, July 18, 2015 at 12:00 PM

Stop by the Project CRISS exhibit booth, #1700, for discounts and a treat!

Secondary Reading Interest Group, with presentations by Doug Buehl, Carol Jago, and Jeff Wilhelm, Saturday, July 18, 2015 at 3:00 PM

Illinois Reading Council Conference in Peoria, Illinois, October 1-2, 2015

Writing and Vocabulary in Math Classrooms, presented by Anna Deese, Friday, October 2, 2015 at 11 AM.

Dealing with Demons: Prepping Students for Assessment Tests, presented by Dr. Debra Franciosi, Friday, October 2, 2015 at 2:15 PM.

Visit the exhibitor hall on Thursday and Friday for goodies!



Project CRISS for Students I: It's a Brain Thing ~ Learning How to Learn!

Project CRISS for Students I: It's a Brain Thing Learning How to Learn! is a semester-long learning strategies class for students in grades 5-9. The semester class introduces students to the CRISS principles and strategies. The curriculum includes the companion trade book Tough Terminators by Sneed B. Collard III and a DVD from the Critterman's World series (informational videos about animals) by Montana's own Doc Wild.

For more information about the CRISS for Students I program and a look at one of the chapters in the student workbook click here.