

**Portfolio Artifact: Unit Assessment**  
Grading Rubric

	<b>Exemplary</b>	<b>Acceptable</b>	<b>Unacceptable</b>
<b>Content</b> • chart detailing how RIBTS 9.1, 9.2, 9.3 and 9.4 were met	Chart indicates comprehensive methods were used to meet RIBTS 9.1, 9.2, 9.3, 9.4. (3 pts)	Chart indicates many methods were used to meet RIBTS 9.1, 9.2, 9.3, 9.4. (2 pts)	Chart indicates few methods were used to meet RIBTS 9.1, 9.2, 9.3, 9.4. (1 pt)
• analysis paper discussing reflections of own teaching and modifications made to instruction (RIBTS 9.5)	Analysis of teaching is in-depth and reveals extensive understanding of the relationship of teaching to children's learning. (3 pts)	Analysis of teaching reveals sound understanding of the relationship of teaching to children's learning. (2 pts)	Analysis of teaching reveals scant understanding of the relationship of teaching to children's learning. (1 pt)
• unit assessment sheet: assessment of children in terms of unit objectives and analysis of children's strengths and weaknesses	Objective chart is complete. Analysis of strengths and weaknesses indicates comprehensive understanding of assessing children in relationship to objectives (3 pts).	Objective chart is complete. Analysis of strengths and weaknesses indicates sound understanding of assessing children in relationship to objectives. (2 pts)	Objective chart is complete. Analysis of strengths and weaknesses indicates scant understanding of assessing children in relationship to objectives. (1 pt)
• unit assessment sheet: instructional implications	Includes comprehensive instructional implications that show clear connections to the identified strengths and weaknesses. (3 pts)	Includes many instructional implications showing clear connections to the identified strengths and weaknesses. (2 pts)	Includes few instructional implications and/or may have weak connections to the identified strengths and weaknesses. (1 pt)
<b>Expression/Voice</b> • Paper demonstrates focused, thoughtful composition, phrasing, and structure • Audience is clear and effectively addressed throughout the essay	Well-focused essay with evidence of thought in composition, phrasing and structure. Audience is clear and is effectively addressed. (3 pts)	Essay is focused and shows evidence of skill in writing. Voice may shift and audience may not be clear throughout. (2 pts)	Essay is poorly expressed with little attention to language and sentence structure. (1 pt)
<b>Conventions</b> 1) Uses correct grammar and mechanics, and appropriate word usage 2) Paper is well-organized and flows well	All conventions are addressed. Paper contains fewer than three spelling, punctuation, or grammatical errors. (3 pts)	Most conventions are addressed. Paper contains no more than four spelling, punctuation, or grammatical errors. (2 pts)	Some conventions are addressed. Paper contains five or more errors in spelling, punctuation, and/or grammar. (1 pt)

Total Points 18

Date 12/11/08 Rating: Exemplary (18-16 pts)  Acceptable (15-12 pts) \_\_\_\_\_

Unacceptable (Below 12 pts or an unacceptable rating in any category) \_\_\_\_\_

Revision #1 date: \_\_\_\_\_ Rating: \_\_\_\_\_

Revision #2 date: \_\_\_\_\_ Rating: \_\_\_\_\_

A Content  
A Form

Dr. Randy M. Cottle  
Instructor signature

\* Any artifact earning an Unacceptable rating must be revised.

RIC Candidate:

Date: December 8, 2008

**Rhode Island Beginning Teacher Standards  
Standard Number 9 (ACEI Standards 1, 2.3, 4, 5.1, 5.2)**

Teachers use a variety of formal and informal assessment strategies to support the continuous development of the learner.

- 9.1 gather information about their students (e.g. experiences, interests, learning styles, and prior knowledge) from parents/guardians, colleagues, and the students themselves.
- 9.2 use a variety of assessment strategies and instruments (e.g. observation, portfolio, teacher made tests, self-assessments) that are aligned with instructional content and methodology.
- 9.3 encourage students to evaluate their own work and use the results of this self-assessment to establish individual goals for learning.
- 9.4 maintain records of student learning and communicate student progress to students, parents/guardians, and other colleagues.
- 9.5 use information from their assessment of students to reflect on their own teaching and to modify their instruction.

Using this chart list the ways you met indicators 9.1, 9.2, 9.3, and 9.4.

9.1	9.2	9.3	9.4
<ul style="list-style-type: none"> <li>• My fellow practicum teachers and I spoke with the classroom teacher and received a roster of the students and the classroom teacher's notations regarding levels of students.</li> <li>• We received further information from the classroom teacher, denoting which students are ESL, which students receive some resource intervention, and which students receive OT.</li> <li>• During our first meeting with the students, we asked the students to complete a "math attitude survey"</li> </ul>	<ul style="list-style-type: none"> <li>• During each lesson, my fellow practicum teachers and I used both formal assessment strategies (activity worksheets, written response to math journal prompts) and informal assessment strategies (bringing class together to ask impromptu questions) to check for student learning and progress.</li> <li>• In every lesson, after an initial problem solving review, students were given the opportunity to work on a similar problem independently or with a partner or in a small group. Their</li> </ul>	<ul style="list-style-type: none"> <li>• As mentioned in section 9.2, at the close of the unit on problem solving, we distributed a survey to the students so that they would have the opportunity to self-evaluate their progress during the unit based on certain <i>specified</i> benchmarks (for example: their ability to explain the difference between a problem solving <u>step</u> and a problem solving <u>strategy</u>).</li> <li>• In addition to asking the students on the final survey for their input on specified benchmarks, we asked also asked them three open-</li> </ul>	<ul style="list-style-type: none"> <li>• After each lesson in the unit, my fellow practicum teachers and I would respond in writing to each student's response to their math journal prompt. In general, our responses positively encouraged their continued work, while at the same time communicated a progress to the students so they were aware if they adequately responded to the given questions or not.</li> <li>• After each lesson (whether immediately afterwards, or in the days that followed),</li> </ul>

<p>which allowed us to gather information on each individual student in terms of how they feel about certain criteria regarding math instruction, including math operations, problem solving, working with a partner and participating in class, for example. We were able to take this information into consideration in planning future lessons.</p> <ul style="list-style-type: none"> <li>• During each lesson, we had the opportunity to rotate through the classroom and work with students one-on-one. In doing so, we developed – albeit brief – a better understanding of each individual students’ learning style and math ability.</li> <li>• Each week after a lesson was observed or taught, I prepared a detailed reflection that documented how each student performed in relation to our lesson objectives and captured information on what I learned about each child as a result of observing, or teaching, a particular lesson.</li> <li>• Throughout the unit, the classroom</li> </ul>	<p>work on these problems was detailed in writing or through production of a chart, for example, that allowed my fellow practicum teachers and I to review individual student’s work and assess their learning progress towards a particular objective.</p> <ul style="list-style-type: none"> <li>• During each lesson, when students were working, either on their own, with partners or in small groups on solving problems, my fellow practicum teachers and I would be able to observe and take note of the progress of student learning.</li> <li>• At the close of each lesson, each student responded in writing to a journal prompt which was designed to focus in on asking the student to apply their knowledge of a learned problem solving step and/or strategy introduced during the lesson. Their response provided more evidence of student learning for evaluation.</li> <li>• At the close of the unit on problem solving, we distributed a survey to the students so that they would have the opportunity to</li> </ul>	<p>ended questions to encourage their input so we could further assess individual student goals for learning, specifically about math problem solving.</p> <ul style="list-style-type: none"> <li>• During the course of observing the students working on various math problems during the course of the unit, my fellow practicum teachers and I repeatedly stressed to the students the importance of using the final problem solving step, “Look back,” to remind them to look back and check their work for accuracy and completeness. In doing so, we were encouraging the students to use another method of self-evaluation.</li> <li>• Often, when students would have the opportunity to look back at their previous journal entry and review the notes my fellow practicum teachers and I had left in their journals, some students would take the opportunity to respond to a question we had posed to them to clarify their work on a previous problem or to recheck their work and provide the</li> </ul>	<p>my fellow practicum teachers and I would discuss our interactions with individual students and our review of their work so we would better understand if students were on target with their learning or not.</p> <ul style="list-style-type: none"> <li>• Following each lesson, my fellow practicum teachers and I would complete a chart as part of our written reflection to quantify and determine how children were responding to our lesson objectives.</li> <li>• In addition to preparing the above chart for tracking students’ learning and progress, as part of the prepared reflection, I would include detailed anecdotal notes on each student’s success or challenge in meeting each lesson’s objectives, as evidenced by his or her work towards those benchmarks.</li> <li>• Retaining copies of students’ work on worksheets and photocopies of their math journal responses has allowed me to maintain an overall record of student learning in which I was able to refer</li> </ul>
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<p>teacher often provided feedback on our ability to work with certain students, or clarified obstacles we would have in reaching certain students.</p>	<p>self-evaluate their progress during the unit based on certain benchmarks (for example: their ability to explain the difference between a problem solving <u>step</u> and a problem solving <u>strategy</u>).</p> <ul style="list-style-type: none"><li>• Together, the students' work on all of their individual problem solving worksheet activities, responses aloud in class, written responses in their journals and pre- and post- survey feedback all combine to act as a portfolio to showcase the learning and progress they have made in mathematics during the course of this one unit on problem solving.</li></ul>	<p>reasoning behind their answer. In doing so, they were given the opportunity to self-monitor their learning, instead of just being "corrected" by a teacher.</p>	<p>back to from lesson-to-lesson to help me better understand students' progress of learning math problem solving over time.</p>
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Analysis paper  
Connecting to indicator 9.5

Even though much time was spent planning and then acting to teach (or observe) each elementary mathematics lesson taught in this eight-lesson unit to the twenty-three students in Mrs. Creamer's third grade class at Marieville Elementary School in North Providence, Rhode Island, just as much time, if not more, was invested reflecting on the effectiveness of instruction. Through my own reflection, I feel I was able to gain much insight into how students learn mathematics, and how I should teach mathematics going forward. A positive side-effect of this experience is that I have been able to improve my own attitude towards mathematics.



As I began this practicum in mathematics, I wondered how I would begin to overcome my own math anxieties in order to project a positive attitude about math to my students. The positive outcome, I can now report, is that I unlocked a key to my ability to overcome my math apprehensions – and that is, if I can find a way to make math lessons for my students creative, not only will I be enthused to teach the lessons, but in turn, my students' interest will be piqued, and they will have their attention focused on learning.

*A great leap forward...*

Through the course of the eight-lesson unit on math problem solving that my two fellow practicum teachers and I taught, I was able to interact at some level with all twenty-three students in our classroom, and I specifically zeroed-in on the work and learning of seven of the students. At the start of the unit, my fellow practicum teachers and I gave the students a variation of the "Mathematics Attitude Survey." The survey responses of the seven students I would work with ran the gamut based on different aspects of mathematics we asked them to record their feelings about. In general, however, their attitude about math overall ranged from "ok" to "positive."

One of these seven students was very communicative about her fluctuating attitude towards math throughout the course of the unit. At the start of the unit, I noticed underneath this student's name on the cover of her math journal, she had written, "Math! yuk!" I knew this particular student was going to be a challenge to keep motivated and interested in the subject of math. I held out hope that I could succeed, even in this short amount of time with her, to be able to at least begin to turn her feelings about math around.

After the first lesson, she wrote in her math journal in response to the question we asked about what she would like to learn about problem solving in math was, "How to make it really, really, really, really, really, really, really fun!" By the second lesson, when she had read a response I had written in her journal, suggesting that I thought she would enjoy how we would be using fables to learn more about problem solving, she responded: "Thank u I did." During the third and fourth lessons in this unit, I was working with this same student to fine-tune a logical reasoning problem she had written herself. With her permission, one of my fellow practicum teachers used a variation of her problem during one of the math center activities during our final lesson with the students. Although her involvement in creating this problem and her communication to me about her enjoyment of making a connection through the use of fables aided her involvement in many of the math lessons we taught, it certainly wasn't a cure-all for this one particular student's attitude towards math.

Towards the end of the unit, I was a little disappointed to review her math journal and see a revised notation on the cover of her journal. It now read: "Math! yuk! Still yuck!" It made me feel that I was back to "square one" with this student in terms of her attitude towards math. While that may be so, it reminded me that overcoming a student's attitude towards math doesn't happen overnight. And, I was lucky that this student actually communicated her negative feelings about mathematics to me. I am sure there were many others in that very classroom who felt similarly about math, but chose not to be as demonstrative about it as this one student was.

As a classroom teacher, I really need to take the pulse of the class, both as a whole, and at the individual learner level to make sure, as their teacher, I am continually motivating, challenging and monitoring students' attitudes towards learning, particularly in mathematics since the content knowledge in this subject is learned cumulatively over time. As I know from <sup>my</sup> own personal experience, when a student turns his or her back on math and slips into being a poor math student, it takes a long, long time to even attempt to turn that negative attitude around. As a teacher, I will need to continue to have a positive approach to teaching mathematics, which will help my students stay motivated in their math learning. I will

also need to emphasize the fun in math and provide opportunities for my students to explore the ongoing challenges that mathematics provides, making meaningful connections to how they will be able to apply math in their everyday lives.

Overall, if I quantified the students' learning solely based on the numerical indicators of the key in the below "Unit Assessment Sheet" in response to the students' abilities to meet the benchmarks of the objectives, *on average*, all seven of the students at least partially met all of our unit's objectives. While that seems to be a success to note in regards to students' abilities to learn about new mathematical concepts in such a short span of time, it needs to be further noted that within that global average, each student demonstrated through their work that they met each particular objective with varying degrees of success. Lesson-to-lesson, I tried to focus in on the challenges and successes each individual student had by assessing their performance and working towards modifying instruction in order to effectively reach more students, which would in turn provide each student with a better opportunity to learn.

Sometimes, modifications took the form of changes in classroom management. Through a bit of trial-and-error throughout the course of the unit, my fellow practicum teachers and I discovered that it is not always a good idea to pair a "higher-level" student with a "lower-level" student. And, sometimes it's also not the best idea to pair students at all, especially when they view the opportunity to work with a partner as a "treat" and perhaps an invitation to misbehave. Allowing students to sit together at a back table, where they turn their backs (and subsequently, their attention) away from the teacher, was an important lesson for us, as teachers, to learn not to give permission for our students to do. When I taught the two lessons on my own, I actively decided to have students work on their practice problems individually (or with their immediate neighbor, if they chose), since I had observed the varying degrees of success my fellow practicum teachers had during their lessons, as it had often seemed that pairing students up could cause inadvertent obstacles for student learning. Promoting independent work and encouraging their neighbor's help seemed to work well because the chaos of moving seats was not an issue, and students were otherwise able to start their work fairly quickly after I reviewed the directions with the class.


If I had the opportunity to work with this same classroom of students for more time than just these eight lessons, I can see where I would try to work towards making accommodations for specific students to be able to include them in the lessons more regularly which would promote their learning. This particular classroom had an interesting community of students. The classroom teacher confided to us that half of the students were performing at, or above grade level, while the remaining half was currently below grade level. For a few of the students in this classroom, English is not their primary language, which presents obstacles for learning, especially when these students are asked to write or read extensively. Another student I worked with is often challenged in keeping his work neat and easy to read. His written work was so illegible during one of our lessons, that one of my fellow practicum teachers provided him with a new worksheet, and encouraged him to start fresh.

Taking these, and many other, individual learner's needs into consideration while balancing the contrasting learner levels in the classroom as a whole while planning our lessons did present some challenges because we wanted to make sure we were continuing to reach all of the students, while also balancing the ability to challenge students at their current learning levels. One way we made accommodations in our lessons was to provide a problem solving challenge, or extension activity, for those students who finished their work early. During one of the lessons I taught, this meant that about five of the twenty-three students were ready to take on trying to work through a problem solving challenge question. Another way we modified instruction, also employed if students finished their work early, was to encourage them to create a similar problem on their own. By doing so, the students weren't just challenged to do more work, but instead were given the chance to apply their knowledge through creation, which encourages the highest of the higher-order thinking skills.

One way I modified instruction for the second lesson I taught was to provide paper coins as manipulatives for students to use to aid them in solving problems. While preparing for the lesson, I debated whether to have the coins available for use at all, as I was thinking all of the students could probably work through the examples on paper without them. In reality, that was true for some of the students in this class,



but not for all. Many of the students chose to work through the first problem using only the coin manipulatives, which was encouraged, as long as they would also eventually write out their work on paper. The coins provided a tangible accommodation that allowed more students to be actively engaged in the activities of this lesson, and also more actively engaged in their own learning.

By examining the students' writing in response to our journal prompts at the close of each lesson, I do not completely feel that we always hit the mark on posing the most appropriate prompt question(s) that would in turn most adequately allow us to assess student learning. At least one student among the seven whose journals I reviewed each lesson, even noted in her final math survey that, "writing in the journal was a little hard to understand for me." A few other students I worked with are ESL students, who could have probably better demonstrated their learning with more graphics-based prompts, rather than language-based ones, or been provided with an option of responding in the language they may feel more comfortable communicating in. Going forward in teaching mathematics, I do feel, however, that the math journal is an important tool to assess student learning, especially to track progress over time. Given the push to connect students' thinking in mathematics through writing, combined with writing's connection to standardized testing, I definitely find value in having students write about their math, but in the future, I aim to fine-tune  this aspect of my mathematics teaching by not having my students respond to a journal after every single lesson, and perhaps allow them more flexibility in their writing that allows them to showcase all that they know about a concept.

As I listened to the questions that students asked through the course of this unit on math problem solving, I learned that a teacher cannot be explicit enough when giving directions, particularly if they are directions that directly impact how a student may interpret a task he or she will complete in order to be assessed on his or her learning. Many of the types of questions we received from students had to do with clarifying, or re-clarifying what we were asking them to do, or how they needed to respond in writing to a worksheet activity or to a prompt in their journal. If students do not understand what they are doing or how to proceed, then the information they give back will not adequately showcase their learning. To address

potential problems such as these, teachers need to be extremely clear in their language, both verbal and written.

It became evident, particularly with supporting mathematics learning, that students need to have their unique ideas and ways of working through problems accepted and sometimes even applauded. During one of my lessons, for example, as I modeled how to compile an organized list, writing out columns denoting coins from lowest to highest value, a student raised his hand to ask if it was acceptable for him to arrange the columns instead from highest to lowest value when he created his organized list. I validated his suggestion as acceptable, which perhaps could have made more sense to him, but I also took the opportunity to reinforce how in mathematics there is continually more than one way to work through the mechanics of the problem to arrive at a solution. Also, sometimes, depending upon the problem at hand, there could even be multiple solutions that are still valid answers – and as a teacher, I need to remember this. During one of my fellow practicum teacher's review of a logical reason problem in which the order of animal pictures needed to be arranged, it seemed that some students started to verbalize an alternate (and still applicable) solution. In problems such as these, it will be good to remember to poll the class to see if anyone agreed or disagreed with a particular solution, or if anyone was able to work out another solution to a given problem to encourage students' ability to verbally communicate their thinking through of math, if nothing else.

I strongly feel that the major aspect of my teaching that was most effective was the positive attitude I promoted about math learning. I anxiously awaited my time to share with the students the fables I chose as the center-point of the lessons I taught. Similarly, I couldn't wait to share the story extension and accompanying problem solving activities I had created. I feel that the enthusiasm I projected was contagious among the students – from the start of the lesson when I gathered the students to listen to the fable as I read it aloud, through to the ending activities of the lesson. Also, a secondary aspect of my teaching that I thought was effective was beginning to get to know some of the students one-on-one. Beginning to understand their challenges, attitudes, and even quirks, allowed a gateway for me to be able to have some background knowledge on the students as individual learners and be able to give them some guidance that would help

them learn the concepts at hand. Some students commented on the initial survey that they don't like to ask for help from their math teacher, but it became obvious that these same students my fellow practicum teachers and I took the initiative to approach, not only appreciated – but often needed – the extra guidance, yet didn't feel pressured by having to be the one who initiated the help of a teacher.

In closing, I feel the major key in considering what student performance indicates about my own teaching, as well as being able to accurately assess the effectiveness of my instruction in relationship to their learning, revolves around being able to have a keen understanding of individual students. Week-to-week, I started to gain a better understanding of each student, and began to develop questions about the performance, abilities and challenges some students exhibit and how to best address those instructionally to best promote their learning. Through more ongoing and consistent work with students, particularly in mathematics, I will be able to have a better grasp on their learning, attitudes, assessing their learning and the progress of their learning over time to help build upon their cumulative collection of their mathematics learning in a positive and meaningful way.

This is a superb analysis of your effectiveness as a teacher during this experience and description of contributing factors!

Excellent artifact overall! I've no doubt you will continue to grow as a math teacher who can affect both the attitudes and knowledge of her students!

A Content  
A Form

RIC Candidate: \_\_\_\_\_  
Unit Title: Integrating Fables with Mathematics Learning

Date: December 8, 2008

**UNIT ASSESSMENT SHEET**

Directions: Complete this chart for your unit. Show all different objectives in the entire unit.

Key
Did the student meet the objectives?
4 = yes
3 = partially
2 = no
1 = not observed

Lesson Objectives (Lesson #)	Students' Initials						
	JMe.	JMa.	JQ	SC	AC	TR	AY
Identify the four steps of problem solving (1, 2, 8)	1, 1, 4	3, 1, 4	1, 1, 4	4, 3, 4	1, 3, 4	1, 1, 4	1, 3, 4
Write at least two complete sentences about how they used the four steps of problem solving to play the "25!" game (1)	2	4	3	3	2	3	2
Show how they were able to combine various playing card values to obtain the sum of 25 (1)	4	3	1	1	4	3	1
Identify the problem solving strategy Make a Picture or Draw a Diagram (2)	1	3	3	4	1	4	3
Use the problem solving strategy Make a Picture or Draw a Diagram where appropriate (2)	4	4	4	4	4	4	4
Identify <i>and apply</i> the four steps of problem solving (3, 8)	2, 3	1, 3	3, 3	3, 3	1, 3	3, 3	1, 3
Identify and apply the problem solving strategy Logical Reasoning (3)	3	3	3	3	2	3	2
Recognize where logical reasoning is applicable to given word problems (3)	3	3	3	3	2	3	2

Lesson Objectives (Lesson #)	Students' Initials						
	JMe.	JMa.	JQ	SC	AC	TR	AY
Understand that word problems can be solved with a number of strategies (3)	3	3	3	3	3	3	3
Identify the problem solving strategy Use or Make a Table or a Graph (4, 5)	3, 3	2, 2	2, 3	1, 4	2, 3	3, 3	3, 2
Identify a pictograph (4)	3	2	2	1	3	4	2
Use a pictograph to organize information and draw conclusions (4)	4	3	3	3	3	3	4
Use the problem solving strategy Use or Make a Table or Graph to solve the problems presented by the teacher (4,5)	4, 4	4, 3	3, 4	3, 3	3, 2	4, 4	4, 3
Construct a pictograph using information collected and provide and draw conclusions (5)	4	3	3	3	3	4	3
Identify the problem solving strategy Use or Look for a Pattern (6)	4	N/A, absent	4	4	4	4	4
Use a 0-99 chart to make a specified number pattern (6)	4	N/A, absent	4	4	4	4	4
Describe the pattern made by the number sequence (either horizontally, vertically or diagonally) (6)	4	N/A, absent	4	3	3	3	2
Use the problem solving strategy Use or Look for a Pattern to solve the problems presented by the teacher (6)	4	N/A, absent	4	4	4	4	4
Extend a pattern sequence to at least one more repetition (6)	4	N/A, absent	2	2	2	4	2
Identify the problem solving strategies of Make it Simpler and Use an Organized List (7)	1	3	4	4	4	3	4
Use a list to simplify/ organize information contained in a math problem (7)	3	3	4	4	4	4	4

Lesson Objectives (Lesson #)	Students' Initials						
	JMe.	JMa.	JQ	SC	AC	TR	AY
Explain how much money would be needed for the hippo to pay his bill(s) at the restaurant (7)	4	4	4	4	4	4	4
Use the problem solving strategy of Make it Simpler and Use an Organized List to solve the problems presented by the teacher (7)	3	3	4	4	4	4	4
Identify and use problem solving strategies to solve problems (8)	4	4	4	4	4	4	4

Summary

Students' Initials	Strengths	Weaknesses	Instructional Implications
JMe.	<p>Displays good mental math skills; active participant in class; enjoys reading directions aloud; although he may not respond in writing, he seems to look forward to having a note waiting for him in his math journal; consistently positive student to work with; he puts forth a good effort in all of his math work; works well with a partner, both giving, and seeking advice, as needed; when finished with initial problems, can at least attempt a challenge/higher-order thinking extension activity; has good ideas and can communicate them well; enjoys the challenge that problem solving brings, said on his ending math survey that he likes figuring problems out</p>	<p>Can be hesitant to start his work; seeks constant reassurance that he is proceeding correctly; can be confused by directions and visibly shows aggravation when he doesn't understand, to the point of shutting himself out of trying a problem</p>	<p>Need to check for his understanding before he starts a new challenge so he doesn't get so frustrated sometimes; seems to be proceeding at grade level in math and could benefit from being given higher-level or challenge questions, when appropriate, to encourage his own exploration of learning and keep his positive attitude about math up</p>
JMa.	<p>When he puts his mind to it, he can work through problems thoroughly and successfully</p>	<p>Repeatedly seems that he does not want to put in much effort to solve problems; seems distant when working with a partner; does not like to ask teacher for help (per math attitude survey); his work appears to be sloppy and he has a reputation among his classroom teacher and peers as being lazy; often looks for a short cut in his work to seemingly take the easy way out</p>	<p>Could benefit from one-on-one time with teacher or other intervention about his written work and also about his effort; needs to be motivated to show more of an effort to be a participating math learner; will be important to continue monitoring any progress JMa. demonstrates, not only in his math abilities, but also in the presentation of his work overall (specifically his handwriting) – as it is unknown if his haphazardness here is</p>

JMa., continued			“just” laziness or something more serious that he should receive additional supports to work towards improving
JQ	Has positive attitude about learning math; quiet learner; careful and neat about her work; succeeds more in graphic-based work than in language-based work because of her developing English language skills; found the written journal work “a little hard to understand” per her response in the ending math survey	Since JQ is such a quiet student, she unfortunately is easily looked-over while her more demonstrative classmates take teacher attention away from her (and her needs); she needs to be more communicative; struggled during one lesson to communicate counting by twos	Needs to be paired with a student more on her same level (and not with a fellow student who will immediately take the upper-hand, or else JQ will become a follower and not an active participant in her own learning); needs continual exposure to math basics (like a hundreds chart) to help beef up her basic math skills, including counting
SC	Works well with a partner; is comfortable doing and showcasing mental math skills; participates well in whole-class discussions; is open to sharing his work/thinking aloud with his classmates; is usually actively engaged in a lesson and its activities; asks good questions; assists his classmates/partners in positive ways; often finishes tasks successfully and fairly quickly and enjoys the challenge extension activities provide; can successfully attempt higher-level tasks (like creating own math problems, etc.), if not at least begin them; seems to have a firm grasp on counting money	Does not like to ask teacher for help (per math attitude survey); can sometimes be distracted – and distracting – during teacher-guided portion of lessons	Expressed that he would like to learn more about math games; needs to be continually engaged in a lesson or activity or else he will become a distraction to himself and his classmates; shows great potential at learning many facets of mathematics, including higher-leveled problems and positively expressed his desire to want to learn more
AC	Succeeds when independent work is not so heavily language-based; worked better on solving problems involving charts, tables and organized lists,	Often, AC’s language barrier is a stumbling block in allowing him to communicate his responses in writing; the mental math he	Could be helped by modified/more scaffolded activities to encourage a higher level of his participation (ex: providing a grid with



<p>AC, continued</p>	<p>than in responding to written question prompts; because of his English language skills that are still under development, AC sometimes appears to be in over his head and lost in certain activities; is willing to put in the extra effort to go back and check/revise his work; when he clicks with an activity, he is able to communicate to his teacher one-on-one, in his own words, his findings, which are almost always right on-track</p>	<p>communicates is slow, evidenced by his methodical one-at-a-time pointing of symbols to count; does not like to be verbal in class when the whole audience of his classmates is listening (per his math attitude survey).</p>	<p>blocks that have numbers on them to help him understand the order of placing objects in sequential order); should not be paired with a student who is way ahead of him level-wise, or else he will be totally lost and not have a chance of participating in his own learning; could benefit from continued exposure to basic math skills (like numbers charts), or other tools that will contribute to his understanding of number relationships and counting</p>
<p>TR</p>	<p>Is interested and engaged in math when it is connected to something that is fun (such as fables); expresses what she knows well; can work well with a partner; can work through problems well and attempt challenge extensions which require her to apply higher-order thinking skills; did a great job of quickly coming up with her own logical reasoning problem that was shared with the class during a math center in the unit's final lesson</p>	<p>Often, TR is too quick to complete her work; has fluctuating attitude about math and is very verbal about it, either way; when her attitude is negative towards learning math, she puts up her own obstacles in her progress towards learning; could sometimes show more effort to do her work more thoroughly; inconsistent student in terms of engagement in lessons, cooperation and effort</p>	<p>TR continually needs to be motivated, challenged and monitored; she has the ability to be the best math student in the class, but she also has just as much propensity to put up a wall and slip into being a poor math student – the outcome will continually be dependant upon her teacher's positive approach to teaching mathematics and the ability for TR to stay motivated, see the fun in math and be provided with opportunities to keep her challenged</p>
<p>AY</p>	<p>AY often demonstrates good mental math skills and can verbalize his thinking with a little prodding; has good attitude about most aspects of math learning (per math attitude survey); worked best with the graphics-based (less language-based) activities in math, such as the pictograph, for</p>	<p>Responded on math attitude survey that he does not like to work with a partner; is sometimes confused about directions of a task; needs to put in a little more effort into his written work; he often doesn't stop to listen and communicate his understanding to directions; has been seen</p>	<p>AY needs to be encouraged to work and think independently; he could sometimes be helped by modified/more scaffolded activities to encourage a higher level of his participation; it may not always make sense for him to be paired up with a partner, especially if he is going to rely on that</p>

AY, continued	example; is able to explain and interpret the basics of graphs and charts well; volunteers to read questions aloud, and often volunteers to discuss his answers and reasoning in solving math problems aloud to his teacher and all of his classmates	copying the work of fellow students word-for-word, or restating the information contained in the math journal prompts as his answer in an inapplicable way; is inconsistent in his own genuine effort in working through his math problems	partner as an outlet to claim work as his own, when it's not; AY has the ability, and often shows the interest, in developing his math skills; he is definitely a capable student, but needs to be positively encouraged to be an active participant in his own learning of math
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