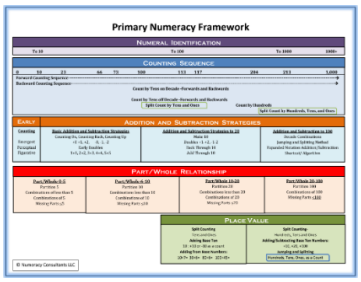
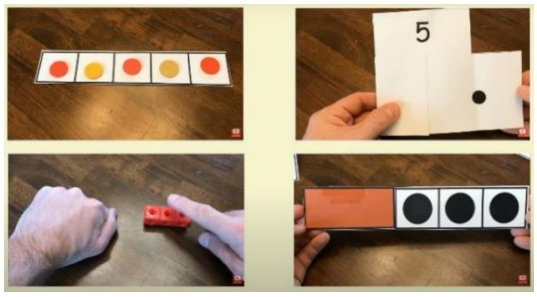
Our Instructional Approach
Data Ignites the Process the CRA Fuels the Learning

Numeracy Consultants *(Updated 2022)*

The instructional approach utilized by Numeracy Consultants is fundamentally anchored in the rich data derived from our standards based Primary Numeracy Assessment. This assessment was meticulously designed and serves as the cornerstone of our instructional framework. By understanding that data is the keystone of any effective teaching strategy, Numeracy Consultants has laid a robust foundation for tailored and efficient numeracy education.



The data gathered from the Primary Numeracy Assessment is not just a simple snapshot of a student's mathematical proficiency; it is a comprehensive diagnostic tool that unveils the intricate nuances of their numerical journey. This data encompasses a wide spectrum of mathematical skills, ranging from basic counting and numeral identification to more complex problem-solving abilities. With this data, teachers are able to gain invaluable insights into individual student strengths and weaknesses, enabling them to create highly personalized learning paths.

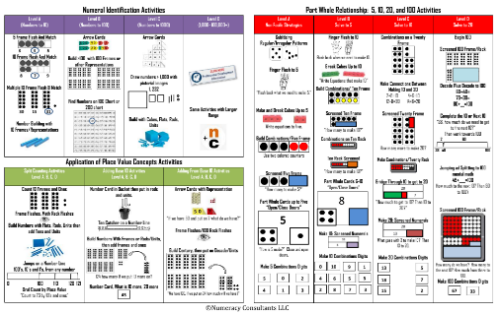


To harness the full potential of this data, we have aligned our instructional materials, including lessons, workbooks, leveled hands on activities, and supplementary resources, seamlessly with the Concrete-Representational-Abstract (CRA) instructional model. The CRA model is a well-established pedagogical approach that progresses students through three critical stages of mathematical understanding. It begins with concrete experiences, moves to representational visualizations, and finally culminates in abstract symbolic representations.

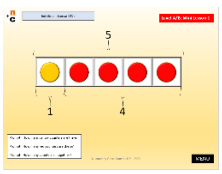
The lessons and learning materials are crafted to initiate the learning process with concrete experiences that directly relate to the student's assessment data. These hands-on activities are designed to bridge the gap between theoretical knowledge and real-world application. Our workbooks and materials, following this scaffolded approach, provide students with various representational tools and step-by-step guidance that correlate with their specific areas of improvement, as indicated by the assessment data. The materials are not one-size-fits-all; instead, they are fine-tuned to address individual needs, ensuring a highly customized learning experience.

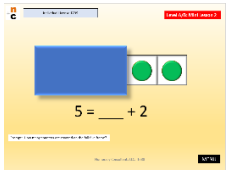
This integration of data-driven insights and the CRA instructional model empowers Numeracy Consultants to deliver a highly effective numeracy education system. The combination of precise assessment data and strategically designed materials ensures that students receive targeted instruction that nurtures their mathematical growth from a concrete foundation to abstract mastery. In essence, Numeracy Consultants' instructional approach serves as a testament to the transformative potential of data-informed teaching methods in the realm of numeracy education.

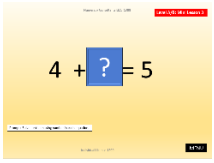
The **Leveled Activities Guide** effectively integrates the Concrete-Representational-Abstract (CRA) model for instruction. At the outset of the guide, you'll find concrete activities designed to immerse students in hands-on experiences with physical objects like counters or base-ten blocks, promoting a tangible understanding of counting by tens. As you progress down the guide, the activities gradually transition to the representational phase. Here, students begin to work with pictorial representations such as drawings or charts, helping them visualize and reinforce their grasp of counting by tens in a more symbolic manner. Towards the bottom of the guide, the activities evolve into the abstract phase, where students increasingly rely on numbers and symbols to count by tens independently, with fewer visual supports. This structured approach ensures a comprehensive and sequential learning experience, ultimately enabling students to master counting by tens with confidence and proficiency.



Both the **eLibrary 1.0 and 2.0** versions, seamlessly adhere to the CRA instructional approach. As exemplified here, while nurturing fundamental comprehension of part-whole relationships and cultivating algebraic thinking, these models smoothly progress from introducing tangible, real-world examples in the initial lessons. They then progressively scaffold towards more complex, abstract representations.

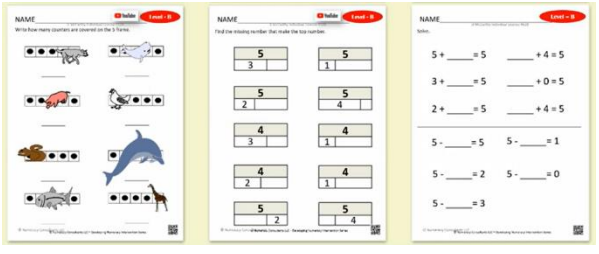






Ultimately, the concluding part of each lesson immerses students in the realm of pure abstraction, exclusively dealing with numerical digits devoid of any tangible context. This comprehensive learning experience can be further enriched by integrating both the 2.0 and 1.0 versions with the Leveled Activities guide, offering students a broader and more diverse range of educational encounters.

Both the eLibrary 1.0 and 2.0 incorporate the Concrete-Representational-Abstract (CRA) approach into the student practice workbooks. These **workbooks** meticulously align with the corresponding lessons, ensuring that students engage in practice at the same skill level they acquired during the lesson. To support effective learning, the workbooks offer concrete models for



lessons focusing on tangible concepts, while abstract lessons provide abstract practice exercises. This seamless integration ensures that the skills taught in the lessons are mirrored in the practice materials, fostering a cohesive and comprehensive learning experience for students.

In conclusion, Numeracy Consultants' instructional approach showcases a steadfast commitment to fostering mathematical proficiency in students by seamlessly integrating the Concrete-Representational-Abstract (CRA) framework into every facet of their curriculum. Through carefully designed lessons, engaging activities, and thoughtfully crafted student practice workbooks, Numeracy Consultants not only ensure that learners grasp mathematical concepts but also empower them to apply their knowledge in real-world contexts. By consistently employing the CRA model, Numeracy Consultants not only transform the way students learn mathematics but also lay a strong foundation for a lifelong love of numbers and problem-solving. This comprehensive approach represents an invaluable tool for educators and learners alike, fostering a deep understanding of mathematical principles that extends far beyond the classroom

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