

# **EARLY MATH ASSESSMENT**

for student success



# **KEY FEATURES**

#### **Flexible Assessments**

The delivery of the assessments can be driven by the classroom teacher to be administered in a group, or it can be completed by the student independently, allowing for the flexibility of assessment delivery. With intuitive instructions, students can independently navigate their way through different subsections of the screener, providing an individualized learning experience.



# Let's Practice! Where is 1? Next >

# Simplified items

The content in the assessments are not only impactful and engaging, but are also designed to be clear, concise, and expressed in a manner which is easy to understand. With a mixture of multiple-choice, drag and drop, to responses which students are required to construct and input themselves, the assessment questions create an inclusive experience for all.

### **Real-time Student Monitoring**

The assessment allows educators to view student activity in real-time, providing valuable insight on how students approach the questions and the difficulty each question presents. Educators can also identify student trends and patterns as it pertains to the questions in the assessment, including pinpointing questions that students spend the most time on.



#### **Engaging Assessments**

The assessment design enhances the student experience, as they engage with custom interactions which provide an intuitive educational journey. Guided through each step of the assessment, the screener offers a focused and thoughtful approach to assessing early math skills. While maintaining a structured environment, the assessment is designed to capture each child's attention through clear, purposeful tasks that accurately reflect their abilities.





#### **Voice Enabled**

Instructions for the assessment items are voiceenabled to ensure that young children with limited reading abilities fully understand what they are expected to do. This feature provides clear guidance in an easy-to-understand manner, supporting independent learning and making the assessment experience more comfortable and accessible for early learners.

## **Dashboard & Reporting**

An intuitive dashboard provides educators with the ability to view student performance, along with the ability to generate comprehensive reports. These detailed reports provide specific insights on student performance at the individual and class level, including students who score above and/or below the cut-score, allowing educators to hone in on students who require remediation.



#### **COLLABORATION**

In 2021, researchers from Carleton University created the Early Math Assessment @ School (EMA@School) screener that measures vital skills in numeracy development such as number comparison, transcoding numbers, number line placement, and arithmetic fluency. The screener was created for use in the classroom to inform educators about students who may require extra assistance.

After the successful use of the screener in its paper-based format for three years across numerous schools in Canada, Carleton University and Vretta partnered, in 2024, to digitize and extend the implementation of the EMA@School at large-scale. The EMA@School platform includes interactive items, data capturing tools, and visualizations to support a collaborative and innovative learning environment for children.

#### **ACCESSIBILITY AND SECURITY**

The EMA@School is designed to provide equal opportunity for all children. The system and content are designed to be perceivable, operable, understandable, and robust for all users, compliant with the principles of WCAG 2.2. Security is also at the forefront of the screener, with stringent security compliance certifications (SOC 1 Type 2, SOC 2 Type 2, and ISO 27001) being maintained to ensure that the system and processes strictly adhere to privacy and security regulations.











