## MATHEMATICS UNIVERSAL SCREENING TOOLS: CRTI REVIEWED

Provided here are universal screening tools reviewed by the <u>Center on Response to Intervention (CRtI)</u>. The tools are presented in alphabetical order and, when available, features for each measure are provided. Technical Characteristics are provided when available. Readers should <u>not</u> interpret the inclusion of a measure in the following table as representing an approved status or an endorsement by the Iowa Department of Education. Additionally, this list is not an exhaustive list of available tools, but rather those provided on the CRtI site. Additional screening tools exist.

These CRtI data are based on a June 2016 review. An additional review was planned for summer of 2017 and involved a transition from the CRtI to <u>National Center of Intensive Instruction</u> (NCII) process and criteria so only tools currently listed here will reviewed during this transition.

## **Technical Characteristics Descriptors**

Below are the descriptors for each of the technical characteristics, as provided by the Center on Response to Intervention (CRtI). More detail related to the classification criteria for each of the three technical characteristics is available on the CRtI <u>rating rubric</u>.

|            | Convincing Evidence           |
|------------|-------------------------------|
|            | Partially Convincing Evidence |
| $\bigcirc$ | Unconvincing Evidence         |

| Universal Screening Tool,<br>Publisher             |  |        |                       | Admir                             | nistratio           | n                           | red                                    |              |                      |                  |                                      | Technical<br>Characteristics |             |               |             |
|--|--|--------|-----------------------|-----------------------------------|---------------------|-----------------------------|--|--------------|----------------------|------------------|--------------------------------------|------------------------------|-------------|---------------|-------------|
|  |  | Grades | (I)ndividual, (G)roup | (P)aper, (I)nterview, (W)eb-based | (F)ixed, (A)daptive | Estimated Time <sup>1</sup> | (I)mmediate (H)and-scored or (N)either | Data System? | Perform. Comparisons | Is there a cost? | Progress Monitoring<br>Availability? | Classification Accuracy      | Reliability | Validity      | CRtI review |
| Acuity Mathematics,<br>McGraw Hill                 |  | 3-8    | G                     | W                                 | F, A                | 50                          | I                                      | Y            | Y                    | Y                | N                                    | $\bigcirc$                   | <u> </u>    |               | <u>link</u> |
|  | Missing Number   | K-1    | I                     | P                                 | F                   | 1                           | Н                                      | Y            | Y                    | Y                | Y                                    | 0                            |             |               | <u>link</u> |
|  | Number<br>Identification                                 | K-1    | I                     | P                                 | F                   | 1                           | Н                                      | Y            | Y                    | Y                | Y                                    | 0                            |             | 0             | <u>link</u> |
| AIMCoord   | Oral Counting  | K-1    | I                     | I                                 | F                   | 1                           | Н                                      | Y            | Y                    | Y                | Y                                    | 0                            | $\circ$     | 0             | <u>link</u> |
| AIMSweb.<br>Pearson                                | Quantity<br>Discrimination                               | K-1    | I                     | Р                                 | F                   | 1                           | Н                                      | Y            | Y                    | Y                | Y                                    | 0                            |             |               | <u>link</u> |
|  | Computation  | 1-8    | I,G                   | P                                 | F                   | 8                           | Н                                      | Y            | Y                    | Y                | Y                                    | $\bigcirc$                   | $\bigcirc$  | 0             | <u>link</u> |
|  | Concepts and Applications                                | 2-8    | I,G                   | Р                                 | F                   | ~9                          | Н                                      | Y            | Y                    | Y                | Y                                    | $\bigcirc$                   |             | 0             | <u>link</u> |
| Classsworks Univer                                 |  | K-10   | I,G                   | W                                 | F                   | 30                          | I                                      | Y            | Y                    | Y                | Y                                    | $\bigcirc$                   |             | 0             | <u>link</u> |
| Mathematics - Pred<br>Discovery                    | <u>Mathematics – Predictive Assessment,</u><br>Discovery |        | I,G                   | W                                 |                     | 40                          | I                                      | Y            | Y                    | Y                | N                                    |                              | •           | •             | <u>link</u> |
| FAST,  | Adaptive Math  | K-6    | I,G                   | W                                 | A                   | ~25                         | I                                      | Y            | Y                    | Y                | N                                    |                              |             |               | <u>link</u> |
| FastBridge<br>Learning                             | earlyMath<br>Composite <sup>2</sup>                      | K-1    | I                     | Р                                 | F                   | ~7                          | I                                      | Y            | Y                    | Y                | Y                                    |                              |             |               | link        |
| Group Math Assessi<br>Evaluation (G-MAD<br>Pearson | ment and Diagnostic<br>E),                               | 1-12   | I,G                   | P                                 | F                   | ~70                         | Н                                      | Y            | Y                    | Y                | N                                    | <b>○</b>                     |             | $\overline{}$ | <u>link</u> |

|  |        |                       | Admir                                | nistratio           | n                           | pə.                                    |              |                      |                  |                                      | Technical<br>Characteristics |             |            |             |
|--|--------|-----------------------|--------------------------------------|---------------------|-----------------------------|--|--------------|----------------------|------------------|--------------------------------------|------------------------------|-------------|------------|-------------|
| Universal Screening Tool,<br>Publisher                   | Grades | (I)ndividual, (G)roup | (P)aper, (I)nterview,<br>(W)eb-based | (F)ixed, (A)daptive | Estimated Time <sup>1</sup> | (I)mmediate (H)and-scored or (N)either | Data System? | Perform. Comparisons | Is there a cost? | Progress Monitoring<br>Availability? | Classification Accuracy      | Reliability | Validity   | CRtI review |
| i-Ready Mathematics,<br>Curriculum Associates            | K-12   | I,G                   | W                                    | A                   | ~45                         | I                                      | Y            | Y                    | Y                | N                                    |                              | •           | •          | link        |
| Measures of Academic Progress (MAP) Primary Grades, NWEA | K-2    | I,G                   | W                                    | A                   | 40                          | I                                      | Y            | Y                    | Y                | N                                    | •                            | <u> </u>    | <b>○</b>   | <u>link</u> |
| Measures of Academic Progress (MAP), NWEA                | 2-12   | I,G                   | W                                    | A                   | 40                          | I                                      | Y            | Y                    | Y                | N                                    |                              | $\bigcirc$  | $\bigcirc$ | <u>link</u> |
| mCLASS: Math<br>Amplify                                  | K-3    | I,G                   | P                                    | F                   | ~7                          | I                                      | Y            | Y                    | Y                | Y                                    | 0                            |             | 0          | <u>link</u> |
| STAR Math, Renaissance                                   | 1-12   | I,G                   | W                                    | A                   | 15                          | I                                      | Υ            | Y                    | Y                | Y                                    |                              |             |            | link        |

<sup>&</sup>lt;sup>1</sup>Administration times are reported by the vendor and approximates. Those indicated with a "~" are the middle of the range provided. For example, if vendor provided 10-20 minutes administration range, ~15 is reported.

<sup>&</sup>lt;sup>2</sup> Depending on the grade and screening window, FAST the early Math Composite is a combination of the following subtests: Composing, Decomposing Grouping and Place Value, Match Quantity, Number Sequence, Numeral Identification and Story Problems.

## MATHEMATICS UNIVERSAL SCREENING TOOLS: STATEWIDE SURVEY

Provided here are universal screening tools reported through a statewide survey. These universal screening tools were *not* reviewed by the CRtl, yet were reported to serve as universal screening tools in at least two Iowa districts. Please note that being listed here rather than the previous table is <u>not</u> a statement of lesser merit or value as a universal screening tool, but simply a reflection that the assessment was not submitted to the CRtl during its 2016 review. Also, please note these measures may serve assessment purposes in addition to universal screening and may have the characteristics of universal screening measures to varying degrees. The tools are presented in alphabetical order and, when available, features for each measure are provided. When available, a link is provided to each measures Technical Characteristics, as provided by the developer. Readers should <u>not</u> interpret the inclusion of a measure in the following table as representing an approved status or an endorsement by the Iowa Department of Education. Additionally, this list is not an exhaustive list of available tools, but rather a list of those reported as used through a statewide survey.

| Universal Screening Tool,<br>Publisher   |  |        | Administ              | tration F                            | ormat               |                              | Stu                             | ident D      | ata                  |                   |                      | Š                         |
|--|--|--------|-----------------------|--------------------------------------|---------------------|------------------------------|---------------------------------|--------------|----------------------|-------------------|----------------------|---------------------------|
|  |  | Grades | (I)ndividual, (G)roup | (P)aper, (I)nterview,<br>(W)eb-based | (F)ixed, (A)daptive | Administration ${ m Time}^1$ | (I)mmediate , (H)and-<br>scored | Data System? | Perform. Comparisons | Is there a cost?  | Progress Monitoring? | Technical Characteristics |
| Assessment for Mathematical Understanding, Education Northwest                           |  | K-1    | I                     | P,I                                  | F                   |                              | Н                               | N            |                      | N                 | N                    |                           |
| Boulder Valley Screener,<br>Forefront Math   |  | K-5    | I,G                   | P                                    | F                   | ~13                          | I                               | N            | Fall                 | N                 | N                    | Technical Information     |
| Delaware Universal. Screening Tool for<br>Number Sense<br>Delaware Mathematics Coalition |  | K-5    | I,G                   | P                                    | F                   | ~13                          | I                               | N            |                      | N                 | N                    |                           |
| DIBELS Math. Dynamic Measureme   | <u>DIBELS Math.</u><br>Dynamic Measurement Group |        | I                     | P                                    | F                   | ~8                           | Н                               | Y            | Y                    | Note <sup>2</sup> | Y                    | Technical Information     |
|  | Number<br>Identification                         | K-1    | I                     | Р                                    | F                   | 2                            | Н                               | N            | Y                    | N                 | Y                    |                           |
| Early Numeracy Indicators  | Quantity<br>Discrimination                       | K-1    | I                     | P                                    | F                   | 2                            | Н                               | N            | Y                    | N                 | Y                    | Track with 1 In Comment   |
| Research Institute<br>on Progress<br>Monitoring (RIPM)                                   | Missing Number                                   | K-1    | I                     | P                                    | F                   | 2                            | Н                               | N            | Y                    | N                 | Y                    | Technical Information     |
|  | Mixed Numeracy                                   | K-1    | I                     | Р                                    | F                   | 2                            | Н                               | N            | Y                    | N                 | Y                    |                           |
| easyCBM<br>Houghton Mifflin Harcourt   |  | K-6    | I,G                   | W                                    | F                   | ~25                          | I                               | Y            | Y                    | Note <sup>3</sup> | Y                    | Technical Information     |

| Universal Screening Tool,<br>Publisher                   |  |        | Administ              | tration F                            | ormat               |                                  | Stu                        | Student Data |                      |                  |                      | Š                         |
|--|--|--------|-----------------------|--------------------------------------|---------------------|----------------------------------|----------------------------|--------------|----------------------|------------------|----------------------|---------------------------|
|  |  | Grades | (I)ndividual, (G)roup | (P)aper, (I)nterview,<br>(W)eb-based | (F)ixed, (A)daptive | Administration Time <sup>1</sup> | (I)mmediate , (H)andscored | Data System? | Perform. Comparisons | Is there a cost? | Progress Monitoring? | Technical Characteristics |
| Monitoring Basic Skills Progress                         | Computation                                  | 1-6    | I,G                   | P                                    | F                   | ~4                               | Н                          | Y            |                      | Y                | Y                    | Technical Information     |
| (MBSP)<br>Pro-Ed   | Concepts and<br>Application                  | 2-6    | I,G                   | P                                    | F                   | ~7                               | Н                          | Y            |                      | Y                | Y                    | Technical Information     |
| Number Knowledge Test (NKT),<br>McGraw Hill              |  | K-1    | I                     | P, I                                 | F                   | ~12                              | I                          | N            |                      | N                | N                    | Technical Information     |
|  | Number Sense Screener,<br>Brookes Publishing |        | I                     | P, I                                 | F                   | ~17                              | I                          | N            | Note <sup>4</sup>    | Y                | N                    | Technical Information     |
| Math Reasoning Inv<br>Scholastic                         | Math Reasoning Inventory,<br>Scholastic      |        | I                     | P, I, W                              | F                   | ~17                              | I                          | Y            |                      | N                |                      | Technical Information     |
| Math Inventory Houghton Mifflin Harcourt                 |  | K-12   | I,G                   | W                                    | A                   | 40                               | I                          | Y            | Y                    | Y                | N                    | Technical Information     |
| Ohio Diagnostic Assessment, Ohio Department of Education |  | K-2    |                       | P                                    | F                   |                                  | Н                          | N            |                      | N                |                      | Technical Information     |
| IGDIs Early Numeracy Early Learning Labs                 |  | PK     | I                     | P,I                                  | F                   | 10                               | I                          | Y            | Y                    | Y                | Y                    | Technical Information     |

¹Administration times are reported by the vendor and approximates. Those indicated with a "~" are the middle of the range provided. For example, if vendor provided 10-20 minutes administration range, ~15 is reported.

<sup>&</sup>lt;sup>2</sup>Currently free

<sup>&</sup>lt;sup>3</sup>easyCBM has two levels of access and use; one free, one fee-based.

<sup>&</sup>lt;sup>4</sup>Kdg Fall & Spring, 1<sup>st</sup> Fall only