

## Trajectories Pilot Information

### Sample Trajectories Chart:

The color coded skill chart is based upon the Communication Matrix presented through the CEP in Oakland County. The left chart shows the first page of the trajectories with the green cells indicating that the student is consistently proficient and has mastered those skills. The yellow boxes indicate that the student has developing skills or has not yet mastered all of the assessed items. As a student learns new skills, the chart can be updated at each IEP to demonstrate long term growth. The assessment also allows the level of prompting to be indicated from an independent level-4 the least level of prompting to a level-1 requiring full physical assistance.

IEP goals should not be developed for each trajectory in isolation. The team should look across the trajectories for common skills and write a goal that would show the connections and support overall math achievement. Once Oakland Schools has developed the electronic version of the chart, teachers would be able to change the colors to reflect the student's current skill level as well as to save and print the document.

Oakland Schools is working to make the assessments for all 13 trajectories web friendly and will allow the assessments to be updated electronically and saved to a local folder or drive.

Below are samples of Student A and their progress over one IEP year for trajectories 1-5.

	Number Recognition & Subitizing	Counting	Comparing, Ordering, Estimating	Adding & Subtracting by Counting	Arithmetic- Place Value & Multi Digit		Number Recognition & Subitizing	Counting	Comparing, Ordering, Estimating	Adding & Subtracting by Counting	Arithmetic- Place Value & Multi Digit
8	Conceptual subitizer with place value and multiplication		Mental number line to 1000s Benchmarks estimator Composition estimator			8	Conceptual subitizer with place value and multiplication		Mental number line to 1000s Benchmarks estimator Composition estimator		
7	Conceptual subitizer with place value and skip counting	Number Conservor Counter forward and back	Place value comparer Mental number line to 100 Scanning with intuitive quantification estimator	Deriver +/- Problem solver +/-	Composr with tens and ones Problem solver +/- Multi-digit +/-	7	Conceptual subitizer with place value and skip counting	Number Conservor Counter forward and back	Place value comparer Mental number line to 100 Scanning with intuitive quantification estimator	Deriver +/- Problem solver +/-	Composr with tens and ones Problem solver +/- Multi-digit +/-
6	Conceptual subitizer to 20	Counter from N (N+1, N-1) Skip counter by 10s to 100 Counter on using patterns Skip Counter Counter of imagined items Counter on keeping track Counter of Quantitative units/place value	Mental number line to 10 Serial orderer to 6+ Spatial Extent estimator	Part-Whole +/- Numbers-in-Numbers +/-	Deriver +/-	6	Conceptual subitizer to 20	Counter from N (N+1, N-1) Skip counter by 10s to 100 Counter on using patterns Skip Counter Counter of imagined items Counter on keeping track Counter of Quantitative units/place value	Mental number line to 10 Serial orderer to 6+ Spatial Extent estimator	Part-Whole +/- Numbers-in-Numbers +/-	Deriver +/-
5	Perceptual subitizer to 5 Conceptual subitizer to 5 Conceptual subitizer to 10	Counter and Producer (10s) (then 20, then 30) Counter backward from 10	Counting comparer (5) Original counter Spatial extent estimator-small/big Counting comparer (10)	Find result +/- Make a N Find change +/- Counting strategies +/-	Composr to 10	5	Perceptual subitizer to 5 Conceptual subitizer to 5 Conceptual subitizer to 10	Counter and Producer (10s) (then 20, then 30) Counter backward from 10	Counting comparer (5) Original counter Spatial extent estimator-small/big Counting comparer (10)	Find result +/- Make a N Find change +/- Counting strategies +/-	Composr to 10
4	Perceptual subitizer to 4	Counter (small numbers) Counter (up to 10) Producer (small numbers)	Nonverbal comparer of dissimilar items Matching comparer Counting comparer (same size) Mental number line to 5	Small number +/-	Composr to 7	4	Perceptual subitizer to 4	Counter (small numbers) Counter (up to 10) Producer (small numbers)	Nonverbal comparer of dissimilar items Matching comparer Counting comparer (same size) Mental number line to 5	Small number +/-	Composr to 7
3	Maker of small collections (1-3, sometimes 4)	Reciter(10) Corresponder	First-Second Ordinal Counter Non-verbal comparer of similar items	Nonverbal	Insert part-whole recognizer Composr to 4 then 5	3	Maker of small collections (1-3, sometimes 4)	Reciter(10) Corresponder	First-Second Ordinal Counter Non-verbal comparer of similar items	Nonverbal	Insert part-whole recognizer Composr to 4 then 5
2	Name groups of 1-2, sometimes 3	Reciter	One to One correspondor Object correspondor Perceptual Comparer	Nonverbal	Pre-part-whole recognizer	2	Name groups of 1-2, sometimes 3	Reciter	One to One correspondor Object correspondor Perceptual Comparer	Nonverbal	Pre-part-whole recognizer
1		Pre-counter Chaster	Many-to-One Correspondor	Pre-explicit		1		Pre-counter Chaster	Many-to-One Correspondor	Pre-explicit	

### Student A- October 2013

### Student A – September 2014

### Feedback

Pilot feedback is desired. Specifically:

- How long did it take to administer the assessment?
- Were the results an accurate picture of the student skills?
- Did the assessment provide reliable data for designing individualized instructional plans?
- Were additional visuals or print materials required?

The goal is for the assessment to be a teacher friendly tool that is good for kids and mathematics education!

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