

Area: **Math**

Subskill: **Math Fact Fluency**

Materials:

Index cards & pen

Know/Don't Know Record Sheet

Flashcards

**This can also be set up on an ipad using a flash card app.*

Description: Incremental rehearsal builds student fluency in basic math facts by pairing unknown computation items with a steadily increasing collection of known items. This intervention makes use of repeated practice to promote fluency and guarantees that the students will experience a high rate of success.

Baseline and Progress Monitoring Procedure

1. Check which math facts a student knows by flipping through the stack of flash cards and making a pile of "Knows" and "Don't Know." If a child takes longer than 3 seconds or shows signs of calculation, it should go in the "Don't Know" pile.
 - a. Use a pre-purchased stack of math facts flash cards or download a set at A-Plus Math Flashcard Creator, http://www.aplusmath.com/Flashcards/Flashcard_Creator.html
2. Record the "Don't Know" facts on the chart by highlighting the chart. Use the same color to fill in the baseline data on the graph.
3. Progress Monitor every 4-5 days using this Know/Don't Know probe.
4. Record progress on the chart using a different color to correlate unknown facts.

Intervention Preparation

1. Choose 5-9 known facts and write each on an index card. Stack them in a pile.
2. Select one unknown fact. Write it on an index card and place it on the top of the pile.
3. Place a paperclip or removable flag sticker on the unknown fact card to indicate that this is the fact that the student is learning today.

Intervention Procedure:

1. Show the child the unknown fact card at the top of the pile and state the problem and answer.
2. The child should go through the stack saying the problem and answer for the unknown fact(flagged) and only the answer for the known facts.
3. Use this sequence of flipping back to the beginning of the deck and including one additional card with each sequence.
 - a. Unknown (Top card), Known (Card 2)
 - b. Unknown (Top card), Known (Card 2), Known (Card 3)
 - c. Unknown (Top card), Known (Card 2), Known (Card 3), Known (Card 4)
 - d. Unknown (Top card), Known (Card 2), Known (Card 3), Known (Card 4), Known (Card 5)

**Repeat until you have completed the deck of 6-10 cards.*
4. When finished, the student should put an X through that highlighted fact on the chart and a new unknown fact should be chosen and logged for tomorrow's intervention.
5. Make 1 copy of this fact. Move the flag or paperclip to this new fact and place on the top of the pile. Remove the last card in each pile. The deck is ready for tomorrow's intervention.
6. Repeat this intervention pattern until all facts are learned.

Note: If a student misses over 3 facts in the intervention stack, do not add a new fact. Simply review the existing facts during the next intervention session.