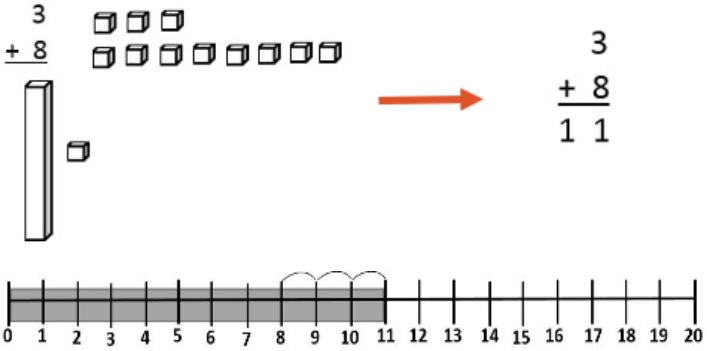


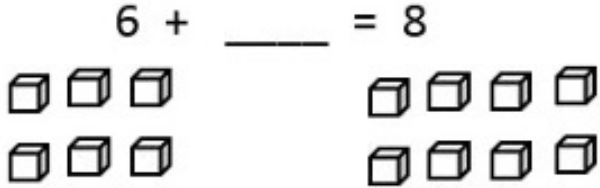
Addition Within 20

CRA-Integrated

1. Instruction begins with both concrete and representational activities at the same time to solve abstract problems
2. Concrete activities fade from instruction: abstract problems solved with pictures and drawings
3. Representational activities fade from instruction: problems solved with numbers and symbols (abstract)



- Explicit Instruction
- Scaffolded Supports
- Cognitive and Metacognitive Strategies



- Missing Addend
- Number Line
- Place Value
- Magnitude
- Commutative Property
- Word Problems

Phase	Purpose	Lessons	Mastery Criteria
Phase 1	Pretest(s)	Pretest Lesson	80% accuracy
Phase 2	Teach addition at concrete level and representational level using base-ten blocks, number lines, and drawings	Lessons 1-3	100% accuracy
Phase 3	Teach addition at the representational level using number lines, and drawings	Lessons 4-5	100% accuracy
Phase 4	Teach strategy-use to solve addition problems at the representational level using number lines, and drawings	Lesson 6-7	100% accuracy
Phase 5	Teach FACTS strategy for solving addition problems	Lesson 8	100% accuracy in identifying steps
Phase 6	Teach addition at abstract level using FACTS strategy and numbers only	Lessons 9-12	100% accuracy
Phase 7	Posttest(s)	Posttest Lesson	90% accuracy

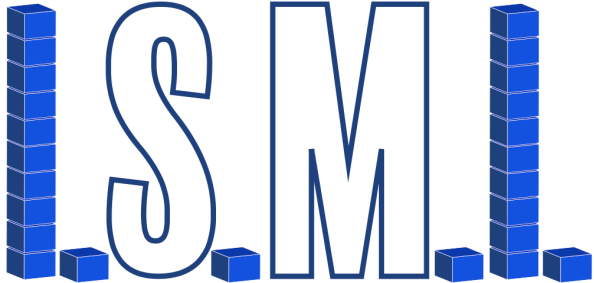
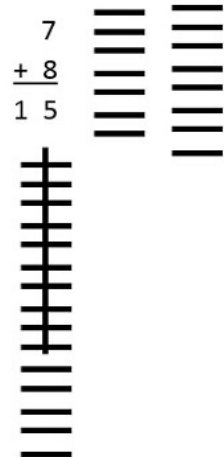
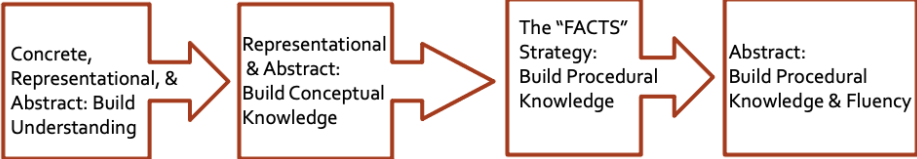
The "FACTS" Strategy

Focus on the problem.

Solve from memory if you can.
If you can't, decide whether to use:

- Another problem
- Counting-on
- Tallies

Solve the problem and check.



Institute for Strategic Mathematics Interventions