

# WHAT IS AUTOMATICITY?

The research says that automaticity

is being able to retrieve an answer within 3 seconds. It's what Logan(1991) called the "instant popping into of mind." It means students can easily recall basic facts from their long term memory, without even thinking about it. A "reasonable amount of time" means moving through a process without getting stuck, lost, or bogged down (Bay-Williams & San Giovanni, 2022).

So really it is about fluidity with your facts, stopping and thinking along the way is fine. With targeted, intentional, purposeful practice, automaticity comes. Research says that by 5th grade we want students to be automatic, otherwise they get way bogged down in the little stuff and exhausted on their way to higher mathematics. The focus must be on the number sense so students can think and reason.