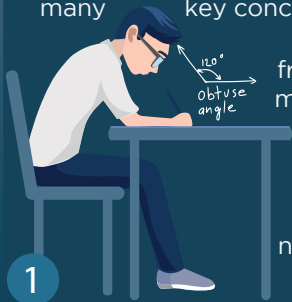


# Understanding the ICEBERG PROBLEM

## 1 IMAGINE

it's your first day of **6th grade** and math was a struggle for you back in elementary school. For a variety of reasons, you did not finish learning many key concepts. This may



prevent you from mastering more advanced concepts in middle school given the cumulative nature of math.

## 2 READY or not

your new math teacher will hand you a **6th grade** math textbook and spend the year covering the **6th grade** standards.

You may grasp some concepts, but many others will be inaccessible to you because you are missing key foundational skills. You find math increasingly frustrating.



6th - Grade Skills Learned

6th - Grade Skills NOT Learned

5th - Grade Skills NOT Learned

4th - Grade Skills NOT Learned

Your teacher wants to address your unfinished learning, but there's too little time because your school is focused on preparing you for the annual sixth grade test. Under federal and state policy, the results of these tests drive your school's overall performance rating.



As a result, learning gaps accumulate. They now include unfinished learning you carried over from elementary school as well as the 6th grade skills you could not successfully access, making it even harder to succeed in the **7th grade** and beyond.



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Because accountability policies drive teacher and school administrators to focus instruction on each year's annual grade level test, unfinished learning can accumulate below the surface and produce an ICEBERG PROBLEM.

## ICEBERG PROBLEM

THE PHENOMENON THAT DESCRIBES WHEN ONLY A SMALL AMOUNT OF INFORMATION IS VISIBLE WHILE THE MORE COMPREHENSIVE INFORMATION REMAINS HIDDEN FROM VIEW.