

Transcript – Key Concepts and Procedures

We are now going to take a closer look at the key concepts and procedures. Notice that there is one additional grade level on your key concepts and procedures document. Its purpose is to look at how the progression of the key concepts and procedures aligns with the next grade level.

Take notes in your journal of the progression of these key concepts and procedures. What do you see happening? What "Ahas!" do you have?

Transcript – Key Concepts and Procedures: What to Look At

We've used the document to look at the progression of the key concepts and procedures. Now think back to the Texas Response to Curriculum Focal Points. Use that particular content for your grade level and look at how those key concepts and procedures relate to the Texas Response to Curriculum Focal Points. Where do you see those and how do you see them progressing? Include that information in your notes.

Transcript – Grade K–2 Instructions

Now we'll take a closer look at some key concepts and procedures. Spend a few moments using the Vertical Look document to take a closer look at addition and subtraction in kindergarten through grade three. Make notes on the development of the identified key concepts and procedures on your journal page.

Notice that the concept of addition and subtraction is addressed at each grade level, moving from developing an understanding of addition and subtraction in kindergarten to being able to solve addition and subtraction problems fluently in grade three.

Transcript – Grade 3–5 Instructions

Now we will take a closer look at some key concepts and procedures. Spend a few moments using the Vertical Look document to take a closer look at fractions in grades three through six. Make notes on the development of the identified key concepts and procedures on your Vertical Look and Key Concepts journal page.

Transcript – Grade 6–8 Instructions

Now we will take a closer look at some key concepts and procedures. Spend a few moments using the Vertical Look document to take a closer look at expressions and equations in grades five through eight. Make notes on the development of the identified key concepts and procedures on your journal page.

Let's take a closer look at some of the big ideas in the grade seven document. Notice the progression from third grade to seventh grade of linear relationships moves from describing multiplication expressions, relationships, and tables to representing problems using an output/input table.

Then students are expected to graph relationships in the form of $y = ax$ or $y = x + a$. You see a lot of specificity here with the types of equations that a student is expected to work with. In grade six, students move to an understanding of k (the constant of proportionality) and an understanding of independent and dependent quantities.

Some new vocabulary has been introduced here, tying back to the input/output tables in grade three. Then, in seventh grade, students are expected to represent linear relationships that simplify to the form of $y = mx + b$. It is important to note the word "simplify" here.

If we look beyond to grade eight, these concepts move into the proportionality strand where students continue to build on their ideas as they move into functions.

You may have also noticed that, under the strand of expressions and equations, students build their understanding of solving equations. Notice that grade four students are expected to use letters as variables for unknown quantities. Starting in grade six, students are not only working with *equality* but *inequality* as well. This is a new concept for middle school students.

Finally, notice that geometric and measurement concepts and formulas are being developed through the lens of expressions and equations.