Whole Numbers: Place Value

Students	Learning Continuum Statements:
Students:	**RIT 151-160:** • Represents whole numbers within 20 with models
Students:	**RIT 161-170:** • Reads and writes whole numbers within 1,000 as hundreds, tens, and ones • Reads and writes whole numbers within 1,000 in word form • Reads and writes whole numbers within 100 in word form • Reads and writes whole numbers within 20 in word form • Represents whole numbers within 1,000 with models • Represents whole numbers within 100 with models • Represents whole numbers within 20 with models
Students:	**RIT 171-180:** • Composes or decomposes tens in a model to represent whole numbers within 20 in multiple ways • Identifies the number of tens and ones in a model • Knows place-value names in numbers through the hundred thousands • Reads and writes whole numbers within 1,000 as hundreds, tens, and ones • Reads and writes whole numbers within 1,000 in expanded form • Reads and writes whole numbers within 1,000 in word form • Reads and writes whole numbers within 10,000 in expanded form • Reads and writes whole numbers within 10,000 in word form • Reads and writes whole numbers within 100 as tens and ones • Reads and writes whole numbers within 100 in expanded form • Reads and writes whole numbers within 100 in word form • Represents whole numbers within 1,000 with models • Represents whole numbers within 100 with models • Understands the value of a digit in whole numbers within 1,000
Students:	**RIT 181-190:** • Identifies the number of tens and ones in a model • Knows place-value names in numbers through the hundred thousands • Reads and writes whole numbers within 1,000 as hundreds, tens, and ones • Reads and writes whole numbers within 1,000 in expanded form • Reads and writes whole numbers within 1,000 in word form • Reads and writes whole numbers within 10,000 in expanded form • Reads and writes whole numbers within 100 as tens and ones

- Reads and writes whole numbers within 100,000 in word form
- Represents whole numbers within 1,000 with models
- Understands the value of a digit in whole numbers within 1,000
- Understands the value of a digit in whole numbers within 1,000,000

Students:	RIT 191-200:
	- Composes or decomposes tens in a model to represent whole numbers within 100 in multiple ways - Knows place-value names in numbers through the hundred thousands - Reads and writes whole numbers greater than 1,000,000 in word form - Reads and writes whole numbers within 1,000 in expanded form - Reads and writes whole numbers within 1,000,000 in word form - Reads and writes whole numbers within 10,000 in expanded form - Reads and writes whole numbers within 100 as tens and ones - Reads and writes whole numbers within 100,000 in expanded form - Reads and writes whole numbers within 100,000 in word form - Represents whole numbers greater than 1,000 with models - Represents whole numbers within 1,000 with models - Understands that 10 ones is the same as 1 ten - Understands the value of a digit in whole numbers within 1,000,000
Students:	RIT 201-210:
	- Decomposes whole numbers within 100 into tens and ones in multiple ways - Knows place-value names in numbers greater than the hundred thousands - Knows place-value names in numbers through the hundred thousands - Reads and writes whole numbers greater than 1,000,000 in word form - Reads and writes whole numbers within 1,000,000 in expanded form - Reads and writes whole numbers within 1,000,000 in word form - Reads and writes whole numbers within 10,000 as thousands, hundreds, tens, and ones - Reads and writes whole numbers within 100,000 in expanded form - Reads and writes whole numbers within 100,000 in word form - Represents whole numbers greater than 1,000 with models - Understands patterns of zeros when multiplying by 10, 100, 1,000, etc. - Understands that 10 ones is the same as 1 ten - Understands that 10 tens is the same as 1 hundred - Understands that the same digit, moved one place to the left, now represents 10 times the value - Understands the value of a digit in whole numbers greater than 1,000,000
Students:	RIT 211-220:
	- Decomposes whole numbers within 100 into tens and ones in multiple ways - Reads and writes whole numbers greater than 1,000,000 in word form - Reads and writes whole numbers within 1,000,000 in word form - Reads and writes whole numbers within 100,000 in expanded form

- Reads and writes whole numbers within 100,000 using powers of 10 in exponential form
- Understands patterns of zeros when multiplying by 10, 100, 1,000, etc.
- Understands that 10 ones is the same as 1 ten
- Understands that the same digit, moved one place to the left, now represents 10 times the value
- Understands that the same digit, moved one place to the right, now represents 1/10 the value

Students:	RIT 221-230:

- Decomposes whole numbers within 1,000 into hundreds, tens, and ones, in multiple ways
- Reads and writes whole numbers within 100,000 using powers of 10 in exponential form
- Understands patterns of zeros when multiplying by 10, 100, 1,000, etc.
- Understands that the same digit, moved one place to the left, now represents 10 times the value
- Understands that the same digit, moved one place to the right, now represents 1/10 the value

Students:	RIT 231-240:

- Decomposes whole numbers within 1,000 into hundreds, tens, and ones, in multiple ways
- Reads and writes whole numbers greater than 100,000 using powers of 10 in exponential form
- Reads and writes whole numbers within 100,000 using powers of 10 in exponential form
- Understands that the same digit, moved one place to the left, now represents 10 times the value
- Understands that the same digit, moved one place to the right, now represents 1/10 the value
- Understands whole-number place-value relationships

Students:	RIT 241-250:

- Reads and writes whole numbers greater than 100,000 using powers of 10 in exponential form
- Understands that the same digit, moved one place to the left, now represents 10 times the value
- Understands that the same digit, moved one place to the right, now represents 1/10 the value