**Unit # 5**

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| **Literacy Strategies**  (Check all that apply.) | **Habits of Success**  (Check one per unit.) | **Multiple Intelligence Areas** |
| * Admit/Exit slips * Graphic organizer * Know/Want to Know/Learn chart (KWL) * Open-response questions * Double-entry/Two-column notes * Retelling * Reflection * Jigsaw reading * Anticipation guide * RAFT (Role/Audience/Format/Topic) * Interactive reading guide * Concept definition maps * Frayer model * Visual prediction guide * Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | * Create relationships * Teamwork, responsibility, effective communication) * Study, manage time, organize * (Organization, time management, study skills) * Improve reading/writing skills * (Use reading and writing to learn strategies) * Improve mathematics skills * (Estimate, compute, solve, synthesize) * Set goals/plan * (Set goals, plan, monitor progress) * Access resources * (Research, analyze, utilize) * USE OF TECHNOLOGY | * Logical/Mathematical * Spatial * Musical * Bodily—Kinesthetic * Interpersonal * Intrapersonal * Naturalist * Linguistic |

**UNIT Assessments:**

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| Pre-Assessment: |
| Daily/Weekly: (Included on daily activities plans) |
| Post-Assessment: |

State Standards and Benchmarks:

**9-12.A.1.13** Simplify rational expressions by factoring and reducing to lowest terms.

**9-12.A.1.16** Factor polynomials of various types (e.g., difference of squares, perfect square trinomials, sum and difference of cubes). [Introduced in course 2/mastered in 3]

**9-12.D.2.3** Display the distribution of univariate data, describe its shape using appropriate summary statistics, and understand the distinction between a statistic and a parameter.

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.6** Describe the characteristics of a normal distribution.

**A.1.10 Solve radical equations involving one radical**

**A.1.11 Describe the properties of rational exponents and apply these properties to simplify algebraic expressions**

**A.2.9 Graph exponential functions and identify their key characteristics as related to contextual situations (specifically y = 3x and y = a\* bx)**

**A.2.10 Identify and describe symmetries of graphs**

**A.2.3 Translate among tabular, symbolic, and graphical representations of functions and relations(review only)**

**9-12.G.1.9** Write geometric proofs, including proofs by contradiction, and perform and explain basic geometric constructions related to: theorems involving the properties of parallel and perpendicular lines, circles, and polygons; theorems involving complementary, supplementary, and congruent angles; theorems involving congruence and similarity; and the Pythagorean theorem.

**9-12.D.2.15** Evaluate published reports that are based on data by examining the design of the study, the appropriateness of the data

**9-12.D.2.14** Describe how sample statistics, including the law of large numbers, reflect the values of population parameters and use sampling distributions as the basis for informal inference.

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

**Day 1**

Benchmark: N/A

Learning Objective: Student will be able to demonstrate abilities to work previously learned concepts needed to be successful in this unit

Assessment: Pre test

Accommodations:

Tier 2:

Tier 3:

Materials: Pre test

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Explain the difference between types of functions. Where would you use them? |
| Introduction/Engage | 5 min | Share your answers with your partner and be prepared for a report out. |
| Explore/Review | 10 min | Review some of the basic concepts which they will find on the pre-test. |
| Assessment | 20 min | Pretest |
| Closure | 5 min | Discuss problems which thie had on the test. |

Reflection:

**Day 2**

Benchmark: **A.2.3 Translate among tabular, symbolic, and graphical representations of functions and relations(review only)**

Learning Objective: Understand the definition of a relation

Understand the definition of a function

Decide whether an equation defines a function

Use function notation

Apply function concepts in applications

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mathdude video – Properties of Functions

Mini-lecture 9.5 Introduction to Functions

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| **Strategy** | **Time** | **Activity** |
| Bell work | 15 min. | Show mathdude video – Properties of Functions |
| Introduction/Engage | 10 min | Explain to students that before we can actually get into the heart of dealing with functions we need to build some necessary math skills, which may take several class periods.  Open a discussion with students about the different types of functions, including absolute value, functions with radicals, quadradics, and exponential functions. Include in the discussion about a major experiment planned at the end of the study of Functions. The experiment I have in mind is a balloon launch, which will require some real understanding of functions, especially quadratic functions. It might even include the actual building of the balloon launch and a competition among groups to see who can hit me with a balloon that is launched from their individual balloon launchers. |
| Explore/Review | 15 min | Introduce functions to students by having them complete a table of values resulting in coordinate points on a graph (see Mini-lecture 9.5)  Discuss domain, range, and how to determine if a relation represents a function.  Provide samples from mini-lecture for students to practice. |
| Assessment | 5 min | Have students do a KWL on Functions, with a special emphasis on the type of experiment we could do with functions. |

Reflection: If your discussion about functions and the planned experiment do not take up the remaining time in the

Class period, you may want to begin the next lesson.

**Day 3**

Benchmark: **A.1.10 Solve radical equations involving one radical (mastery of this benchmark requires some background work on basic math skills involving roots of numbers, this benchmark will be carried over for several daily lessons.)**

Learning Objective: Find square roots

Decide whether a given root is rational, irrational, or not a real number

Find decimal approximations for irrational square roots

Use the Pythagorean formula

Find cubes, fourth, and other roots

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.1 – Evaluation Roots

Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Practice problems involving roots to find out what the students already know. Discuss results with students |
| Introduction/Engage | 5 min | Introduce the subject of square roots.  Provide problems from Mini-lecture 8.1 for students to practice on individual white boards |
| Explore/Review | 10 min | Explore using calculators or a square root table to approximate square roots to the nearest thousandth. Evaluate higher order roots to the nearest thousandth.  Provide practice problems for students to do on individual white boards. |
| Assessment | 20 min | Draw a diagram and have students use the Pythagorean theorem to solve word problems to check for understanding application of square roots. |
| Closure | 5 min | Ticket out the door: Why is a square root equation so necessary? |

Reflection: Many students find the signs confusing with these problems.

Although the square root of a negative number is included here, it is recommended that students not deal with complex numbers and imaginary numbers yet. They should just be reminded that there is no real number solution.

Encourage students to memorize the squares of the numbers 1 through 12.

**Day 4**

Benchmark: **A.1.10 Solve radical equations involving one radical (mastery of this benchmark requires some background work on basic math skills involving roots of numbers, this benchmark will be carried over for several daily lessons.)**

Learning Objective: Multiply square root radicals

Simplify radicals using the product rule

Simplify radicals using the quotient rule

Simplify radicals involving variables

Simplify other roots

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.2 – Multiplying, Dividing, and Simplifying Radicals

Individual white boards

Dry-erase markers

“I have \_\_\_\_\_, who has\_\_\_\_\_\_?” cards (Ivy or Rick will make these and put them in the file)

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Distribute “I have \_\_\_\_\_, who has \_\_\_\_\_\_\_\_” cards with square root problems for students to practice their square root skills. |
| Introduction/Engage | 5 min | Introduce the product rule for radicals and the quotient rule for radicals to students.  Provide sample problems from mini-lecture 8.2 for students to practice on individual white boards. |
| Explore/Review | 10 min | Explore the process of simplifying radicals involving variables and other roots. |
| Assessment | 20 min | Provide practice problems for students to solve on individual white boards. |
| Closure | 5 min | Ticket out the door – Have students write about how to simplify radicals |

Reflection: Many students have trouble simplifying radicals

Encourage students to write non-perfect square numbers as the product of the highest possible perfect square and another number

Most students need a lot of practice finding wquare roots of variables with odd exponents

**Day 5 (assessment)**

Benchmark:

**A.2.3 Translate among tabular, symbolic, and graphical representations of functions and relations(review only)**

**A.1.10 Solve radical equations involving one radical**

Learning Objective: The student will be able to solve variables and work with linear equations and inequalities.

Assessment: Quiz

Accommodations:

Tier 2:

Tier 3:

Materials: Quiz

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Have students name three types of problems they are having trouble with. |
| Introduction/Engage | 5 min | Have students share with others the problems and find strategies. |
| Explore/Review | 10 min | Review with students using their problems in report outs. |
| Assessment | 20 min | Quiz |
| Closure | 5 min | Discuss the problems that still bother them |

Reflection:

**Day 6**

Benchmark: **A.1.10 Solve radical equations involving one radical (mastery of this benchmark requires some background work on basic math skills involving roots of numbers, this benchmark will be carried over for several daily lessons.)**

Learning Objective: Add and subtract radicals

Simplify radical sums and differences

Simplify more complicated radical expressions

Assessment: Ticket out the door – Compare and contrast the processes for adding and subtracting radicals and for multiplying and dividing radicals.

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.3 Adding and subtracting radicals

Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Practice problems involving multiplying and dividing radicals  Discuss results |
| Introduction/Engage | 5 min | Introduce the process for adding and subtracting radicals  Provide practice problems for students to practice on Individual white boards |
| Explore/Review | 25 min | Explore processes for simplifying and combining radicals by adding and subtracting, and solving applied problems  Provide practice problems for white board practice |
| Assessment | 5 min | Ticket out the door – Compare and contrast the processes for adding and subtracting radicals and for multiplying and dividing radicals. |
| Closure | 5 min | Review adding and subtracting redicals |

Reflection: Most students find adding and subtracting radicals easy once they realize that adding and subtracting like radicals is analogous to adding and subtracting like terms.

Many students have trouble at first with the examples where the square root has a coefficient other than 1 before simplification.

**Day 7**

Benchmark: **A.1.10 Solve radical equations involving one radical (mastery of this benchmark requires some background work on basic math skills involving roots of numbers, this benchmark will be carried over for several daily lessons.)**

Learning Objective: Rational denominators with square roots

Write radicals in simplified form

Rationalize denominators with cube roots

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.4 – Rationalizing the Denominator

Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | What is meant by the denominator? When it is division, how do you find the decimal equivalent? |
| Introduction/Engage | 5 min | Introduce rationalizing the denominator  Provide practice problems from Mini-lecture for practice on the individual white boards  Insure that students are writing the results in simplified form |
| Explore/Review | 20 min | Explore the answer students are getting to check for understanding then move on to more complicated problems, such as cube roots  Provide practice problems for white boards. |
| Assessment | 10 min | Have students do a JIST writing exercise by summarizing the process of rationalizing the denominator in 20 words or less. |
| Closure | 5 min | Journal writing: What are the rules for rationalizing the denominator. If you were going to explain it to someone who had no idea what you were talking about, how would you explain it? |

Reflection: Some students need to see several examples of how √a \* √a =a before applying it to rationalizing a denominator

**Day 8**

Benchmark: **A.1.10 Solve radical equations involving one radical (mastery of this benchmark requires some background work on basic math skills involving roots of numbers, this benchmark will be carried over for several daily lessons.)**

Learning Objective: Simplify products of radical expressions

Use conjugates to rationalize denominators of radical expressions

Write radical expressions with quotients in lowest terms

Solving Equations with Radicals

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.5 More Simplifying and Operations with Radicals.

Mini-lecture 8.6 Solving Equations with Radicals

Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Practice problems involving addition, subtraction, multiplication and division of radicals |
| Introduction/Engage | 5 min | Introduce students to more complicated forms of radicals, such as, distributive property and rationalizing with a conjugate  Provide practice problems for students to work on individual white boards. |
| Explore/Review | 15 min | Explore solving equations with radicals (Mini-lecture 8.6) |
| Assessment | 15 min | Provide practice problems for students to work on individual white boards |
| Closure | 5 min | Ticket out the door – Provide an equation to solve prior to the end of class |

Reflection: Some students still are confused when solving for the leg of a right triangle rather than the hypotenuse

Encourage students to draw and label a diagram for the applied problems

Show students a simple example of an extraneous solution, such as:√y+9 = y+3 yields the answers: 0 and -5. -5 does not work as a solution when you check your answer, so it is extraneous.

**Day 9**

Benchmark: **A.1.10 Solve radical equations involving one radical**

**A.1.11 Describe the properties of rational exponents and apply these properties to simplify algebraic expressions**

Learning Objective: Solving Equations with Radicals

Simplify algebraic expressions involving rational exponents

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mini-lecture 8.6 Solving Equations with Radicals

Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Practice problems dealing with solving equations with radicals |
| Introduction/Engage | 5 min | KWL on radicals and solving equations with radicals  Practice solving problems dealing with Pathageorn thereom  Find an activity dealing with radicals and application problems with radicals. Provide problems for students to practice on individual white boards. |
| Explore/Review | 20 min | Explore the idea of having exponents that are in the form of a fraction (rational exponents) Have students discuss how they would deal with this type of exponent.  Introduce the process of converting fractional exponents to radicals and radicals to fractional exponents  Provide sample problems for students to convert and simplify on the individual white boards. |
| Assessment | 10 min | Prepare for assessment on solving equations with radicals |
| Closure | 5 min | Have the students reflect on how they can use conversion of rational exponents to simplify some problems. |

Reflection: This should be a logical tie in to rational exponents. Students may need more practice converting back and forth between radicals and rational exponents. They need to understand that they convert from one to the other at their own convenience (whichever makes it easier for them to manipulate and solve the equation or simplify the solution.

**Day 10 (assessment)**

Benchmark:

**A.1.10 Solve radical equations involving one radical**

**A.1.11 Describe the properties of rational exponents and apply these properties to simplify algebraic expressions**

Learning Objective: The student will be able to solve variables and work with linear equations and inequalities.

Assessment: Quiz

Accommodations:

Tier 2:

Tier 3:

Materials: Quiz

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Have students name three types of problems they are having trouble with. |
| Introduction/Engage | 5 min | Have students share with others the problems and find strategies. |
| Explore/Review | 10 min | Review with students using their problems in report outs. |
| Assessment | 20 min | Quiz |
| Closure | 5 min | Discuss the problems that still bother them |

Reflection:

**Day 11**

Benchmark: **A.1.11 Describe the properties of rational exponents and apply these properties to simplify algebraic expressions**

Learning Objective: Students will become proficient in using the properties of rational exponents to simplify expressions and solve equations

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Individual white boards

Dry-erase markers

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Practice problems converting between fractional exponents and radicals |
| Introduction/Engage | 5 min | Review properties of Rational Exponents (In file), including multiplying, raising to a power, dividing, and negative exponents.  Provide practice problems for students to practice on individual white boards. |
| Explore/Review | 20 min | Explore several ways that expressions and equations can be simplified by using the properties of rational exponents and converting back and forth to from rational exponents to radicals and from radicals to rational exponents.  Provide additional sample problems for students to practice. |
| Assessment | 10 min | Short assessment on solving equations with radicals |
| Closure | 5 min | Ticket out the door: Give rules for simplifying expressions using fractional exponents. Give examples. |

Reflection: Remind students that the properties of integer exponents also apply to rational exponents

**Day 12-13**

Benchmark: **A.2.9 Graph exponential functions and identify their key characteristics as related to contextual situations (specifically y = 3x and y = a\* bx)**

Learning Objective: Students will identify why exponential functions model exponential growth and decay

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Mathdude video on Exponential Functions

Graphing Paper white boards

Dry-erase markers

Laptop computers for students

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| **Strategy** | **Time** | **Activity** |
| Bell work | 10 min | Show Mathdude Video on Exponential Functions |
| Introduction/Engage | 20 min | Provide students with graphing paper and ask them to graph the following functions: y = 2x , y = 3x , y = (1/2)x , and (1/3)x  Discuss the results of the graphs, asking pointed questions about compare, contrast, etc. This should lead to some interesting discussion. Insure that the discussion leads to the identification of the key characteristics as related to contextual situations. |
| Explore/Review | 40 min | Hand out the “Tower of Hanoi” handout and have students work in groups to answer to the questions. After a few minutes of work, stop and facilitate a discussion about the answers students are coming up with to insure they are making adequate progress. |
| Assessment | 15 min | This activity will take up to 2 class periods. The Hanoi worksheet could serve as the assessment. |
| Closure | 5 min | Ticket out the door: Was this exercise enough to explain exponentials? What were its strengths and what were its weaknesses? |

Reflection:

**Day14**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Read introduction and be ready for class discussion. |
| Introduction/Engage | 5minutes | Discuss Induction and relevance |
| Explore/Review | 25minutes | Review Mathematics note pg 338 and emphasize frequency and relative frequency. Put list into calculator. |
| Assessment | 5 minutes | Find mean and standard deviation for list |
| Closure | 5 | Ticket out the door: Explain the relationship of frequency and relative frequency |

**Day15**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Read Exploration 1. What is meant by a population and a sample? |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner |
| Explore/Review | 25minutes | Exploration and Discussion 1 see pg 353 of calculator guide book on how to download a list from one calculator to another. |
| Assessment | 5 minutes | Assignment 1.1 |
| Closure | 5 | Ticket out the door: Explain three things you learned in class today. |

**Day16**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Assignment 1.2 |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner |
| Explore/Review | 25minutes | Assignment 1.3 and 1.4 |
| Assessment | 5 minutes | Tables and responses from 1.3 and 1.4 |
| Closure | 5 minutes | This is the process we will use for our simulations. We will be looking at how to develop a simulation which will give us further comparisons of this type of data analysis |

**Day17**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal, 12 coins per group, container for coins, graphpaper.

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Have students flip a coin 25 times and record results |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner. Report outs and discussion why they are not the same. |
| Explore/Review | 25minutes | Explain math note pg344. Exploration 1 and Discussion1. |
| Assessment | 5 minutes | Charts from exploration. |
| Closure | 5 | Exit slip: explain the process and meaning of standard deviation |

**Day18**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal, 12 coins per group, container for coins, graphpaper.

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Give the formula for standard deviation |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner. Report outs and discussion why they are not the same. |
| Explore/Review | 25minutes | Exploration 2 and Discussion 2 |
| Assessment | 5 minutes | Warm up pg 350 |
| Closure | 5 | Assignment 2.1 |

**Day19**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal, 12 coins per group, container for coins, graphpaper.

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Assignment 2.2 |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner. Report outs and discussion |
| Explore/Review | 15minutes | Assignments 2.3, 2.5 |
| Assessment | 15 minutes | Discuss problems 2.4 |
| Closure | 5 | Discuss answers 2.3 and 2.4 |

**Day20**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal, 12 coins per group, container for coins, graphpaper.

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Read activity 3 introduction and math note pg 353 |
| Introduction/Engage | 5minutes | Review discussion |
| Explore/Review | 25minutes | . Exploration and Discussion 2. |
| Assessment | 5 minutes | Warm up pg 355-6 |
| Closure | 5 | Exit slip: describe the different types of probability distributions and illustrate. |

**Day 21**

Benchmark:

**9-12.D.2.4** Calculate and apply measures of variability (e.g., standard deviation).

**9-12.D.2.13** Use the results of simulations to explore the variability of sample statistics from a known population and construct sampling distributions.

Learning Objective: The student will be able to organize data using frequency and relative frequency tables, histograms, and polygons and use mean and standard deviation to describe data sets.

Assessment:

Accommodations:

Tier 2:

Tier 3:

Materials: Simms Level 3, Nearly normal, 12 coins per group, container for coins, graphpaper.

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 minutes | Assignment 3.3 |
| Introduction/Engage | 5minutes | Discuss results with shoulder partner. Report outs and discussion |
| Explore/Review | 25minutes | Assignment 3.1 and 3.2 |
| Assessment | 5 minutes | Assignment 3.4 |
| Closure | 5 | Exit slip: discuss the similarities and differences of the three types of probability distributions |

**Day 14**

Benchmark: N/A

Learning Objective: The student will be able to demonstrate abilities on processes in the unit

Assessment: test

Accommodations:

Tier 2:

Tier 3:

Materials: test

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| **Strategy** | **Time** | **Activity** |
| Bell work | 5 min | Review with partner |
| Introduction/Engage | 5 min | Report out on reviews |
| Explore/Review | 10 min | Class review |
| Assessment | 25 min | Unit Assessment |
| Closure | 0 min |  |

Reflection: