| 3rd Grade - Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and Knowledge | Related Basic Skill or Concept | Sample I nstructional Activities |
| Number, Number Sense, Computation and Estimation | 3M-NSCE 1 | - Identify and write numbers 0 to 30. <br> - Identify the place value of tens on a number line between 0 to 30 . | - One-to-one correspondence <br> - Counting <br> - Building the value of number with units and rods | - Lay out number cards 0-30 and have students select a number and say the number aloud. <br> - Roll 2 dot cubes, have the student write a 2 -digit number based on what they rolled; have students make the larger number and the smaller number based on the two numbers rolled (e.g.; 42 and 24). <br> - Give student a picture of units and rods. Have them determine the amount and match it to the appropriate number card. |
|  | 3M-NSCE 2 | - Solve addition and subtraction problems when result is unknown with numbers 0-30. | - Understand ways to make groups of 10 <br> - Meaning of + and - symbols | - Have a deck of cards numbered 0-30. Turn over two cards. Have a student roll a die that has + and - signs. The student then adds or subtracts the two numbers and writes the sum or difference. <br> - Give student an addition or subtraction fact. Give them a problem solving mat and some counters so they can act out the problem using the counters. Have them say or write the total in numbers. |
|  |  |  |  |  |


| 3rd Grade - Mathematics |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and <br> Knowledge | Related Basic Skill or <br> Concept | Sample Instructional <br> Activities |


| 3M-NSCE 3 | - Determine fractional part from a whole. <br> - Recognize that shapes can be portioned into equal areas. | - Recognize shapes that are cut into equal and/or unequal parts | - Give student several cards that are cut into equal parts(ex: halves, thirds, fourths, etc.). Have the student select all the cards that show halves. <br> - Give student different shapes (ex: squares, triangles, circles, etc.) Have the student divide the shape into equal parts. For example, have the student split a rectangle into 3 equal parts. |
| :---: | :---: | :---: | :---: |
| 3M -NSCE 4 | - Add to solve single-step story problems from 0-30. <br> - Identify place value to tens place. | - Understand ways to make 10 <br> - Understand meaning of + and - | - Use the Make Ten strategy (e.g.; $9+5$ is make the 9 a 10 and make the 5 a 4 and $10+4$ $=14$ so $9+5$ also $=14$ ). <br> - Use the Hundreds Board to model counts of 10 to 100 and have students note that for each count of 10 , the number in the 10's place increases by 1-ten-10, 20, $30,40, . .100$. |
| 3M -NSCE 5 | - Use addition to find total number of objects arranged within equal groups up to a total of 10 . <br> - Count by tens using money. | - Skip count by 2s, 5s, and 10s | - Give students a piece of paper that has pre-drawn circles. Ask them to put a certain amount in each circle. Have them find the total and write a number sentence to show how they found the total. For example, you may give them 3 circles and ask them to place 3 counters in each circle. They would find the total and write $3+3+3=9$. <br> - Give students a collection of dimes. Have them count by 10 s to find total. |


| 3rd Grade - Mathematics |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and <br> Knowledge | Related Basic Skill or <br> Concept | Sample Instructional <br> Activities |  |


| 3M -NSCE 6 | - Use repeated addition and equal groups to find the total number of objects to find the sum. | - Skip count by $2 \mathrm{~s}, 5, \mathrm{~s}$ and 10s | - Give students a piece of paper that has pre-drawn circles. Ask them to put a certain amount in each circle. Have them find the total and write a number sentence to show how they found the total. For example, you may give them 4 circles and ask them to place 2 counters in each circle. They would find the total and write $2+2+2+2=8$. <br> - Give students a piece of paper that has pre-drawn circles. Ask them to put a certain amount in each circle. Have them find the total and write a number sentence to show how they found the total. For example, you may give them 2 circles and ask them to place 5 counters in each circle. They would find the total and write $5+5=10$. |
| :---: | :---: | :---: | :---: |
| 3M -NSCE 7 | - Differentiate between whole, half, and fourth. | - Understanding that shapes can be divided into equal parts | - Use a square to represent the whole then fold it in half to represent one-half then fold again to represent one-fourth. <br> whole <br> fourth This activity can also be done with other shapes that are easy to fold into halves and fourths. |


| 3rd Grade - Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and Knowledge | Related Basic Skill or Concept | Sample I nstructional Activities |
| Measurement and Geometry | 3M-MG 1 | - Identify coins (penny, nickel, dime, quarter) and their values. | - Understand that the size of the coin does not reflect the value of the coin | - Although the penny is larger than a dime and smaller than a nickel, its' value is 1 cent and the nickel and dime are valued at 5 and 10 cents, respectively. |
|  | 3M-MG 2 | - Identify standard units of measure for mass and liquid. <br> - Measure length of objects using standard tools, such as rulers, yardsticks, and meter sticks. | - Understand that things can be measured using various tools <br> - Identify tools used to measure capacity, mass/weight, and length | - Have students measure mass using the units of ounces, pounds, grams, and kilograms and tools such as scales, measuring cups, etc. |
|  | 3M-MG 3 | - Tell time to the hour on a digital clock. | - Recognize and read numbers | - Have students read the numerals below to assist with telling time. $\begin{aligned} & \square 1234 \\ & 56789 \end{aligned}$ |
|  | 3M-MG 4 | - Identify models and pictures of plane geometric figures(circle, square, rectangle, and triangle) and solid geometric figures (cube, rectangular prism, square pyramid, sphere, cone, and cylinder) by name. <br> - Identify and describe plane geometric figures by counting the number of sides and angles. <br> - Identify and describe solid | - Identify figures <br> - Describe figures <br> - Understand similarities and differences between figures | - Having students choose two triangles out of a group of 5 figures. <br> - Have students trace the shapes of geometric solids and name the shapes of faces they traced. <br> - Sort real world items by their solid geometric shapes (e.g., a basketball, a baseball, and a tennis ball would all be sorted under a picture of a sphere). |


| 3rd Grade - Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and Knowledge | Related Basic Skill or Concept | Sample Instructional Activities |
|  |  | geometric figures by counting the number of angles, vertices, edges, and by the number and shape of faces. |  |  |


| 3rd Grade - Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and Knowledge | Related Basic Skill or Concept | Sample I nstructional Activities |
| Probability, Statistics, Patterns, Functions, and Algebra | 3M-PSPFA 1 | - Create picture graphs from collected data <br> - Use picture or bar graph data to answer questions <br> - Insert data into a preconstructed bar graph template <br> - Interpret data from a variety of graphs to answer questions | - Recognize bar graphs and pictographs <br> - Use collected data in graphs | - Students identify bar and pictographs from several graphing formats (e.g.; <br> (bar graph) |
|  |  |  |  |  |
|  |  |  |  | mushroom Ax A |
|  |  |  |  | suusage 盛 |
|  |  |  |  | popperoni |
|  |  |  |  | (picture graph) |
|  |  |  |  | One represents 5 toys |
|  |  |  |  | Name $\begin{aligned} & \text { Number of Toys }\end{aligned}$ |
|  |  |  |  | Tom * - |
|  |  |  |  | Dick * |
|  |  |  |  | Hany © ¢ ¢ |
|  |  |  |  | Bobby - - |
|  |  |  |  | Eunty * * * |
|  |  |  |  | (pictograph) |
|  | 3M-PSPFA 2 | - Identify arithmetic patterns | - Understand that patterns can repeat and grow | - Have students extend patterns that both repeat and grow $\begin{aligned} & \text { (e.g.; 1, 3, 5, 1, 3, 5, 1, 3, 5,..; } \\ & 1,2,4,7,11,16, \ldots) \end{aligned}$ |
|  | 3M-PSPFA 3 | - Demonstrate the connection between repeated addition and | - Understand that multiplication can be | - Have students model 3+3+3 <br> $\cdots \cdot+\cdots \cdot+\cdots \cdot$ then |


| 3rd Grade - Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and Knowledge | Related Basic Skill or Concept | Sample I nstructional Activities |
|  |  | multiplication | represented as repeated addition | model $3 \times 3 \ldots \ldots$.e. Have students discuss that three groups (or sets) of three is 9 . Next, have students discuss that $3 \times 3$ is three groups (or sets) of three and that is 9 . They should recognize the two models/number sentences are equal, so $3+3+3=3 \times 3$. |


| 3rd Grade - Mathematics |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Reporting Category | Standard | Essential Skills and <br> Knowledge | Related Basic Skill or <br> Concept | Sample Instructional <br> Activities |

