Generic Report Card Comments

MATHEMATICS

General Strengths

- solves problems independently
- creates new problem solving strategies
- chooses the most appropriate problem solving strategy
- solves problems almost always accurately
- solves problems accurately
- demonstrates an understanding of concepts independently
- uses most of the required concepts
- uses all of the required concepts
- gives appropriate and complete explanations
- applies mathematical concepts in a variety of contexts
- independently applies mathematical procedures
- applies mathematical procedures that are the most appropriate in solving problems
- applies mathematical procedures that are the most appropriate in solving problems and justifies the choice
- applies mathematical procedures with a few minor errors and/or omissions
- applies mathematical procedures with practically no minor errors and/or omissions
- communicates the required knowledge independently
- communicates knowledge clearly and precisely
- communicates knowledge clearly, precisely and confidently
- communicates knowledge usually using appropriate mathematical terminology and symbols
- communicates knowledge always using appropriate mathematical terminology and symbols

General Weaknesses

- solves problems with assistance
- solves problems with limited assistance
- solves problems with a limited range of appropriate strategies solves problems with appropriate strategies
- rarely solves problems accurately
- at times solves problems accurately
- shows an understanding of concepts but with assistance
- gives partially complete but inappropriate explanations
- uses only a few of the required concepts
- applies mathematical procedures with assistance
- applies mathematical procedures with limited assistance

- applies mathematical procedures that are considered to be basic in solving problems
- applies mathematical procedures that are considered to be appropriate in solving problems
- applies mathematical procedures but with major errors and/or omissions
- applies mathematical procedures but with several minor errors and/or omissions
- requires assistance to communicate required knowledge
- communicates the required knowledge unclearly and imprecisely
- rarely uses appropriate mathematical terminology
- sometimes uses appropriate mathematical terminology and symbols

General Next Steps

The next step comments encourage the student to improve in the areas of problem solving, understanding of concepts, application of mathematical procedures, and communication of required knowledge).

Example:

- will need to check answers in order to avoid several minor errors
- will need to demonstrate an understanding of mathematical concepts by giving complete explanations
- additional practice is required in problem solving

STRAND: NUMBER SENSE AND NUMERATION

Strengths

- has successfully met all the required expectations in this strand
- is successful in comparing, ordering and representing the designated numbers using: (integers, fractions, decimals, multiples, factors, square roots etc.)
- understands and can explain operations with fractions
- is successful in using order of operations
- understands multi-step problem solving using a variety of methods
- shows proficiency in using (a variety of media or a calculator or math manipulatives or video recorder or video recorder or computer)
- solves problems that involve designated conversions using appropriate methods
- demonstrates an understanding of the basic operations involving (whole numbers, decimals, fractions, integers, percent etc.)
- has a working knowledge of the meaning and use of exponents
- successfully represents whole numbers in expanded form using powers and scientific notation
- demonstrates an understanding of the terms (multiples, factors, composite numbers, prime factors, square roots, perfect squares etc.)

Weaknesses

- was unable to demonstrate successfully many of the expectations
- is experiencing difficulty in understanding the basic skills for (whole numbers, decimals, fractions, integers)
- has difficulty performing operations with fractions using manipulatives
- shows a lack of understanding of when to use estimation
- study notes are incomplete
- workbook requires greater organization
- math materials are frequently not brought to class
- there is often a lack of attention to the teaching/review lesson
- does not know basic number facts

Next Steps

- is encouraged to continue the excellent effort and work habits exhibited this term
- needs to review and practice the basic operations such as (adding, subtracting, multiplication, division) of (whole numbers, decimals, fractions, integers)
- more time should be spent considering when to use pen and paper calculations, a calculator or mental calculations
- needs to continue to put forth a strong effort in math by studying definitions, so that knowledge can be applied to problem-solving
- is urged to take care to organize work in a logical manner
- needs to ask for assistance when required
- should continue to review number facts
- more time and effort is needed in order to experience greater success in problem solving

- might benefit from engaging in additional practice questions related to . . .
- should review tests for practice

STRAND: DATA MANAGEMENT AND PROBABILITY

Strengths

- has successfully met all the required expectations in Data Management and Probability
- shows proficiency in the collecting, organizing and analyzing of data
- is successful in interpreting displays of data
- presents information concerning data using the appropriate mathematical terms
- demonstrates an understanding of the use and application of probability
- uses a computer to examine and interpret data in a variety of ways
- evaluates data and makes reasonable conclusions from this analysis
- appreciates the use of a statistical method or probability model in decision making
- shows an understanding of the consequences of bias in data-collecting methods
- accurately constructs and labels a variety of graphs
- knows the definitions and understands the uses of the concepts (census, sample, mean, median, mode, trends)
- extrapolates information from (tables, tally charts, stem-and-leaf plots, line graphs, broken line graphs, pictographs, circle graphs, and bar graphs)
- is successful at problem solving using a variety of data or probability information
- can apply the knowledge of probability in sports, games of chance, weather predictions or political polling

Weaknesses

- unable to successfully meet a large portion of the expectations for this unit
- experiences difficulty organizing and interpreting data
- does not always select appropriate graphs or charts
- lacks a degree of confidence in the understanding and application of probability
- appears unsure of consequences to manipulating data on the decision-making process
- has difficulty using computer applications to examine and interpret data
- experiences difficulty extrapolating information from a variety of graphs/charts
- is unable to apply information from graphs or charts to problem solving situations
- unable to differentiate among mean, median and mode: consequent misinterpretation of information results
- is unable to articulate meaning and usage of survey, census, sample, trend

Next Steps:

- is encouraged to continue the excellent (good) effort and work habits exhibited in math this term
- should (begin, continue) to ask probing mathematical questions
- extra practice is necessary in interpreting and using data from a variety of sources and applying this data to problem solving situations

STRAND: PATTERNING AND ALGEBRA

Strengths

- has successfully met all the required expectations in this strand
- applies patterning strategies in problem solving situations
- demonstrates a grasp of the relationship between whole numbers and variables
- successfully (identifies, creates, explains, solves) patterns, in algebraic terms or equations
- is proficient at solving simple algebraic equations using (substitution, inspection, systematic trial)
- successfully solves algebraic equations using (whole numbers, decimals, fractions) with or without a calculator
- uses appropriate mathematical language in using and describing algebraic patterns and expressions
- is able to write statements to interpret simple equations and formula
- recognizes the link between the value of a variable in the solution and a true equation
- accurately uses manipulatives to understand and demonstrate patterns and algebraic concepts
- communicates the link between concrete, representational and abstract

Weaknesses

- is unable to demonstrate many of the expectations
- experiences difficulty applying a numerical value to variables using an appropriate method
- experiences difficulty solving simple algebraic equations using (substitution, inspection, systematic trial)
- experiences difficulty solving algebraic equations using (whole numbers, decimals, fractions) with or without a calculator
- is unable to explain or expand patterns or formulas orally or in writing, using mathematical language
- does not recognize and use patterns to make predictions
- has difficulty articulating the problem solving process used
- does not consistently review the process and results once a task is completed

Next Steps

- is encouraged to continue the strong effort and work habits exhibited this term
- is urged to continue to take complete note of definitions and methods
- needs to concentrate efforts on completing assignments in a legible and organized manner
- is urged to ask for extra help when needed
- needs to review previously taught concepts such as finding, extending, recording, and explaining patterns
- uses patterns and formulas to predict what will happen next

- perseveres when connecting a mathematical idea to a real-world problem-solving situation

STRAND: GEOMETRY AND SPATIAL SENSE

Strengths

- has successfully met all the required expectations for this strand
- successfully (identifies, describes, compares, classifies) geometric figures
- is skillful at constructing 3-D geometric shapes from nets
- distinguishes between congruency and similarity
- accurately explains conditions for congruency and solves related problems
- is capable of recognizing and sketching reproductions of different perspectives of figures
- uses mathematical language effectively to describe geometric concepts, reasoning and investigations
- skillfully explores transformations of geometric figures - with and without drawings
- successfully identifies designated 2-D shapes according to certain criteria
- competent in identifying and using designated elements of angles, lines, circles
- recognizes, creates, and solves problems using 2-D shapes under a translation, a reflection, and a rotation and in terms of congruency
- constructs and analyzes tiling patterns and tessellations
- constructs and analyzing tiling patterns and tessellations
- uses effective strategies to solve problems

Weaknesses:

- is unable to demonstrate several of the expectations
- problem-solving skills need to be developed through practice
- has difficulty with the creation and use of diagrams and models
- has difficulty understanding the relationship of internal angles of a triangle, relationship between certain lines and the resulting angles, concept of congruence

Next Steps:

- needs to spend greater time and effort developing problem-solving skills such as (choosing best strategy, reaching reasonable conclusions, recognizing errors, communicating clearly, explaining results appropriately would benefit from studying definitions
- needs to initiate and develop strategies for problem solving , both in group work and when working alone
- continue to use (models and diagrams, as tools, appropriate strategies, correct mathematical) to assist in problem solving
- is encouraged to continue the strong effort and work habits

STRAND: MEASUREMENT

Strengths

- has successfully met all the required expectations in this strand
- demonstrates a verbal and written understanding of accurate measurement strategies that relate to their environment
- is able to apply accurate measurement strategies to their environment
- successfully solves problems related to the measurement concepts
- is skillful at (applying, describing, researching, reporting, estimating, explaining) designated measurement concepts
- capable of understanding and applying knowledge of (linear measurement, area, volume, capacity, mass) using the correct mathematical language
- competent in understanding and applying area and/or perimeter
- capable of developing a formula for (area, perimeter, circumference) for designated figures with or without nets
- recognizes the relationship among radius, diameter, circumference and area of a circle, using a formula in problem-solving context
- demonstrates an ability to develop and apply formula for finding volume of designated figures

Weaknesses

- unable to successfully demonstrate many of the measurement expectations
- exhibits difficulty internalizing and applying the measurement concepts

Next Steps

- is encouraged to continue the strong effort and work habits exhibited this term
- needs to study and review the concepts of this unit so as to apply them when solving problems
- is encouraged to correct errors in daily assignments to facilitate learning