

ACTIVITY ONE (SHOW YOUR WORK; SELECTIONS MAY HAVE MORE THAN ONE CORRECT ANSWER)**Article:** Loaded lineup disappearing in Rock slide, *Sun., May 12, Sports, page 1C**The article includes statistics that highlight the Rockies recent avalanche:*

Cold facts

The Rockies' offense, considered the team's strength this season, has gone into a deep slump. A closer look at the Rockies' woes:

- Tied a major-league record with 40 consecutive batters retired
- Went hitless in 49 consecutive at-bats
- Have not scored a run in 26 consecutive innings
- Batting .095 (11-for-116) in the last four games as the team batting average has dropped from .284 to .266
- Have struck out 20 times in the last two games
- There are 162 games over the course of the major league baseball season. The statistics show that the Rockies have struck out 20 times in the last two games. If the last two games are representative of the entire season, how many strikeouts would the Rockies expect to have at the end of the year?
 - 162 strikeouts
 - 1,620 strikeouts
 - 3,240 strikeouts
 - 3,969 strikeouts
- Three strikes and you are out. Three outs and the team at bat is out. Each game has 9 innings. If both teams go to bat each inning, which of the algorithms will tell you the maximum number of outs that can be made each game?
 - three strikes times three outs times nine innings times 2 teams ($3 \times 3 \times 9 \times 2$)
 - three strikes times three outs times nine innings divided by 2 teams ($3 \times 3 \times 9 \div 2$)
 - three outs times 2 teams times nine innings ($3 \times 2 \times 9$)
 - three outs times 2 teams times three strikeouts divided by nine innings ($3 \times 2 \times 3 \div 9$)
- How many innings are scheduled to be played over the course of a season?
 - 162 innings
 - 324 innings
 - 486 innings
 - 1,458 innings

ACTIVITY TWO**Article:** Boeing stays aloft despite 787 woes, *Sun., May 12, Business, page 12K*

- Chicago-based United Airlines is the only U.S. carrier to have 787s, and it "has only six in a fleet of 700 planes". Which of the following shows the ratio of United Airlines' 787s to all their planes?
 - 6:700
 - 6:706
 - 700:6
 - 787:6
- Convert the ratio to the smallest denomination fraction.
 - 6/700
 - 3/350
 - 1/15
 - 1/11

ACTIVITY THREE**Article:** Exchange Rate, *Sun., May 12, Business, page 12E*

- One U.S. dollar equals 7.76 Hong Kong dollars. How many Hong Kong dollars are needed to buy an item that costs \$110 U.S. dollars?
 - \$77.60
 - \$776.00
 - \$853.60
 - \$900.60

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ANSWERS

ACTIVITY ONE

1,620 strikeouts

three outs times 2 teams times nine innings ($3 \times 2 \times 9 = 54$ outs per game)

1,458 innings

ACTIVITY TWO

6:700

3/350

\$853.60

Colorado Academic Standards

Mathematics 1. Number Sense, Properties, and Operations

Understand the structure and properties of our number system. At their most basic level numbers are abstract symbols that represent real-world quantities

1. The decimal number system to the hundredths place describes place value patterns and relationships that are repeated in large and small numbers and forms the foundation for efficient algorithms.

Understand that equivalence is a foundation of mathematics represented in numbers, shapes, measures, expressions, and equations

2. Different models and representations can be used to compare fractional parts.

Are fluent with basic numerical, symbolic facts and algorithms, and are able to select and use appropriate (mental math, paper and pencil, and technology) methods based on an understanding of their efficiency, precision, and transparency

3. Formulate, represent, and use algorithms to compute with flexibility, accuracy, and efficiency

Mathematics 2. Patterns, Functions, and Algebraic Structures

Make sound predictions and generalizations based on patterns and relationships that arise from numbers, shapes, symbols, and data

Make claims about relationships among numbers, shapes, symbols, and data and defend those claims by relying on the properties that are the structure of mathematics

1. Number patterns and relationships can be represented by symbols

Mathematics 3. Data Analysis, Statistics, and Probability

Solve problems and make decisions that depend on understanding, explaining, and quantifying the variability in data

1. Visual displays are used to represent data

Mathematics 4. Shape, Dimension, and Geometric Relationships

Understand quantity through estimation, precision, order of magnitude, and comparison. The reasonableness of answers relies on the ability to judge appropriateness, compare, estimate, and analyze error

1. Appropriate measurement tools, units, and systems are used to measure different attributes of objects and time

Make claims about relationships among numbers, shapes, symbols, and data and defend those claims by relying on the properties that are the structure of mathematics

2. Geometric figures in the plane and in space are described and analyzed by their attributes