# May 19, 2013 STEM: MATHEMATICS and more 

## ACTIVITY ONE (SHOW YOUR WORK; SELECTIONS MAY HAVE MORE THAN ONE CORRECT ANSWER)

Article: Colfax Marathon draws runners, increased security, Sun., May 19, Denver \& The West, page 6B

- Refer to the map accompanying the article to determine the nearest cross street(s) to each mile marker for the half marathon:
- 5 miles: Montview Blvd. and $\qquad$
- 10 miles: E. Colfax Ave. and $\qquad$
- The half marathon is:
○ 26.2 miles
$\bigcirc 17$ miles
O more than 12 miles
O less than 12 miles


## ACTIVITY TWO

Articles: Prep Championships, Sun., May 19, Sports, section CC

- Senior Ana Holland of Regis Jesuit High won three events in the state championships. Which of the following terms (more than one) refer to three?
O triple
Otri-
O triangle
O tetra-


## ACTIVITY THREE

Article: Denver Daily Deals display ad, Sun., May 19, Denver \& The West, page 7B

- You can buy kids tennis lessons for $\$ 49$. This is $50 \%$ off the regular price. What is the regular price?
- There is an offer for window washing. The regular price is $\$ 80$. The savings is $51 \%$. What is the price being offered through Denver Daily Deals?
- The cost of a pass to Denver Golf Family Fun is $\$ 79$. The regular price is $\$ 364$. What is the percentage off?


## ACTIVITY FOUR

Article: Main section, Sun., May 19, Main

- The Main section is numbered page 1A through 26A. Write a " $P$ " next to the numbers listed that are prime numbers. Write an explanation of what constitutes a prime number.

| 1A | 2A |
| :---: | :---: |
| 5A | 6A |
| 9A | 10A |
| 13A | 14A |
| 17A | 18A |
| 21A | 22A |
| 25A | 26A |

1A
$\qquad$
6A
3A $\qquad$
7A $\qquad$

4A $\qquad$
8A $\qquad$
11A $\qquad$
12A $\qquad$
15A $\qquad$

19A $\qquad$
$\qquad$
16A

20A $\qquad$
23A $\qquad$
24A $\qquad$

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Utilizing your rolling 30 -day access to the Denver Post e-edition

Activities reinforce Colorado Academic Standards using e-editions of the Denver Post.

## ANSWERS

## ACTIVITY ONE

- 5 miles: Montview Blvd. and Monaco Pkwy.
- 10 miles: E. Colfax Ave. and Quebec St.

Half marathon is less than 12 miles long.

## ACTIVITY TWO

Three: triple, tri-, triangle

## ACTIVITY THREE

\$98
\$39
78\%

## ACTIVITY FOUR

A prime number is a natural number greater than 1 that has no positive divisors other than 1 and itself.
3A
5A
7A
11A
13A
17A
19A
23A

## 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

