Theoretical probability and counting

Math H

Name _____ Class _____ Date _____

1 What does ${}_7P_4$ equal?

A 0
B 3^5
C 840
D 5040

2 **How many** arrangements can a **4-digit** number be made from the numbers **2, 3, 4, 5, 6** using each number **once**?

A 120
B 256
C 1024
D 3125

3 **How many** arrangements of a **6-subject** schedule can be made from **8** subjects?

A 48
B 720
C 5040
D 20,160

4 How many different **combinations** can be made from picking **2** snacks out of **chips**, **pretzels**, **nachos**, and **popcorn**?

A 2
B 4
C 6

5 H
b
o

A
B
C
D

7 H
fr
w

A 252
B 720
C 5040
D 30,240

A $\frac{1}{12}$ **C** $\frac{1}{36}$

B $\frac{2}{12}$ **D** $\frac{2}{36}$

9 There are **7** green and **8** yellow marbles in a bag. If one is picked, replaced and then another one is picked, what is the **probability** of picking **two greens**?

A $\frac{7}{15}$ **C** $\frac{14}{30}$

B $\frac{7}{30}$ **D** $\frac{49}{225}$

10 If a six-sided die is rolled and a coin is flipped, what is the **probability** getting a **2 or 4** and a **head**?

A $\frac{1}{4}$ **C** $\frac{1}{6}$

B $\frac{1}{5}$ **D** $\frac{1}{8}$

ANSWER KEY

What does ${}_7P_4$ equal?

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D 12

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