QUIZIZZ

NAME : _____

CLASS : _____

DATE : _____

Permutation & Combination

20 Questions

1. **A family of 3 plans to sit in the same row at a movie theater. How many ways can the family be seated in 3 seats?**

☐ a) 3

☐ b) 6

☐ c) 1

2. **Prgya is stringing 3 different types of beads on a bracelet. How many ways can she string the next three beads if they must include one bead of each type?**

☐ a) 1

☐ b) 3

☐ c) 6

3. **A group of 8 swimmers are swimming in a race. Prizes are given for first, second, and third place. How many different outcomes can there be?**

☐ a) 336

☐ b) 56

☐ c) 24

4. **Four students need to be selected from a class of 15 to help clean up the campus. How many different ways can the 4 students be chosen?**

☐ a) 32 760

☐ b) 60

☐ c) 1 365

Help

5. **Four students need to be selected from a class of 15 to help clean up the campus. How many different ways can the 4 students be chosen, if the only two girls refuse to help?**

☐ a) 715
☐ b) 1 365
☐ c) 120

6. **When ordering a pizza, you can choose 2 toppings from the following: mushrooms, olives, pepperoni, pineapple, and sausage. How many different types of pizza can you order?**

☐ a) 10
☐ b) 20
☐ c) 30

7. **A Mathmatics test contains five different questions labeled A, B, C, D, and E. You are supposed to choose 2 to answer. How many different ways are there to do this?**

☐ a) 5
☐ b) 10
☐ c) 15

8. **You are ordering a triple-scoop ice-cream cone. There are 18 flavours to choose from and you don't care which flavor is on the top, middle, or bottom. How many different ways can you select a triple-scoop ice-cream cone?**

☐ a) 54
☐ b) 816
☐ c) 4896

9. A disc jockey has to choose three songs for the last few minutes of his evening show. If there are nine songs that he feels are appropriate for that time slot, then how many ways can he choose and arrange to play three of those nine songs?

- ☐ a) 84
- ☐ b) 504
- ☐ c) 9!
- ☐ d) 3!

10. Robin has five different pairs of shoes that match with 6 different pairs of socks. How many shoes-and-socks combinations can she make if she selects one pair of shoes and one pair of socks?

- ☐ a) 1
- ☐ b) 30
- ☐ c) 5!
- ☐ d) 6!

11. An election ballot asks voters to select three city commissioners from a group of six candidates. In how many ways can this be done?

- ☐ a) 6!
- ☐ b) 120
- ☐ c) 20
- ☐ d) 3!

12. How would you solve?
A book club offers a choice of 8 books from a list of 40. In how many ways can a member make a collection?

- ☐ a) Permutation
- ☐ b) Combination
- ☐ c) Factorial
- ☐ d) MPC

13. How would you solve?
The model of car you are thinking of purchasing is available in nine different colors, three different styles and two sizes of motor. How many ways can you order the car?

- ☐ a) Permutation
- ☐ b) Combination
- ☐ c) Factorial
- ☐ d) MPC

14. A committee that consist of 6 teachers is to be chosen from 4 male teachers and 5 female teachers. Find the number of different committee that can be formed if 3 male teachers and 3 female teachers are required in the committee.

☐ a) 120
☐ b) 60
☐ c) 84
☐ d) 40

15. From a group of 4 boys and 3 girls, in how many ways can we form a group 3 with at least 2 girls?

☐ a) 35
☐ b) 13
☐ c) 12
☐ d) 19

16. A student has to answer 8 questions in a 10-question test. If she has to answer at least 3 questions of the first 4, in how many ways can she select the questions?

☐ a) 44
☐ b) 45
☐ c) 39
☐ d) 24

17. How many different 8 letter words arepossible using the letters of the wordSYLLABUS ?

☐ a) 10080
☐ b) 9080
☐ c) 5080
☐ d) 11080

18. How many different 8 letter words arepossible using the letters of the wordSYLLABUS when both s are together

☐ a) 2020
☐ b) 2200
☐ c) 2520
☐ d) 1020

19. How many different arrangements of the word PARRAMATTA are possible?

- ☐ a) 35800
- ☐ b) 36000
- ☐ c) 37800
- ☐ d) 35800

20. A committee of 5 people is to be chosen from a group of 6 men and 4 women. How many committees are possible if:there is to be a majority of women?

- ☐ a) 60
- ☐ b) 65
- ☐ c) 66
- ☐ d) 56