

## Puzzle Activity 57

1.  $5 \cdot 7 = \boxed{35}$

14.  ${}^7P_7 = 7! = \boxed{5040}$

2.  $8 \cdot 3 = \boxed{24}$

15.  ${}^6P_6 = 6! = \boxed{720}$

3.  $8 \cdot 3 \cdot 2 = \boxed{48}$

16.  ${}^7P_2 = \boxed{42}$

4.  $3! = \boxed{6}$

17.  ${}^4P_4 \cdot {}^3P_3 + {}^3P_3 \cdot {}^4P_4 = \boxed{288}$

5.  $\frac{3!}{2!} = \boxed{3}$

18.  $6 \cdot 6 = \boxed{36}$

6.  ${}^4P_4 = \boxed{24}$

19.  $3+1, 2+2, 1+3 \quad \boxed{3}$

7.  ${}^4P_3 = \boxed{24}$

20.  $1+6, 6+1, 2+5, 5+2,$   
 $3+4, 4+3 \quad \boxed{6}$

8.  $4^4 = \boxed{256}$

21.  $\boxed{6}$

9.  $9 \cdot 10 \cdot 10 = \boxed{900}$

22.  $\boxed{1}$

10.  $9 \cdot 10 \cdot 5 = \boxed{450}$

23. HHT, HTH, THH  $\boxed{3}$

11.  $9 \cdot 10 \cdot 5 = \boxed{450}$

24.  $\boxed{3}$

12.  $9 \cdot 10 \cdot 2 = \boxed{180}$

25.  $\boxed{6}$

13.  $9 \cdot 9 \cdot 8 = \boxed{648}$