

# COUNTDOWN Challenge

## Algebra: Simplification

Simplify each expression by combining like terms

### **Part I**

1. 2 dogs + 3 cats + 1 dog + cat + 3 pigs =
2. 2 yards + 2 inches + 3 feet + 2 yards - 2 inches =
3. 4 days - 2 weeks + 3 years + 10 weeks + 4 days =
4. 6 blue + 2 green - 1 blue + red + green + green + green =

### **Part II**

5.  $4h + 5h =$
6.  $2f + 3f =$
7.  $6m - 2m =$
8.  $5c - c =$
9.  $4g + 5g - 6g =$
10.  $3b + 5p + 6b =$
11.  $a + b + e - b =$
12.  $10 + m - 6 + m =$

### **Part III**

13.  $a + b + c + d + a + b + c + d + d + e + b + a =$
14.  $x^2 + 3x^2 - 4x^2 =$
15.  $x^2 + a^2 + x^2 + a^2 + x^2 + a^2 =$
16.  $x^2 + x + 1 + x^2 + x + 1 + 1 + x + x^2 =$
17.  $x^2 + 16x + x^2 - 10x =$
18.  $a^2 + 2a^2 + 3a^2 + 4a^2 + 5a^2 =$
19.  $2.5x + 1.5a - 1.5x + 2.0a + 5.75a^5 =$
20.  $\frac{1}{2}x + \frac{1}{3}y - \frac{1}{3}x + \frac{5}{6}y =$