

Name \_\_\_\_\_



## Power Climb

**Directions:** Simplify each expression. The problems become more challenging as you move down the page. Show your work if needed.

1)  $2^3 \cdot 2^2$

2)  $\frac{5^6}{5^4}$

3)  $(3^2)^3$

4)  $(2x)^2$

5)  $\left(\frac{a}{b}\right)^2$

6)  $m^5 \cdot m^3$

7)  $\frac{n^9}{n^4}$

8)  $(p^2)^5$

9)  $(4q)^3$

10)  $\left(\frac{r}{s}\right)^4$

11)  $(x^2)^3 \cdot x^4$

12)  $\frac{(y^3)^2}{y^5}$