Mathematics, Algebra I
Unit V: Lesson C2

## Poster Design: Wiggle Graphs

Graph $\mathrm{y}=a \mathrm{x}^{\mathrm{n}}+\mathrm{b}$ on separate graphs when $\mathrm{a}=1, \mathrm{~b}=0$, and $\mathrm{n}=2$ to 7 .
Make separate graphs for $\mathrm{n}=2$ and $\mathrm{a}=\{1,2,-2,-3\}$
Make separate graphs for $\mathrm{n}=2$ and $\mathrm{b}=\{1,2,-2,-3\}$
Compare the graphs in each step, looking for patterns.
Make three posters: (1) showing the results of changing the value of $n$, (2) the value of $a$, and (3) the value of b. Include a brief explanation of the patterns you discovered on each poster.

