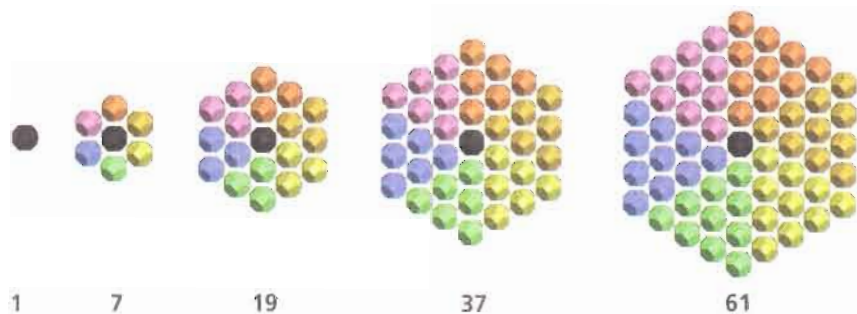


Some people have used the name “hexagonal numbers” for those depicted in Figure 2.26, but we’ll use Martin Gardner’s name, **hex numbers**, to distinguish them.

FIGURE 2.26 *Hex numbers.*



From Figure 2.23 we can see that the n th hex number is

$$\text{hex}_n = 1 + 6\Delta_{n-1} = 1 + 3n + 3n^2.$$

Notice that $\text{hex}_{n+1} = 1 + 6\Delta_n = 1 + 3(n+1) + 3(n+1)^2$ and that the hex numbers are congruent to 1 modulo 6.