

### Plugged In

Array Type	Time to add elements	Time to sum elements
Array List	7.53s	0.77s
Vector	10.77s	3.85s
Ordinary Array	5.55s	0.23s

### Battery Power

Array Type	Time to add elements	Time to sum elements
Array List	10.20s	0.9s
Vector	12.50s	5.08s
Ordinary Array	6.19s	0.28s

From the test results, it's shown that a vector is the slowest object to add elements to and to iterate through them. The ordinary array is the fastest object to add elements to and to iterate through them. This is the same regardless of the processing power of your computer as shown by the plugged in vs battery power tests.

If designers are programming applications that require an extreme level of efficiency, it is better to use the simplest implementations possible. However, if efficiency is not too much of a concern, the added functionality of array lists and vectors may be worth the increase in runtime.