Some considerations when deciding which test to use

1. First check if $\lim_{n\to\infty} a_n \neq 0$, in which case the series diverges and no other test is necessary. If $\lim_{n\to\infty} a_n = 0$ try a different test.

2. If the series is of the form $\sum \frac{1}{n^p}$, it is a p-series. They are convergent if $p > 1$ and divergent if $p \leq 1$. This can be easily shown using the integral test.

3. If the series has the form $\sum ar^{n-1}$ or $\sum ar^n$, it is a geometric series, which converges for $|r| < 1$ and diverges for $|r| \geq 1$. Sometimes is necessary to rearrange terms to take the series to this form. The key is to make sure that the summation parameter (usually n) only appears as powers.

4. If the series has a form that is similar to a p-series or a geometric series, then one of the comparison tests should be considered. In particular
   - If a_n is a rational function or an algebraic function of n (involving roots of polynomials), then the series should be compared to a p-series. The value of p should be chosen by keeping the highest powers of n in the numerator and denominator.
   - If you have only powers of n, try to rearrange the terms to get a geometric series or close to one

5. If the series is of the form $\sum(-1)^{n-1} b_n$ or $\sum(-1)^n b_n$, then the Alternating Series Test is an obvious possibility.

6. Series that involve factorials or other products, including a constant raised to the nth power, are often conveniently tested using the Ratio Test. Note that if the series term contains a factorial then the only test that you got that will work is the Ratio Test.

7. If a_n is of the form $(b_n)^n$, then the Root Test may be useful.

8. If $a_n = f(n)$ for some positive, decreasing function and $\int_a^\infty f(x)\,dx$ is easy to evaluate, then the integral test may work.