Step 1: What You're Proving

State the 'for all' statement that you want to prove:

Step 2: Induction Parameter

We prove this by induction on _____

Step 3: Base Case

Prove the base case(s):

Step 4: Induction Step

Write the induction step:

For a given _____

Step 5: Induction Hypothesis

State the Induction Hypothesis:

I can assume, for all _____

Step 6: What You're Proving Inductively

State what you want to prove:

I want to prove _____

Step 7: Proof

Inductively prove what you stated in Step 6 using your Induction Hypothesis stated in Step 5.

Step 8: Declare Victory

State what you just proved.

Therefore, _____