

Titration Activity

(3) Complete / neatly done

(3) **Background Information:**

- 1 *titrant* - solution of known concentration in the buret
- 1 *endpoint* - the point where a sharp, easily seen change takes place
- 1 *equivalence point* - the amount of titrant used at the end point

(4) **Experimental Design:**

- 2 *manipulated variable* - amount of unknown solution
- 2 *responding variable* - amount of titrant used

(3) **Procedure:**

- 1 *Rinse and clean the buret.*
- 1 *Pipet 10.0 mL of the unknown solution into a flask/beaker.*
- 1 *Add 2 or 3 drops of phenolphthalein indicator.*

(3) **Observations:**

- 1 data chart
- 2 Three trials within 0.4 mL of each other

Conclusion

(5) Part A

- 3 calculation
- 2 value between 0.245 mol/L and 0.255 mol/L

(2) Part B

- materials were not sufficiently cleaned
- phenolphthalein changes at $\text{pH} = 8.0$ rather than at 7.0

_____ out of **23**