**🚀 Basic Cluster Information**

| **Command** | **Usage** |
| --- | --- |
| kubectl version | Show the client and server version information |
| kubectl cluster-info | Display the cluster master and services |
| kubectl get nodes | List all nodes in the cluster |
| kubectl get componentstatuses | Show the health of the cluster components |

**📦 Working with Pods**

| **Command** | **Usage** |
| --- | --- |
| kubectl get pods | List all pods in the current namespace |
| kubectl get pods -A | List pods across all namespaces |
| kubectl describe pod <pod-name> | Get detailed info about a specific pod |
| kubectl logs <pod-name> | Show logs from a container in a pod |
| kubectl logs <pod-name> -c <container-name> | Show logs from a specific container in a pod |
| kubectl exec -it <pod-name> -- /bin/bash | Access a running pod interactively |

**📂 Deployments and Services**

| **Command** | **Usage** |
| --- | --- |
| kubectl get deployments | List all deployments |
| kubectl create deployment <name> --image=<image> | Create a deployment |
| kubectl apply -f <filename>.yaml | Apply configuration from a YAML file |
| kubectl edit deployment <deployment-name> | Edit a deployment in-place |
| kubectl scale deployment <name> --replicas=<count> | Scale a deployment |
| kubectl delete deployment <name> | Delete a deployment |

**🔁 Services and Networking**

| **Command** | **Usage** |
| --- | --- |
| kubectl get services | List all services |
| kubectl expose deployment <deployment-name> --type=NodePort --port=80 | Expose a deployment as a service |
| kubectl port-forward <pod-name> <local-port>:<pod-port> | Forward a local port to a pod |

**📦 Namespaces**

| **Command** | **Usage** |
| --- | --- |
| kubectl get namespaces | List all namespaces |
| kubectl create namespace <name> | Create a new namespace |
| kubectl delete namespace <name> | Delete a namespace |
| kubectl config set-context --current --namespace=<name> | Set default namespace for current context |

**📄 Config and Secrets**

| **Command** | **Usage** |
| --- | --- |
| kubectl get configmaps | List all ConfigMaps |
| kubectl get secrets | List all Secrets |
| kubectl describe secret <name> | Describe a specific secret |
| kubectl create secret generic <name> --from-literal=key=value | Create a secret from literal values |

**🔍 Monitoring and Debugging**

| **Command** | **Usage** |
| --- | --- |
| kubectl top pod | Display resource usage (CPU/Memory) of pods |
| kubectl top node | Display resource usage of nodes |
| kubectl get events | Show recent events |
| kubectl describe <resource> <name> | Get detailed info about any resource (pod, svc, etc.) |

**🧹 Delete Resources**

| **Command** | **Usage** |
| --- | --- |
| kubectl delete pod <name> | Delete a pod |
| kubectl delete service <name> | Delete a service |
| kubectl delete -f <file>.yaml | Delete resources defined in a YAML file |

**🛠️ Custom Resources & Advanced Usage**

| **Command** | **Usage** |
| --- | --- |
| kubectl api-resources | List all resource types in the cluster |
| kubectl get all | List all resources in the current namespace |
| kubectl get <custom-resource> | Get custom resources (e.g., kubectl get ingress) |
| kubectl explain <resource> | Get documentation for a resource (e.g., kubectl explain pod) |