Kubernetes CLI Commands Cheat Sheet

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🧠 1. Cluster Info & Contexts

kubectl cluster-info

kubectl config get-contexts

kubectl config use-context <context-name>

📁 2. Namespace Management

kubectl create namespace <namespace-name>

kubectl get namespaces

kubectl delete namespace <namespace-name>

🐳 3. Pod Operations

kubectl run nginx --image=nginx

kubectl get pods -n <namespace>

kubectl delete pod <pod-name> -n <namespace>

kubectl describe pod <pod-name>

kubectl logs <pod-name>

📦 4. Deployment Management

kubectl create deployment nginx-deploy --image=nginx

kubectl get deployments

kubectl describe deployment nginx-deploy

kubectl scale deployment nginx-deploy --replicas=3

kubectl set image deployment/nginx-deploy nginx=nginx:1.19.1

kubectl rollout status deployment/nginx-deploy

kubectl rollout undo deployment/nginx-deploy

♻️ 5. ReplicaSet Operations

```
kubectl get replicasets
```

```
kubectl describe rs <replicaset-name>
```

⚙️ 6. DaemonSet

```
kubectl get daemonset -A
```

```
kubectl describe daemonset <daemonset-name> -n <namespace>
```

🖥️ 7. Node & Cluster Info

```
kubectl get nodes
```

```
kubectl describe node <node-name>
```

🌐 8. Services

```
kubectl expose deployment nginx-deploy --port=80 --type=NodePort
```

```
kubectl get svc
```

📝 9. YAML Deployment

```
kubectl apply -f <filename>.yml
```

```
kubectl delete -f <filename>.yml
```

🛠️ 10. Debugging & Troubleshooting

```
kubectl describe <resource> <name>
```

```
kubectl logs <pod-name>
```

```
kubectl exec -it <pod-name> -- /bin/bash
```

✅ Tips:

- Always check the namespace (-n <namespace>) if your pod or service is missing.
- Use kubectl get all -n <namespace> for complete resource visibility.
- kubectl explain <resource> is useful for learning YAML structure.