Cheat Sheet: Kubernetes Cluster

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Creating a GKE Cluster and Configuring Credentials

- From the Google Cloud Console (https://console.cloud.google.com)
  - Click the navigation menu, select **Kubernetes Engine**
  - Use the console to create cluster with following settings:
    - Standard Mode cluster (not Autopilot)
    - Zonal cluster (should be the default)
    - Click on **default-pool** and verify the number of nodes is 3
    - Click on **Nodes**, verify the machine type is a **standard-2** (2 CPUs) and NOT a shared-core, check the **Enable preemptible nodes**
    - Click on **Security**, set **Access Scopes** to **Allow full access to all Cloud APIs**
    - Click the **Create** button
- Wait for it to be created (3-5 minutes)

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- A **Connect** button will appear when the cluster is ready
  - Click on the ⋮ and then the **Connect** button, and then choose 'Run in Cloud Shell'
  - Cloud shell will open with a command pre-created. Run the command.
  - This command creates the kubectl config file for your cluster
- When it has completed, test your access by using kubectl commands:
  - **`kubectl get services`**
    - This should return a single service named Kubernetes
  - **`kubectl get nodes`**
    - This should return 3 nodes