AWS Naming Structure and Restrictions

Resource	Naming Rules

CloudFormation	• A stack name can contain only alphanumeric characters (case-sensitive) and hyphens. It must start with an alphabetic character and can't be longer than 128 characters.
	• General requirements for parameters:
	    • Each parameter must be given a logical name (also called logical ID), which must be alphanumeric and unique among all logical names within the template.
	    • Each parameter must be assigned a parameter type that is supported by AWS CloudFormation
	Eg- YAML
	Parameters:
	 ParameterLogicalID:
	  Type: DataType
	  ParameterProperty: value

S3 Bucket	• Bucket name must be at least 3 characters and no more than 63 characters long. • Name can contain or use lowercase, numbers, and hyphen (**cannot use uppercase letter or underscores**). • Each name must start or end with a lowercase or a number. • Names (keys) are globally unique across all the AWS Regions. • Bucket name cannot be changed after they are created. • If a bucket is deleted, its name becomes available again to you or another account to use.
Lambda	• Function name must contain only letters, numbers, hyphens, or underscores • Maximum length is 140 characters. Minimum is 1 character.
DynamoDB	• Table name must be unique for the current AWS account and Region. • Table names and index names must be between 3 and 255 characters long, and can contain only the following characters: a-z , A-Z, 0-9 , _ (underscore), - (dash), . (dot) Avoid [Reserved Words in DynamoDB](#)

IAM Policy	• String of characters consisting of upper and lowercase alphanumeric characters with **no spaces** • Can also include any of the following characters: _+=,.@-
IAM Role	• The role name must be unique within the account. Role names are not distinguished by case. For example, you cannot create roles named both "Role1" and "role1". • String of characters consisting of upper and lowercase alphanumeric characters with no spaces. You can also include any of the following characters: _+=,.@-.

Naming Structure

AWS Resource	Resource Name	Comment	Example
IAM Roles	{{appname_construct}} - {{env }} - {{role_purpose}} - iam-role	Role Purpose can be one of the following -lambda execute -s3 access -dynamo access	schoolFuel-dev-s3access-iam-role
IAM Policy	{{appname_construct}} - {{product_used}} - {{level_of_access}} - iam - policy	Product Used must be one of the AWS product names such as: s3 lambda codedeploy Level of Access must be one of the following: readonly readwrite isolated-by-tag	schoolFuel-s3-readwrite-iam-policy
IAM Group	{{appname_construct}} - {{env }} - {{group_purpose}} - iam - group	Application group purpose can be one of the following: readonly poweruser administrator	schoolFuel-dev-admin-iam-group
CloudFormation Stack	{{appname_construct}} - {{client_name}} - cf	ClientName can be: Littleton	schoolFuel-littleton-cf
Lambda Function	{{appname_construct}} - {{env }} - {{function-name}}	Env can be: dev prod	schoolFuel-dev-dbInsert

	For functions that get triggered by other events {{appname_construct}} - {{env }} - {{event}}		schoolFuel-dev-S3-fileUploaded
DynamoDB Tables	{{appname_construct}} – {{client_name}} - {{ context }}	Context can be the : Student StudentPerformance	schoolFuel-littleton-student

CloudFormation Style Guide - https://github.com/alexgibs/cfnstyle