Using device: cuda
Training subset size: 5000
Test subset size: 1000
Epoch 1/10, Loss: 153.6908
Epoch 2/10, Loss: 123.6853
Epoch 3/10, Loss: 105.5634
Epoch 4/10, Loss: 92.8221
Epoch 5/10, Loss: 84.0468
Epoch 6/10, Loss: 74.0128
Epoch 7/10, Loss: 63.2211
Epoch 8/10, Loss: 51.7025
Epoch 9/10, Loss: 45.8579
Epoch 10/10, Loss: 39.9849
CNN model saved as vgg11_baseline.pth
cnn_model.load_state_dict(torch.load("vgg11_baseline.pth"))
CNN model loaded successfully.
Test Accuracy: 56.30%
Confusion Matrix:
[[70 0 2 1 0 0 3 1 6 17]
[9 68 0 0 1 1 0 0 0 21]
[20 0 60 8 2 1 4 2 0 3]
[6 2 21 31 1 4 14 5 1 15]
[6 1 25 8 28 3 10 11 1 7]
[4 0 19 35 3 24 4 2 0 9]
[3 0 12 4 1 0 76 0 0 4]
[6 0 2 5 0 3 7 61 2 14]
[20 5 4 1 0 0 1 0 55 14]
[3 3 0 1 0 0 0 0 3 90]]
Classification Report:

	precision	recall	f1-score	support
airplane	0.48	0.70	0.57	100
automobile	0.86	0.68	0.76	100
bird	0.41	0.60	0.49	100

cat	0.33	0.31	0.32	100
deer	0.78	0.28	0.41	100
dog	0.67	0.24	0.35	100
frog	0.64	0.76	0.69	100
horse	0.74	0.61	0.67	100
ship	0.81	0.55	0.65	100
truck	0.46	0.90	0.61	100
accuracy			0.56	1000
macro avg	0.62	0.56	0.55	1000
weighted avg	0.62	0.56	0.55	1000