Using device: cuda
Training subset size: 5000
Test subset size: 1000
Epoch 1/10, Loss: 148.3089
Epoch 2/10, Loss: 119.3424
Epoch 3/10, Loss: 102.1041
Epoch 4/10, Loss: 91.5862
Epoch 5/10, Loss: 79.4814
Epoch 6/10, Loss: 64.8581
Epoch 7/10, Loss: 58.8448
Epoch 8/10, Loss: 50.6611
Epoch 9/10, Loss: 41.7093
Epoch 10/10, Loss: 46.3388
CNN model with three removed layers saved as vgg11_remove_three_layers.pth
cnn_model.load_state_dict(torch.load("vgg11_remove_three_layers.pth"))
Model loaded successfully for evaluation.
Test Accuracy: 59.30%
Confusion Matrix:
[[91 1 0 1 2 1 1 0 2 1]
[15 75 0 0 0 5 0 0 0 5]
[26 1 33 3 4 23 5 3 1 1]
[16 4 4 37 7 25 5 0 0 2]
[11 1 10 5 44 15 6 7 0 1]
[4 0 3 15 1 73 1 3 0 0]
[5 1 4 15 3 10 62 0 0 0]
[7 1 0 6 3 19 0 64 0 0]
[45 3 1 2 0 0 0 0 45 4]
[20 6 1 1 0 2 0 1 0 69]]
Classification Report:

	precision	recall	f1-score	support
airplane	0.38	0.91	0.54	100
automobile	0.81	0.75	0.78	100
bird	0.59	0.33	0.42	100

cat	0.44	0.37	0.40	100
deer	0.69	0.44	0.54	100
dog	0.42	0.73	0.53	100
frog	0.78	0.62	0.69	100
horse	0.82	0.64	0.72	100
ship	0.94	0.45	0.61	100
truck	0.83	0.69	0.75	100
accuracy			0.59	1000
macro avg	0.67	0.59	0.60	1000
weighted avg	0.67	0.59	0.60	1000