These supplementary materials include some additional experimental results on CUB and Tiered-Imagenet for a new experimental setting. Besides, the feature extractor used in the paper is a shallow network that contains four convolutional layers. Here we also provide additional results of deeper networks on Mini-Imagenet.

1. Results for the new setting

Under the setting of meta-learning that a model can adapt to unseen classes with good performance, most of existing papers mainly focus on the results of novel classes. However, it is also interesting to observe the performance of this kind of models on base classes. Besides, a more realistic setting of mixing base and novel classes in the testing set is much more indicative of the real-world performance of the model. We conduct experiments based on the new setting on CUB and Tiered-Imagenet (the latter contains 608 classes and is more challenging). Results are shown in A. Note that all the feature extraction backbones are four simple convolutional layers. As we can see, since the models are trained on base classes, the accuracies of base classes are better than that of novel classes. Besides, our method outperforms others on both base and novel classes, which further confirms the efficacy of our proposed method.

2. Results of deeper networks

In Table 4 in the paper, fair comparisons are made among methods (including ours) that simply use four convolutional layers as the backbone. We further evaluate our method with the ResNet12 backbone, and compare with [1][2][3][4][5] where either ResNet12 or deeper ResNet18 were used as their backbones. As shown in B, our 1-shot result outperforms all others, no matter what backbones are used; our 5-shot result is only slightly lower than CloserLook [1]. These comparisons show the efficacy of our method across different backbone networks.