III. User Guide of the Addenda Series

1. Teaching Method

The Addenda Series contains many suggested learning activities. Teachers can choose to include the appropriate exemplars in teaching the topics or to use them in extra-curricular activities. Teachers can modify the contents of the learning activities and worksheets to suit the interest, learning abilities and the needs of their pupils, and also take into account the context of the school so as to achieve a more desirable learning and teaching outcome.

The exemplars provided in the Addenda Series are not exhaustive. Teachers may develop teaching materials according to the cognitive development of pupils. In designing the materials, teachers should adopt a pupil-oriented approach so as to enable pupils to construct new knowledge based on their previous knowledge and experiences, and understand the relations between the concepts. The exemplars can help pupils transit learning from concrete to abstract. Teachers should firstly identify the concept and skills that pupils are not good at and design teaching materials to address these needs to facilitate their understanding. Teachers can also select some appropriate enrichment topics to meet the interest and ability of pupils in order to raise their interest and confidence in the learning of Mathematics.

2. Catering for Learner Diversity

In order to cater for learner diversity, teachers can modify the suggested contents and worksheets to meet the needs in teaching. Teachers should also take into account pupils' learning abilities in designing learning and teaching materials.

To address the needs of pupils of different abilities, teachers can design some challenging activities for more able pupils to let them explore and discover the patterns in Mathematics. It can widen the pupils' vision, reinforce their thinking ability as well as enhancing their interest in learning Mathematics. On the other hand, teachers can give less able pupils some materials which are easy and of appropriate quantity to assist them to master the necessary and basic knowledge, and to cultivate their learning interest. If pupils cannot master the abstract mathematical concepts, more hands-on activities could be provided first. Sufficient time for discussion should also be given to help them master the concept of concrete operations before moving on to the more abstract concepts.