

Preface for Silver 20 to Silver 24

This preface provides detailed explanations on pre-class preparation, teaching methods, introduction session content, classroom routine requirements, and teaching schedule arrangement. Instructors are requested to read this carefully before officially starting the course to facilitate better course delivery later.

Pre-class Preparation

- (1) Please carefully read the front page of the exercise book to understand the learning objectives, key learning points, and the mathematical ability radar chart for this level, and clarify the abilities to be developed at this level.
- (2) Familiarize yourself with the test questions of this level and refer to the answer keys to help you better understand the questions.
- (3) Prepare in advance the pictures of test questions for explaining the question requirements (the format can refer to the illustrations in the specific teaching suggestions), which can be presented through slides (PPT) or other forms as long as they are convenient for students to observe.
- (4) Prepare the corresponding level of exercise books, teaching aid boxes and answering tools.

Teaching Methods

1. Usage of Exercise Books

When students are doing independent exercises, instructors should observe and understand the completion status of each student, and make timely evaluations. Mark the correct answers made by students with symbols such as " \checkmark/\bigcirc ". If incorrect answers are found, repeat the initial problem-solving steps to guide students to find the correct answers, and tell them: "Observe carefully again, try again, and think again." Encourage students to think again and find the correct answers. Instructors should not make any marks next to the wrong questions, and must not mark " \times " for students.

2. Completion Reminder

When 90% of the students have completed an exercise, please tell the other students who have not finished: "It doesn't matter if you can't get it right this time, we can try again next time. As long as you have worked hard to think, you have already become smarter."

3. Praise Methods

There is no need for excessive praise when students get the correct answers; a smile is sufficient. For students who finally get the correct answers after repeatedly struggling with difficult questions, lavish praise should be given for their perseverance in thinking when facing difficulties, and make sure other students can hear it. For students with incorrect answers, encouragement should be given every time, especially for students with low motivation. Encourage them by saying: "As long as you have thought hard, even if you can't work it out, you have already become smarter, so don't worry."

Introduction Session Content

Theoretical Discussion (Within 2 minutes)

It is very important to conduct this step before the official study. Help students understand that perseverance in thinking when facing difficult questions is very useful for achieving good learning results.

Today's education is transforming from the previous cramming education to an educational model that focuses on students' independent thinking and cultivates creative and imaginative abilities. "Future Thinking" is a high-level course that cultivates creative ability from "nothing" to "something". The most important thing in improving thinking ability is the process of perseverance in thinking when facing difficult questions and not giving up. The following are example sentences for the theoretical talk:

- (1) When you feel "it's too difficult", it is the best opportunity to improve your thinking ability. The process of feeling "it's too difficult" can cultivate excellent children.
- (2) Thinking ability will not improve without experiencing the process of feeling "it's too difficult" and then trying without giving up.
- (3) When encountering unsolvable problems, there is no need to feel sad or frustrated because you can't solve them.
- (4) On the contrary, when encountering unsolvable problems, please give yourself time to think, and your ability will naturally improve. Therefore, please study with a happy mood.

- (5) Please challenge repeatedly! If you can't solve it on the same day, solve it with a different mood the next day.
- (6) Whether your thinking ability can be improved depends on how much confidence you have to challenge difficult problems.
- (7) Being able to solve problems is certainly great, but the process of doing your best to think before solving difficult problems is even more important!

Classroom Routine Development

The development of classroom routines is also very important, and instructors should attach great importance to it:

- (1) During the animated video playing session, some students like to answer questions loudly and quickly. Instructors need to guide students to speak out the answers in a pleasant voice, so that students will not compete to answer questions in louder voices, and the classroom atmosphere will be more suitable for students to think.
- (2) When instructors are giving examples to explain the question requirements, students need to put down all their work and look at the instructor, which helps students better understand the question requirements and is more conducive to students' independent thinking during the self-answering session.
- (3) Create a relatively quiet course atmosphere, which is more conducive to students developing the learning qualities of independent thinking and active thinking.
- (4) Guide students to take good care of their exercise books, guide them to keep all teaching aids properly and develop the good habit of putting the used teaching aids back in place, and learn to organize their teaching aid boxes, etc. This is a very important learning ability for students.

Teaching Schedule Arrangement

Taking levels S20- S24 as an example, there are 5 exercise books in total, 1 book per month, with a total study period of 5 months.

Each book is divided into four parts, with the fourth part being challenging difficult questions, which does not need to be included in the teaching plan. Each course is no less than 40 minutes / 1 session per week.

Month	1st Week	2nd Week	3rd Week	4th Week
1st Month (S20)	(S20-1) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S20-2) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S20-3) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S20 Level Test) Level Test Certificate Awarding S20-4 if time permits
2nd Month (S21)	(S21-1) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S21-2) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S21-3) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S21 Level Test) Level Test Certificate Awarding S21-4 if time permits
3rd Month (S22)	(S22-1) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S22-2) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S22-3) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S22 Level Test) Level Test Certificate Awarding S22-4 if time permits
4th Month (S23)	(S23-1) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S23-2) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S23-3) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S23 Level Test) Level Test Certificate Awarding S23-4 if time permits
5th Month (S24)	(S24-1) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S24-2) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S24-3) Theoretical Discussion Video + Exercise Book + Teaching Aids	(S24 Level Test) Level Test Certificate Awarding S24-4 if time permits