

Multiplication Mastery: Memorising Multiplication Tables without Worksheets

Working from the premise that understanding mathematical ideas and seeing patterns in numbers reduces memory load, this workshop shows ways of doing away with pencil and paper drills to remember math facts. Instead of just committing the Tables to memory without understanding, manipulatives are used to build up conceptual understanding of multiplication through grouping, skip-counting and other activities.

This workshop presents concrete ideas for multiplication tables instead of rote-learning (that is, a memorization technique based on repetition). Our speaker Jennifer Lee will introduce **The 9 Lines®** - a patented method of reinforcing these facts into long-term memory before tackling word problems.

You will also learn to create your own games for reinforcing multiplication tables in a relaxed and happy environment. Teachers and parents get immediate feedback on a student's retention and understanding of mathematics lessons when they watch students play these games. These games can be incorporated in small groups or at home.



You will learn how to:

- present multiplication concepts in at least 3 different ways using manipulatives instead of worksheets,
- then use **The 9 Lines®** – a patented method & *mnemonic tool* (from University of California (Berkeley)) to memorise the multiplication tables,
- DIY games to help children memorise the multiplication tables in a happy and stress-free environment,
- use the language of multiplication, and
- create a student-centred reinforcement of multiplication in story sums.

Target Audience:

Educators and parents, caregivers of children aged 6-10.

Date: 26th May 2016, Thursday

Time: 2.30pm to 6.00pm
(registration starts at 1.30pm)

Fee: \$45 including GST. Notes & refreshment provided.

Venue: Resource & Training Centre
Lorong Napiri, Level 3,
Singapore 547532

Workshop Outline

1. Learn multiple ways of presenting multiplication as a concept.
2. Rote-learning or explore and discover to learn?
3. The 9 Lines® - What it is and how does it help?
4. Games - how to organise before making a game and make your own games for the holidays.

About the Speaker:



Jennifer Lee of COGNITIVE CONNECTIONS started the first home-based Montessori kindergarten in Singapore in the 1980s for her own children. After 11 years in early childhood education, she adapted the Montessori method to teach other children with learning disabilities in mainstream schools. Between 2003 to 2011, Jennifer took study trips to the USA to learn about the latest researched best practices for helping children with Dyslexia, Math Difficulties, Handwriting and ADHD. She also took part in a Math Camp in 2005 with the UC Berkeley Extension Program and in 2007 she was invited to run a Remedial Math Camp in San Francisco Friends School. She ran a Math Camp in Singapore the same year. In 2013, Jennifer obtained a Master's degree in Special and Inclusive Education at the Institute of Education, University College London.

Registration Form: **Multiplication Mastery on 26th May 2016**

DETAILS OF SCHOOL / ORGANISATION (if paid by school or organisation)

Registration Liaison Person: _____

Tel: _____ Fax: _____ Email address: _____

Invoice to: _____

Address: _____

Attention to / Department: _____ / _____

PARTICIPANT'S DETAILS

Number of persons attending: _____ (If more than 1 person, please indicate all the names on a separate sheet.)

Name: _____

Tel: _____ Fax: _____ Email address: _____

Mode of Payment: cash / cheque / invoice / e-invoice (MOE Schools Only): _____ (Please specify)

Do you require a Certificate of Attendance? YES NO

To facilitate our trainer customise the workshop to fit the participants' needs (as far as possible), please provide the information below:

Occupation: _____

Age & nature of child with disabilities (if applicable): _____

Complete this form and send it to RTC.

Email address: resourcetrg@awwa.org.sg Fax no: 65115 311

TERMS & CONDITIONS:

- Cash or cheque payment is to be made on or before the workshop. For cheque payment, please write a crossed cheque made payable to **AWWA Ltd-Resource & Training Centre**. NETS payment is NOT AVAILABLE.
- Confirmation of registration is at the discretion of RTC and subject to the availability of seats. Only fully completed forms will be accepted.
- Once registration is confirmed, there shall be no refund of registration fee.
- RTC reserves the right to make changes and disclaim responsibility should any change(s) to the workshop occur. In the event of cancellation made by RTC, a full refund of **ONLY** the registration fee paid will be made.
- Please note that video-recording and photographs will be taken during the training for publicity, archival and news purposes.
- By completing and submitting to us this form:
 - you are deemed to agree to the terms and conditions stated here, and
 - you consent to the collection, use and disclosure of your personal data for the purpose stated above and for us to provide you with the service/s requested.