

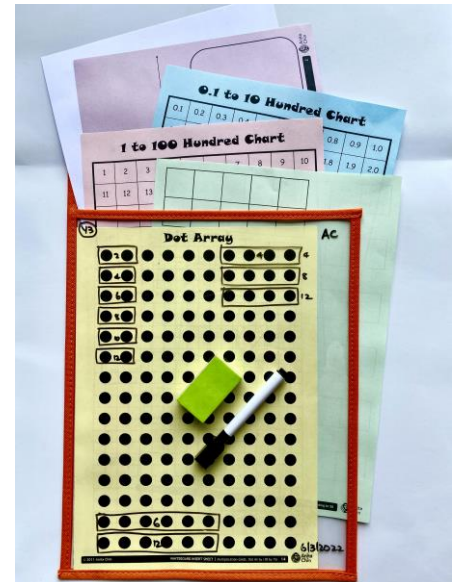
Visual models can be implemented easily as part of a whole-school approach to mathematics.

Simply spend some quality time with the photocopier, buy some sleeves, markers and erasers. Before you know it, you will have one sleeve for every student in every classroom, packed with all the visual models they need for the entire year.

Teachers can use their class set of sleeves with ease as they are on hand in their classroom every day.

For instance, visual models in the sleeve can be used to:

- practise prior learning as part of the lesson warm-up
- plug gaps in student learning 'on the fly'
- support the learning of new content
- record the results of student practice.



Contents of Anita's Everyday Visual Models Sleeve (EVM Sleeve)

Listed below is the contents of Anita's EVM Sleeve for use in student whiteboard insert sleeves. Every student in every class K–6 should have access to their own EVM Sleeve that contains the six insert sheets.

Insert sheets	Paper colour	Recommended grades and concepts
Dot Array & 1 cm Grid	yellow	K–6: Multiplication and division; 2D space.
Ten Frames to 50 & Five Frames to 30	green	K–2: Whole numbers; Addition and subtraction. Years 4–6: Fractions and decimals.
Hundred Chart (1 to 100) & Hundred Chart (801 to 900)	pink	Years 1–4: Number sequences; Place value; Addition and subtraction; Multiplication and division.
Hundred Chart (0.1 to 10) & Hundred Chart (0.01 to 1)	blue	Years 4–6: Number sequences; Place value; Addition and subtraction; Decimals.
Empty Number Line (single) & Empty Number Line (double)	lilac	Years 1–6: Whole numbers; Addition and subtraction; Time; Multiplication and division; Fractions and decimals.
Blank sheet of A4 paper	white	K–6: Open-ended questions

'A powerful set of tools that can help you make sense of mathematical activity.' p. 146

'Such models [i.e. the empty number line and array] are not topics that are introduced and done in the space of two or three weeks. They need to become part of the pedagogical furniture of classrooms as ubiquitous as paper and pencil.' p. 146

'We are better off introducing children to a small number of models and working intensively with these over time.' p. 129

Askew, M. (2015). *Transforming Primary Mathematics: Understanding classroom tasks, tools and talk*. 2nd Edition. Oxon: Routledge.

How to implement Anita's Everyday Visual Models Sleeves



Otto Brights Magazine File

1. Purchase the whiteboard insert sleeves - Maths Crew Leader

Purchase one for each student K–6 (prices incl GST as at 7/3/2022):

- A4 Swap, Write and Wipe Sleeves
eg from Modern Teaching Aids, \$54.95 pack of 25.
eg from Educational Computer Consumables – Steve, ph 02 6622 4744, \$3.75 each.
OR
- A4 Sheet Protectors light weight
eg 'Marbig' brand from Officeworks, code AC25170, \$19.90 box of 300.

2. Purchase student whiteboard black markers and erasers

Purchase one marker and one eraser per student K–6 (2022 prices):

- Student whiteboard black markers
eg from Elizabeth Richards, code ERWNWPEN10, \$3.08 pack of 10.
- Small student whiteboard erasers
eg from Elizabeth Richards, code ERWBE, \$10.01 pack of 10.

3. Purchase magazine files

Purchase one 'Otto Brights' Magazine File for each classroom K–6 from Officeworks, black, code OTBMAGFBK, \$10.97 each.

Note: Otto Brights are 26 cm deep. Other magazine holders are less than 26 cm deep and will not hold the sleeves.

4. Printing and assembling - Maths Crew Leader

- Photocopy class sets (one per student) of recommended visual model insert sheets on coloured paper.
- Place the set of six visual model insert sheets inside each sleeve.
- Distribute class sets of assembled visual model insert sleeves to the appropriate Maths Crew Members.

5. Whole staff meeting - Maths Crew Leader (2 minutes)

- Maths Crew Leader explains Anita's Everyday Visual Models Sleeve to staff ahead of the sleeves being handed out in the next grade/stage meetings by Maths Crew Members.

6. Initial grade/stage meeting - Maths Crew Members leading (10 minutes)

- Maths Crew Members hand out class sets of assembled visual model insert sleeves to their team.
- Teachers examine the visual models in the sleeve and briefly discuss how they might use each one.
- All teachers do a task led by the Maths Crew using one visual model insert sheet, eg the dot array.
 - Discuss how the task will be implemented in lessons, eg lesson warm-up, student-centred practice.
 - Discuss what to 'look for' during observational assessment and why.
- Facilitate agreement about when the insert sheet will be implemented, eg within the next week.

7. Follow-up grade/stage meetings - Maths Crew Members leading (10 minutes)

- Facilitate sharing and reflection about classroom implementation.
- Facilitate agreement on the next visual model insert sheet to be used for the next cycle of learning.
- Celebrate your learning journey achievement!