MATHEMATICAL KNOWLEDGE

Symbols
Representations
Topics

maths teaching and learning

Knowledge of features of learning maths

Knowledge of maths learning standards

Definitions
Connections

Pupil needs
Examples

Knowledge of maths practices in maths

Knowledge of the structure of maths

PEDAGOGICAL CONTENT KNOWLEDGE

Tasks
Resources
Order of topics

BELIEFS

Knowledge of topics

Knowledge of maths teaching

(2020). Parallel stories: Teachers
for mathematics teachers'
Zehetmeier, D. Potari and M.
evelopment and knowledge of
op. 85–103). Routledge.

mplate courtesy
Hart.

Model adapted from Carillo, J.
specialized knowledge. In S.
Ribeiro (Eds.),
mathematics teachers
Hexaflexagon te...

FOLD

MOUNTAIN THEN VALLEY FOLD

... ETC

UNFOLD ALL THEN

FOLD **TUCK**

TAPE

THIS SIDE UP

PUSH **PINCH**

OPEN FROM MIDDLE

TA-DA

How the three sides should appear

MATHEMATICAL KNOWLEDGE

Symbols
Representations
Topics
Definitions
Connections

PEDAGOGICAL CONTENT KNOWLEDGE

Order of topics
Resources
Tasks
Pupil needs
Examples

Knowledge of topics

Knowledge of maths teaching

BELIEFS

on maths | on maths teaching and learning

Knowledge of the structure of maths

Knowledge of features of learning maths

Knowledge of practices in maths

Knowledge of maths learning standards

CAMBRIDGE
√Mathematics

Model adapted from Carillo, J. (2020). Parallel stories: Teachers
and researchers searching for mathematics teachers'
specialized knowledge. In S. Zehetmeier, D. Potari and M.
Ribeiro (Eds.), *Professional development and knowledge of
mathematics teachers* (pp. 85–103). Routledge.

Hexaflexagon template courtesy
of Vi Hart.