Primary task

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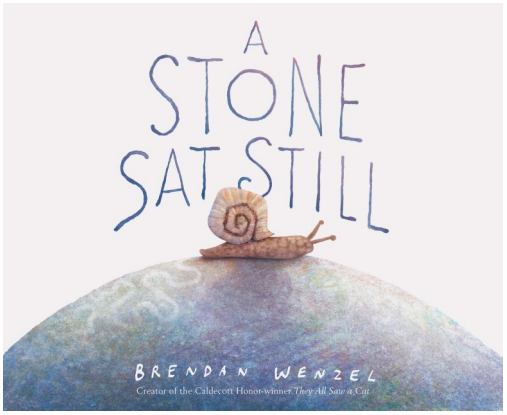
BIG IDEA: spatial Reasoning ~ size, perspective,
Composition and decomposition of 2D shapes, mental rotation and visualization.



Before Reading

Making math to self, math to world and math to math connections.

Begin with *notice & wonder?*

Annie Fetter (mathematics guru) asks us: *How much time are we spending noticing what our students are wondering?*

This applies well to this picture book by Brendan Wenzel.

Observe, consider, share rock experiences and wonderings.

Project the photos included here and have mathematical wonderings of size, perspective, and invite visualization (the ability to perceive complex spatial patterns and comprehend imaginary movements in space).

During Reading

Draw on the student experiences and storytelling. This book invites a slowed down read and plenty of visualization practice. Wondering….. *what math stories live in these pages?*
Size...texture...colour...smell..feeling….

Beware of the impact of the moose page visual. Children are in awe of the perspective of the size of the moose. Where *is the rock? Has it disappeared?* Seeing, recognizing and representing shapes from different perspectives.

After Reading

Allowing this storybook to act as inspiration for problem posing. *What math stories can we tell?*

If the stone was a kitchen …..what math stories live here. *How is a stone a kitchen? How does the author visualize this?*

If the stone was a throne…..*Who sits on a throne? Space...size….'taking on a view through use of the imagination' Very useful skills for later mathematics tasks that involve design.* Taking Shape, *Joan Moss p. 23*

If the stone was a marker….*Who sees this stone from above? What does the stone look like from above?*

If the stone was a map…...*How is an ant representing a map? What paths live on the stone?*

If the map is a maze…..a danger...a haven….a story….a stage.

Provide open-ended question and materials to provoke thinking and investigation. Students will make connections, create meaning and engage in sense-making as they consider mathematics structure, relationships, perspective and spatial reasoning. Invite students to develop their own mathematical stories with a problem included.