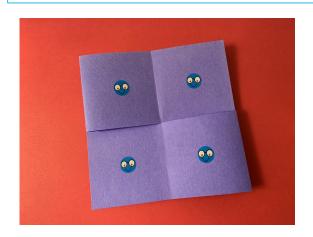


MAGIC SQUARE

GRADES PREK+



MATERIALS

- Paper
- Scissors
- Marker, crayons, or stickers



Allow children to observe how the Magic Square rotates through its center point and reveals new layers.



Use the materials from the list above and the tutorial video link below to create a Magic Square.



After creating the Magic Square, have children rotate the layers and try to predict what layer will come next.

KEY CONCEPTS

- Geometry
 - Fold to create a set of congruent squares, layers, rotation, and patterns.
- Engineering Follow a set of instructions and consider how a design meets a desired purpose..
- Algebraic Thinking Recognize arrays, proportions and patterns.

QUESTIONS TO ASK

- What shapes do you see in the Magic Square?
- Have you seen something like this before?
- What surprised you about the Magic Square?
- What patterns do you notice?
- Where do you see fractions in this model?

THINGS TO NOTICE

- How do they react when they see the layers revealed for the first time?
- What words do children use to describe what they are seeing?
- What shapes and fractions does the child recognize?
- Do they make any connections with something they have seen before?
- Are they able to discover a pattern in the layers?

RESOURCES

- <u>Tutorial Video</u>
- Hexaflexagon Video

