Home Connections
Math Activities

Grade 4

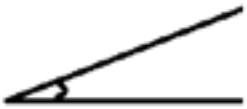
Geometry and Spatial Sense

Angle Search
What Figures Can You Construct
Playing Checkmate
Scavenger Hunt

Angle Search

1. Ask your child to find different angles in your home.
2. Have your child describe where the angle was found and what kind of angle it is on the attached chart.

Try to find at least one example of each kind of angle (acute, right, obtuse).



Acute Angle
Greater than 0°
Less than 90°

Obtuse Angle
Greater than 90°
Less than 180°

Right Angle
90°

Referencing angles to the benchmark angles of zero degrees (0°, 90°, and 180°) helps to develop spatial awareness of angles relevant in everyday life.

Let's Talk About It

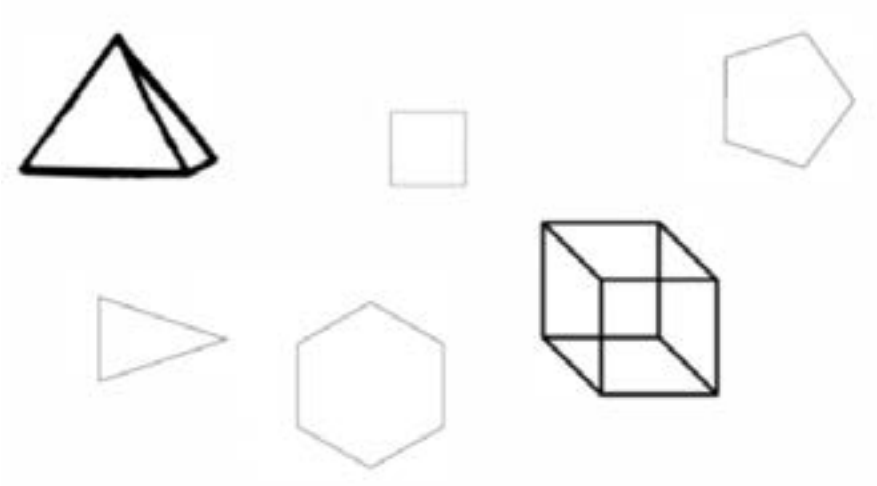
- Which angle did you find the most of?
- Which angle did you find the least of?

Angle Search

Where was the angle found?	What kind of angle is it?	Why is the angle important?

What Figures Can You Construct?

1. Ask your child to cut out the shapes on the attached page.
2. Tape the shapes together to form three dimensional figures.
3. Have your child make at least 4 three-dimensional figures from these shapes.



Each side of the prism or pyramid are called faces.

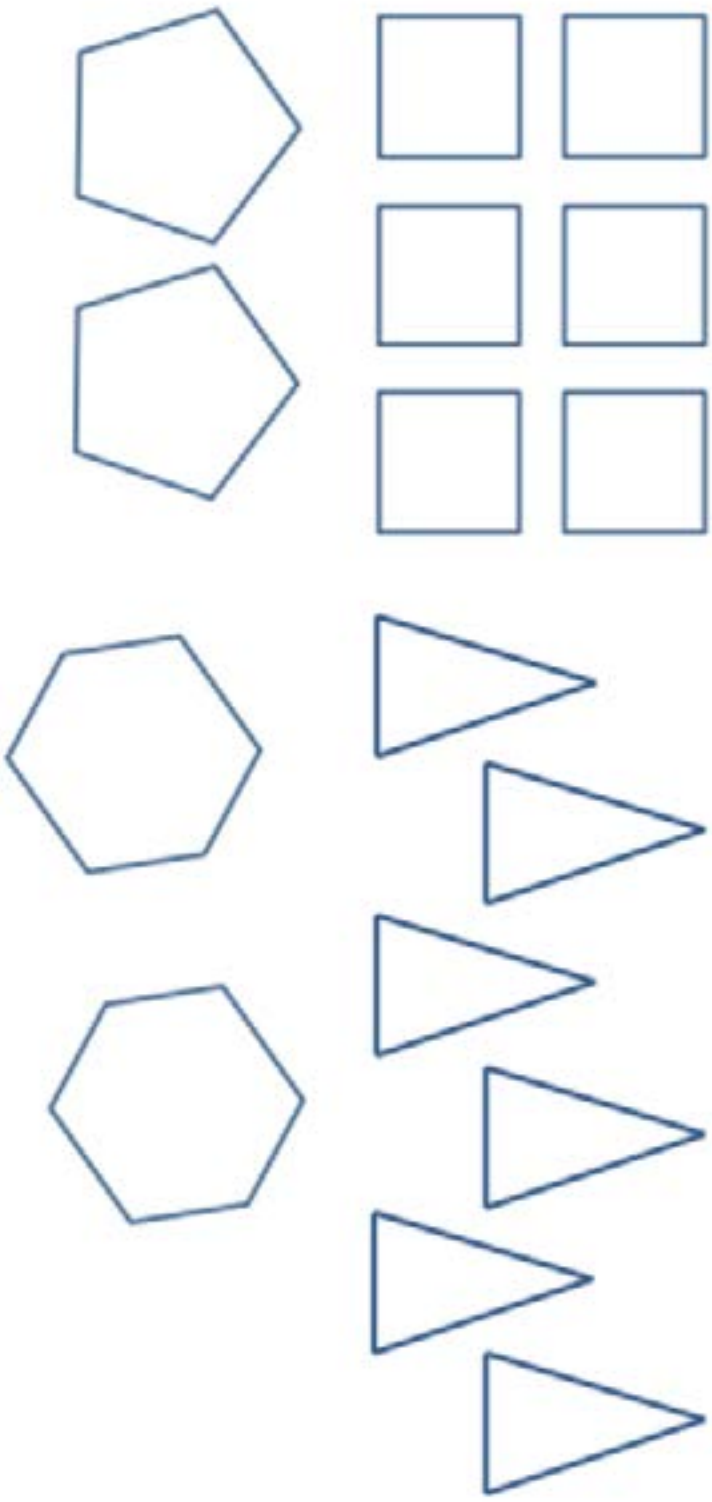
Let's Talk About It

- What was challenging about this activity?
- What do the figures have in common?
- How are the figures that you constructed different?
- What two-dimensional shapes do you see in your three-dimensional figures?

What Figures Can You Construct?

Name of three-dimensional figure	Amount and Type of Faces
Cube	6 Squares

What Figures Can You Construct?

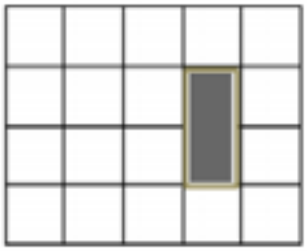


Playing Check Mate

Number of Players: 2

Rules:

1. Each player needs the two attached grids -*Your Shapes* and *Opponent's Shapes*.
2. Each player draws four rectangles of different sizes on the Your Shapes grid. Rectangles must not overlap and need to be traced on the grid lines. Do not show the location of the rectangles to your opponent.
3. Players take turns naming locations of where they think their opponent may have drawn a rectangle. For example D2 would be a hit and A1 would be a miss. Each player records the hits and misses on your Opponent's Shapes grid to help keep track of the guesses.



4. Players track the opponent's guesses on the Your Shapes.

When one player has located all of the other player's rectangles, the game is over.

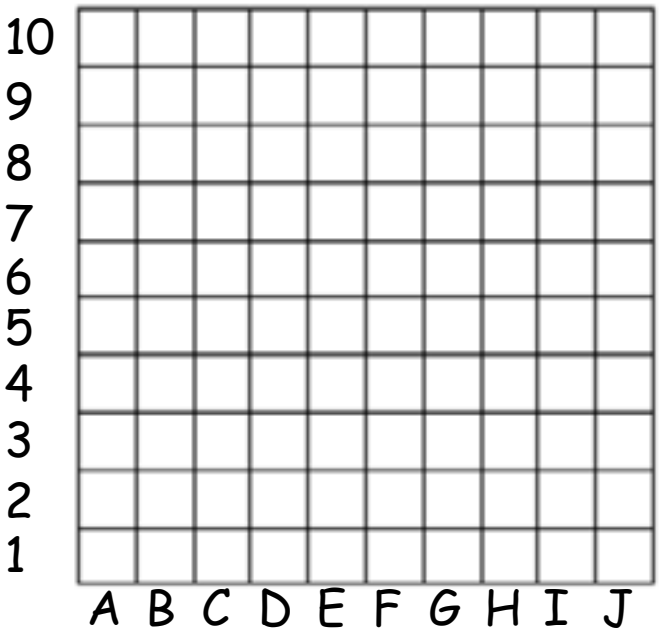
A grid system can be helpful in locating specific objects.

Let's Talk About It

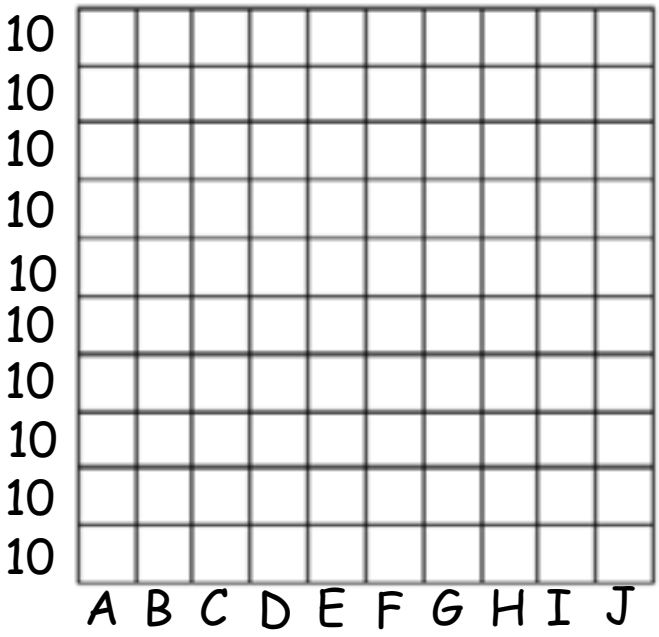
- What strategy did you use to try to win the game?
- How could you play the game differently?
- Would this game work if you used a different shape than a rectangle?

Playing Check Mate

Your Shapes



Your Opponent's Shapes

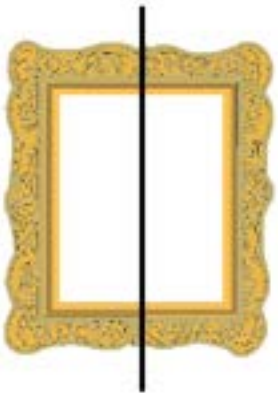


Scavenger Hunt

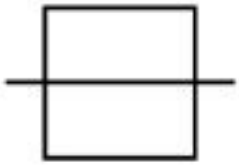
Help your child conduct a scavenger hunt to look for objects that are symmetrical.

For example:

Picture Frames



Line of Reflection



Water Bottle

Line of reflection is an imaginary line such that if you fold the object in half you get the exact same image on both sides of the line.

Let's Talk About It

- Show me the line that your object is symmetrical about.
- Why do you think symmetry is important?

Scavenger Hunt

Objects found in our home that could be symmetrical are:

1.

2.

3.

4.

5.