SYED ALI AUN RAZA SHAMSI

LESSON PLAN- 9TH - 12TH GRADE

UNIT OBJECTIVES

- 1.Students will learn to work with model making board, cardboard to make sculptures.

- 2. Take inspiration from Stijl painters Theo van Does burg, Abstract painter Piet Mondrian and the works of Mies Van Der Roh.

- 3. Students will learn to create Models of a walk-through version of Paintings.

LESSON 2

3D SOLIDS

Objectives- SWBAT

- to Study volumetric study of Platonic solid .
- Make models out of modelling board/cardboard.

VOCABULARY WORDS

- Solids – Are the 3-Dimensional forms of shapes.
- Shapes- a geometric figure such as a square, triangle, or rectangle. Shapes are the basic forms that combine to make other 2D shapes and 3D Solids.
- Flaps- Excess parts of the paper that folded and used to help glue two papers together.
- Construction Lines- Temporary lines used for reference.

DISCUSSION

At the start of the class Students will learn to look at 3D solids all around us in the real world.

I will show them examples of "the Pyramids of Giza and Peru", obviously as an example of Pyramidal solids,

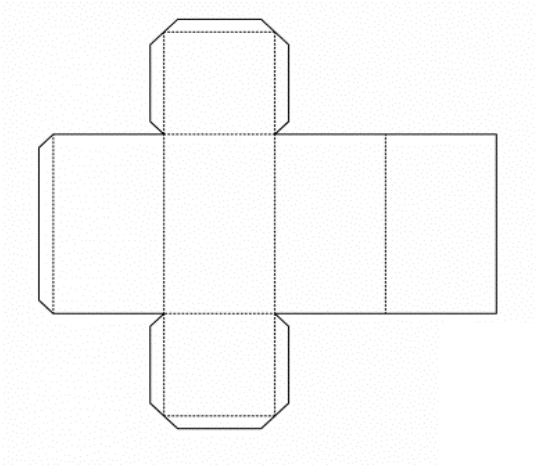
"432 park avenue building-NYC" as an example of cuboids. "Apple store" on 5th avenue as example of cube. "Leaning tower of Pisa" as an example of cylindrical solids.

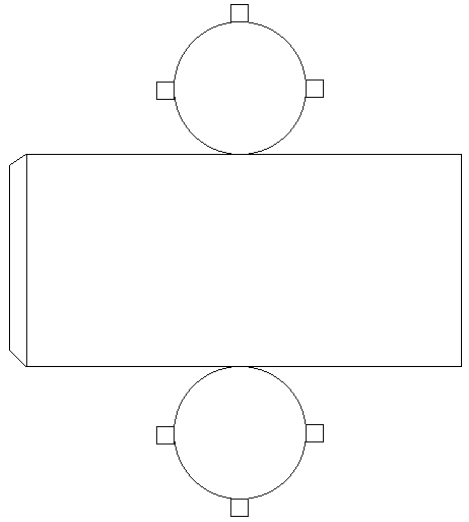
Traffic cones as example of Conical shapes. Ice cream cones etc.

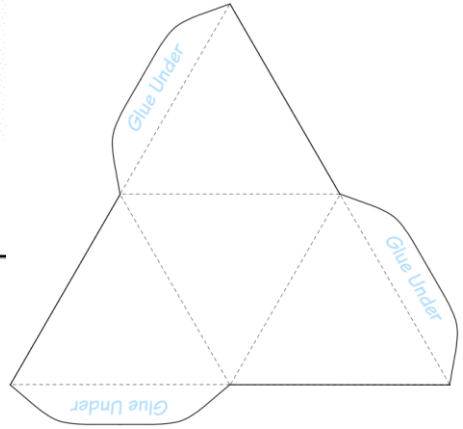
Students will learn to look at the different materials, sizes, color, and other properties of the real-life solids from the examples shown in class. They will also discuss how solids are different from shapes

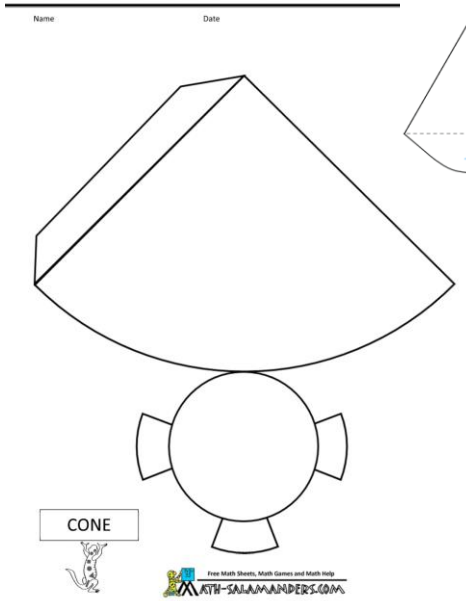
TEMPLET HANDOUTS

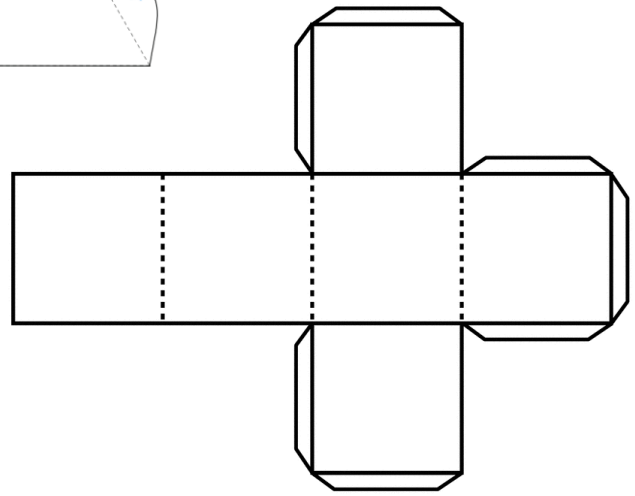
- Students will be giving handouts with a “folded-out” 2D version of solids such as cube, cuboid, cone, cylinder, prism, and pyramid.
- I will start a class discussion with the students on what 2D shapes they see in each one of the “folded out” shape sheet provided to them. Through discussion will guide them to notice that all the 2D shapes they see on the pages are connected or share their construction lines with the other shape.
- Students will also be provided actual wooden cuboid and cubic solids. For the same discussion

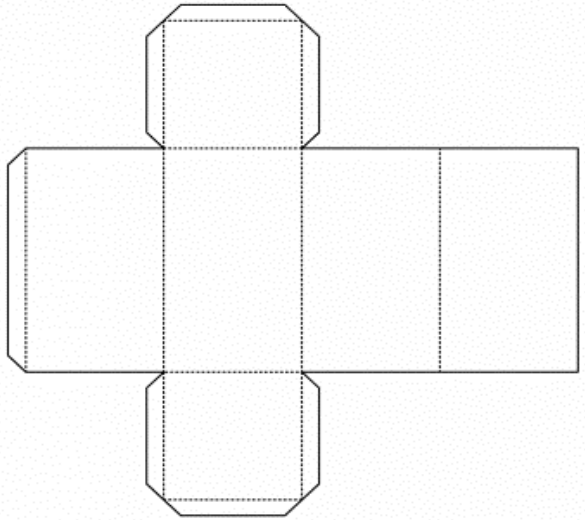




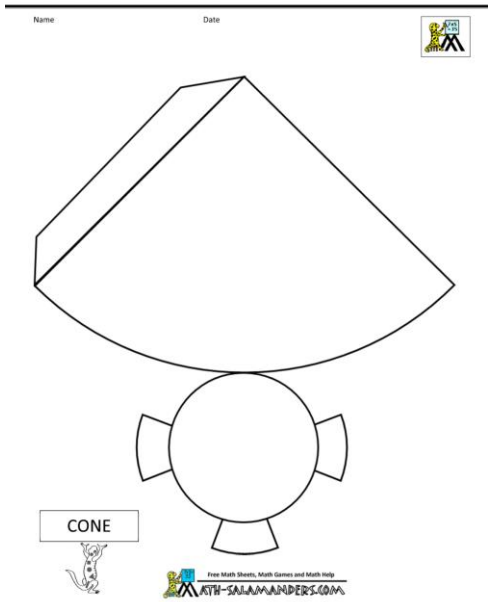




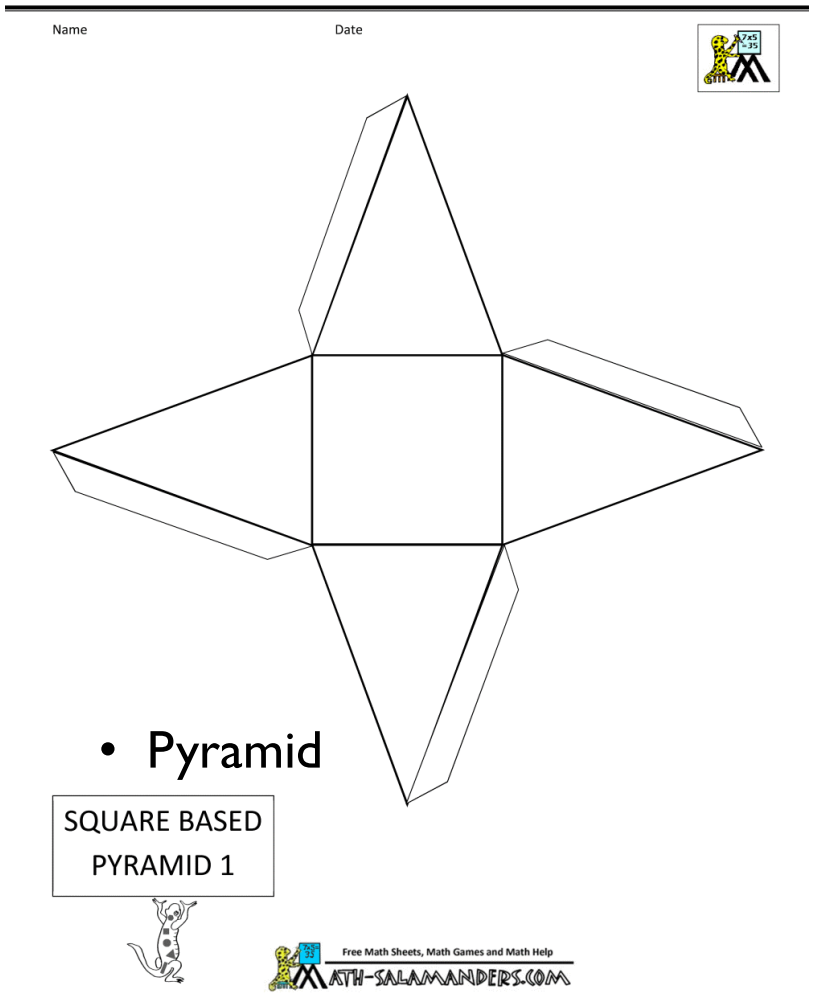




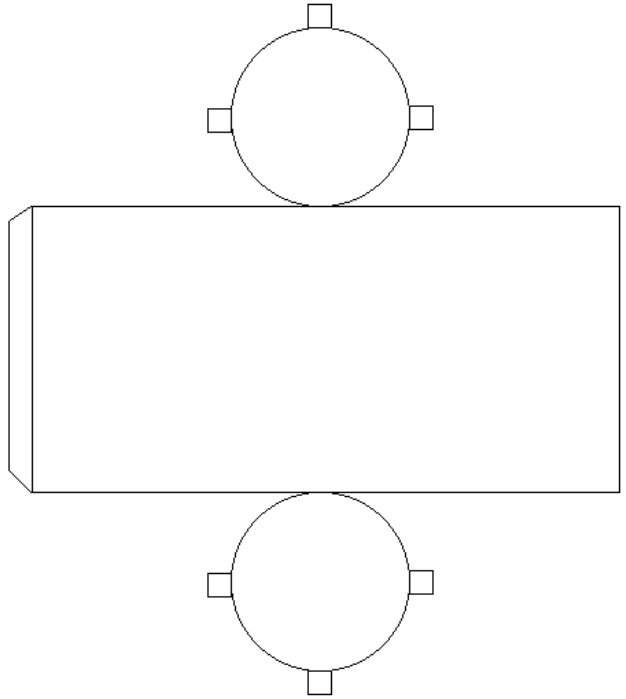
- Cuboid Solid



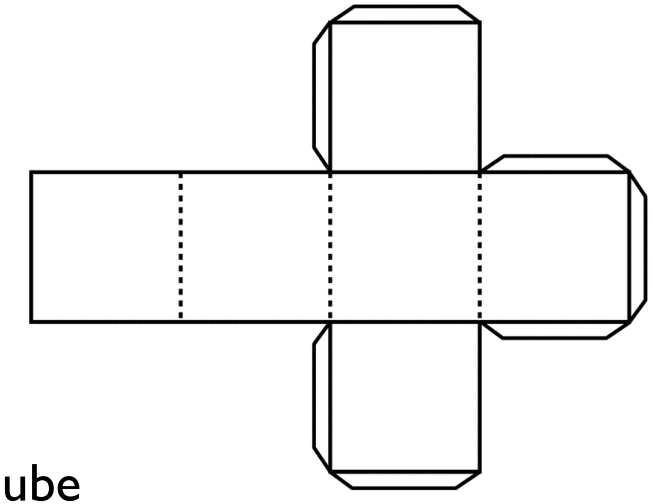
- Conical solid



- Pyramid



- Cylindrical solid

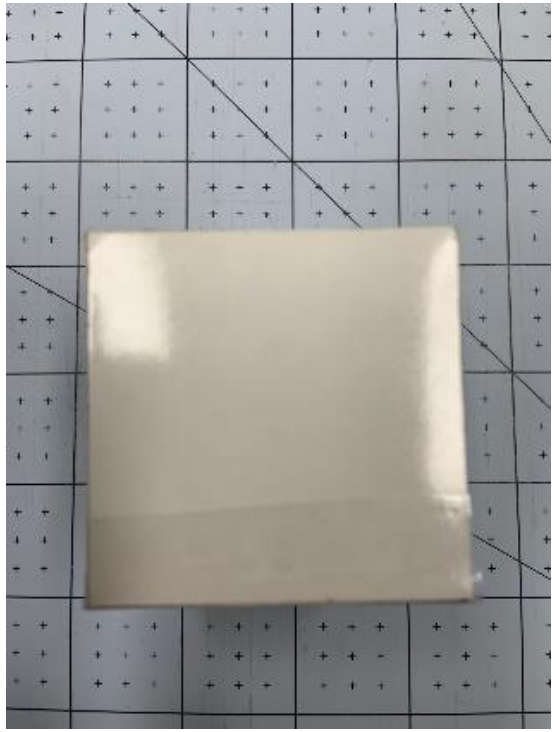


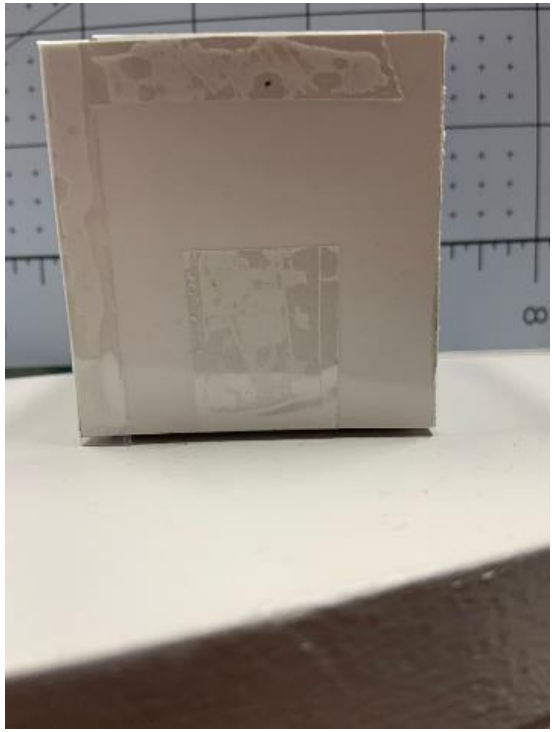
- Cube

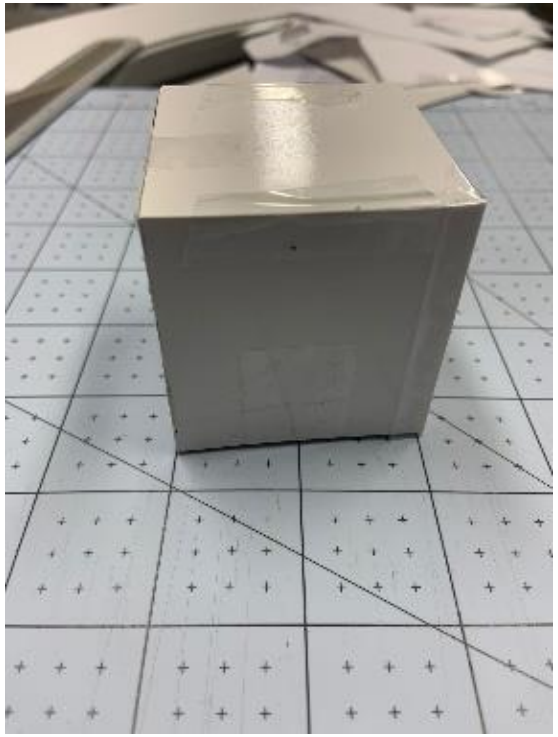
INSTRUCTIONS

- Cut ONLY the outline of each one of the 2D foldouts you have on your table of the 3D solids.
- Paste the cutout onto a piece of cardboard or Thicker paper and cut the outline once again.
- Once the outline is cut, I will use a ruler and back of a box cutter to score all the construction lines of the shapes and the flaps.
- Fold them all in and assemble the 2D folded out shape into the 3D solid, by gluing the flaps.

FINAL PIECE EXAMPLE







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