University of Mary Division of

Education Instructional Sequence

Grade Level: 3rd

Subject(s) Area: Art, Math

Materials Needed:

* Types of Quadrilaterals Handout
* Quadrilateral Robots Worksheet
* 12” x 18” sheet of black paper
* Variety of colored construction paper
* Scissors
* Glue stick

Standards:

* 3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
* 4.2.1 Know the differences among visual art structures and functions.

Objectives:

* Students will identify specific the visual art elements of shape in a work of art that pertain to its structure.
* Students will create their robot using only the quadrilateral shapes of squares, rectangles, rhombuses, parallelograms, trapezoids and kites.

Learning Activities:

* Play YouTube video “Even better than The Shapes Song! (4 Sided Shapes - Quadrilaterals) Fun Learning Math!” <https://www.youtube.com/watch?v=k7oLm94kQEE&nohtml5=False>
* Pass out the quadrilaterals handout.
* Draw each quadrilateral shape on the board.
  + Square, rectangle, trapezoid, rhombus, parallelogram, and kite
* Show PowerPoint of Pablo Picasso’s paintings
  + Ask students to raise their hands to identify different quadrilaterals in the paintings
  + The last slide will show examples of quadrilateral robots
* Instruct students that they will be making a robot using only these shapes. Encourage them to use their imaginations to create their robots.
* Demonstrate how to cut out quadrilateral shapes conserving paper
* Ask students to take out scissors and glue from their desks
* Have “delivery” student hand out a 12” x 18” sheet of black paper to each desk
* Have a variety of colored construction paper in piles on Mrs. Eder’s desk
* Invite groups by number to take up to 5 sheets of each from Mrs. Eder’s desk
* Have them cut out quadrilateral shapes for the body, head, arms, & legs using the primary colored construction paper (students should not glue yet).
  + Allow students like to use a pencil at this step and first draw the shape before they cut it out if they would like.
  + Other students like to cut without drawing first.
  + Let the artists decide how they would like to solve this.
* Encourage student to describe the quadrilateral shapes they are making to one another.
* Have students cut out smaller details for the robot, such as the eyes, mouth, hands, feet and other smaller shapes. Remind students that they are using only quadrilateral shapes.
* Once students have cut out and roughly assembled all of the pieces on the black paper, have them raise their hand to check their work
  + Once okayed, hand them a glue stick so they can begin gluing down each piece.
* When finished, have students return glue stick to basket on Mrs. Eder’s desk
  + Put scissors back in desk
  + Put big sections of colored construction paper in a pile on Mrs. Eder’s desk
* Put scraps of paper in recycling bin
* Have students identify how many different types of quadrilaterals (Square, rectangle, trapezoid, rhombus, parallelogram, and kite) they used for their robot on their worksheet
* Have students respond to writing prompts on worksheet.
* Share artwork with classmates, comparing and contrasting the different parallelograms used in the work and their writing prompts
* When everyone is finished, ask students to place the artwork and piece of paper together in a pile on Mrs. Eder’s desk

Assessment:

* Grade based on participation, effort, only using quadrilaterals, and correctly identifying each type of quadrilateral used in their art project.
  + Monitor students closely to ensure students understand to only use quadrilaterals.
* Formative assessment on rubric

Reflection:

* I think this went really well! Students seemed to engage.
* The Quadrilateral Song Video on YouTube was a great start to engage the students and it was super catchy!
* I was surprised with how engaged and responsive the students were to Pablo Picasso artwork.
* I think I did a good job planning out the procedures for starting.
* Unfortunately, it took a lot longer than I had originally planned. Of course, some students were done quickly, but for most it took awhile. I was really impressed with their creativity, though.
* Because there are so many components to this, next time I am going to allot more time, or have to cut out some parts. I could also use a smaller sheet of paper so the whole artwork is condensed.
* I hope that this was a good continued introduction to the topic, as we did not get into details of each, but were reintroduced to the types of quadrilaterals and can hopefully recognize each better.

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| ART RUBRIC  **Project**: Quadrilateral Robots **Student**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Standards:  4.2.1 Know the differences among visual art structures and functions. | | | | | |
| **Outcomes** | **Projects Outcomes Criteria** | 4 | 3 | 2 | 1 |
| **Basic Skills** | *Directions, Requirements*  *Craftsmanship* | Complete understanding of class dynamics  Exceptional skill with media | Very good idea of the class  Above average art skills | Barely average grasp of directions  Shows some skill | Does not meet expectations |
| **Higher Level Thinking Skills** | *Originality Creativity* | Unique, very original, individual | Usually original, expressive | Seldom original  Work possibly copied | No original ideas |
| **Apply Knowledge Lifelong Learner** | *Design Principles / Elements* | Complete understanding, use of elements and principles | Has very good idea of art intent | Unclear thinking Little use of principles and elements | No concept of art principles or elements |
| **Basic Social Skills** | *Teamwork- Communication* | Always Contributes- Excellent Communication | Contributes most of the time  Gets along | Seldom contributes Sometimes uncooperative | No attempt to communicate Argumentative or Disinterested |
| **Responsible Global Citizen** | *Attitude , including*  *Attendance* | Very helpful, positive and considerate  Never misses Takes total responsibility for work missed | Not too helpful  Absences each grading period Usually makes up work missed | Not very helpful or cooperative  Often misses Sometimes tries to make up work missed | Uninvolved  Many absences each grading period Feels no responsibility to make up work missed |