

Inquiring Minds Visit

TEKS Potentially Covered

for Grades 2-5

Given the breadth and depth of Science, Technology, and Math TEKS, a full list of possibilities for discussion around art would be impossible. The recurring themes and concepts listed below are revisited at each grade level, growing in complexity and specificity as students matriculate through each grade. Thus, the Blanton's objective is to foster age-appropriate discussion and exploration of various artworks and their interplay with STEM concepts.

Teachers who bring student groups to participate in an *Inquiring Minds* visit can expect that the following TEKS may be addressed during a gallery lesson. **We clearly understand that the classroom teacher is the expert in content; our role is to encourage students to discover creative connections between art and the world of STEM.**

** Please note that any follow-up activities in the Blanton WorkLab studio or classroom extensions on the home campus expand the TEKS that might be addressed.*

- [Example of art and activities for a 3rd grade math guided lesson](#)
- [Example of art and activities for a 4th grade science guided lesson](#)

SCIENCE TEKS

Knowledge and skills addressed will be scaffolded according to grade level. Students will be encouraged to:

- Ask questions, make inferences, develop hypotheses and theories, define problems, and propose solutions based on observation
- Make comparisons based on observation and reason
- Identify cause-and-effect relationships
- Describe and classify physical properties of objects and systems
 - Size, shape, color, texture, weight, material
- Examine parts and whole systems
- Observe various kinds of energy, patterns, cycles, systems, and relationships of the natural world
 - Seasons of the year
 - States of matter (and changes in them)
 - Push/pull, magnetism, thermal energy, sound energy, light energy, mechanical energy, potential energy (gravity, chemical, elasticity)
 - Changes in weather and climate
 - Sun, moon, Earth, stars, clouds, galaxies
 - Water cycle
 - Weathering, erosion, creation of landforms
 - Ecosystems (communities, populations, organisms) and food chain
 - Impact of humans on natural resources (renewable and nonrenewable – wind, water, sunlight, plants, animals, fuels) and conservation
 - Laws of motion

MATH TEKS

Knowledge and skills addressed will be scaffolded according to grade level. Students will be encouraged to:

- Identify characteristics of objects that can be measured
- Apply mathematics to problems arising in everyday life, society, and the workplace
- Use manipulatives, paper and pencil, mental math, and estimation to solve problems
- Identify two-dimensional shapes (circles, triangles, rectangles, squares, rhombuses, hexagons, polygons, trapezoids, parallelograms)
- Identify three-dimensional solids (cylinders, cones, spheres, cubes, triangular prisms) in the real world
- Create two-dimensional shapes using a variety of materials and drawings
- Decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles
- Give measurable attributes of an object, including length, capacity, weight
- Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
- Use measuring tools to measure the length of an object
- Identify points, lines, line segments, rays, angles (acute, right, obtuse, equilateral), perpendicular and parallel lines
- Identify and draw one or more lines of symmetry

TECHNOLOGY TEKS

Knowledge and skills addressed will be scaffolded according to grade level. Students will be encouraged to:

- Identify a problem and break it down into smaller pieces
- Identify patterns and make predictions based on them
- Demonstrate creativity and innovation as described in the innovative design process:
 - Persistence
 - Effective communication
 - Following directions
 - Brainstorming
 - Mental agility
 - Metacognition
 - Problem-solving and questioning