



dream ARCHITECTURE

2020-2021 OVERVIEW

TOPIC: Draw Your Dream Library

GRADE: K – 5

CONTENT: Science, Technology, Art, Math

Become an architect and design your dream restaurant Use prior knowledge, research and imagination to create a drawing of a safe, interesting, fun, and healthy restaurant.

CHALLENGE QUESTIONS

CRITERIA

IMAGINE/PLAN

- What material(s) will be used to build your restaurant?
- How will your restaurant affect the environment?
- What will your kitchen, dining room, and clean-up areas look like?
- What kind of food will you have in your restaurant?
- How will people eat in your restaurant?
- How will you keep students and others safe?
- How do you make your restaurant comfortable and accessible for everyone?
- What makes your restaurant special?

- 8 ½x11 OR 11x17 paper
- Mixed media: crayons, markers, pencils, etc.
- MUST have a “Dream Statement” written on the back and completed dreamform
- Complete challenge in allotted time

- brainstorm possible solutions and ideas
- use technology for research
- engage in inquiry and logical reasoning
- list ideas
- plan design

KINDERGARTEN
COS

SCIENCE (ENGINEERING
EMBEDDED)

TECHNOLOGY

MATH

6. Identify and plan possible solutions conducive to meeting

6. Identify uses of technology in daily living.

18. Correctly name shapes regardless of their orientations or overall size.

the needs of plants and animals native to Alabama.

10. Ask questions to obtain information about the purpose of weather forecasts in planning for, preparing for, and responding to severe weather.

20. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts, and other attributes.

FIRST GRADE
COS

SCIENCE (ENGINEERING
EMBEDDED)

TECHNOLOGY

MATH

6. Identify uses of technology in daily living.

19. Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes.
20. Compose two-dimensional shapes or three-dimensional shapes to create a composite shape and compose new shapes from the composite shape.

SECOND GRADE
COS

SCIENCE (ENGINEERING
EMBEDDED)

TECHNOLOGY

MATH

3. Demonstrate and explain how structures made from small pieces can be disassembled and then rearranged to make new and different structures.

6. Identify uses of technology in daily living.

14. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
15. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
16. Estimate lengths using units of inches, feet, centimeters, and meters.

THIRD GRADE
COS

SCIENCE (ENGINEERING
EMBEDDED)

- 4. Apply scientific ideas about magnets to solve a problem through an engineering design project.
- 15. Evaluate a design solution that reduces the impact of a weather-related hazard.

TECHNOLOGY

- 7. Explain the influence of technology on society.

MATH

- 20. Recognize area as an attribute of plane figures, and understand concepts of area measurement.
- 21. Measure areas by counting unit squares.
- 24. Understand that shapes in different categories may share attributes, and that the shared attributes can define a larger category.

FOURTH GRADE
COS

SCIENCE (ENGINEERING
EMBEDDED)

- 4. Design, construct, and test a device that changes energy from one form to another.
- 5. Compile information to describe how the use of energy derived from natural renewable and nonrenewable resources affects the environment.

TECHNOLOGY

- 7. Explain the influence of technology on society.

MATH

- 23. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
- 26. Draw points, lines, line segments, rays, angles, and perpendicular and parallel lines. Identify these in two-dimensional figures.

FIFTH GRADE
COS

SCIENCE (ENGINEERING
EMBEDDED)

- 3. Examine matter through observations and measurements to identify materials based on their properties.
- 16. Collect and organize scientific ideas that individuals and communities can use to protect

TECHNOLOGY

- 7. Explain the influence of technology on society.

MATH

- 25. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
- 26. Classify two-dimensional figures in a hierarchy based on properties.

Earth's natural resources and its environment.

ADDITIONAL INFORMATION FOR RESEARCH AND EXTENSION

<https://pos.toasttab.com/blog/on-the-line/restaurant-architect> (“How a Restaurant Architect can Make your Dream a Reality”)

<https://www.fohlio.com/blog/psychology-restaurant-interior-design-part-5-architecture/> (“The Psychology of Restaurant Design”)

<https://www.architecturaldigest.com/gallery/best-modern-coffee-shop-design-slideshow> (“12 Amazing Modern Coffee Shop Designs”)

<https://www.posist.com/restaurant-times/resources/restaurant-design-tips-2.html#:~:text=Ideally%2C%20restaurant%20planning%20and%20design,total%20sync%20with%20each%20other.>
 (“How to Create a Stellar Layout and Design for your Restaurant”)

<https://www.arcwestarchitects.com/restaurant-design-the-design-process/> (“Restaurant Design | The Design Process”)

<https://www.dezeen.com/2020/05/29/mass-design-strategies-restaurants-in-response-to-coronavirus/>
 (“MASS Design Group Outlines Redesign Strategies for Restaurants Following Coronavirus”)

<https://www.misedesigns.com/restaurant-design-guidelines/> (“Restaurant Design Guidelines”)

https://www.scottsdaleaz.gov/Assets/ScottsdaleAZ/Design/GL_Restaurants.pdf (Restaurant Design Guidelines – City of Scottsdale, AZ)

<https://www.forbes.com/sites/brandonschultz/2020/08/31/how-a-restaurant-can-safely-transport-you-with-more-than-just-cuisine/#593201cd2ea0>

(“How A Restaurant can Safely Transport You with More than Just Cuisine”)

<https://www.architecturaldigest.com/story/restaurant-design-covid-19> (“How Restaurant Design is Changing As a Result of COVID-19”)

<https://commercialobserver.com/2020/04/coronavirus-design-architecture-offices-grocery-stores-fast-casual-food/>
 (“Designing Offices, Restaurants, & Grocery Stores in the Age of Coronavirus”)