

HS 3D Animation

Challenge

Create an animation of what you miss most about being away from school.

Going Beyond Suggestion:

Animate yourself thinking about what you miss.

HS Chapter Team

Challenge

Demonstrate the ability of a TSA chapter to still have proper chapter meetings virtually, include various elements from Robert's Rules of Order as you conduct your meeting.

Going Beyond Suggestion:

Critique your, or other videoed meetings, identifying elements from Robert's Rules of Order which have either been properly carried out or misused.

HS Coding

Challenge

Create a program which allows your TSA adviser to stay organized even at home. This should include keeping track of chapter finances, attendance in virtual meetings, and competition readiness.

Going Beyond Suggestion:

Make a tutorial video showing your advisor how to use your program.

HS Computer Aided Design 2D, Architecture

Challenge

Students across Kansas are needing some time out of the house, but most are unable to go anywhere outside of their yard. Design a Kid's Dream Hangout spot in the backyard. It should be between 300-500 square feet and should have all the amenities a kid would need to let the imagination run wild as they do to. Consider the lot to have a 15% grade (slope) and include all drawings necessary to showcase the Hangout.

Going Beyond Suggestion:

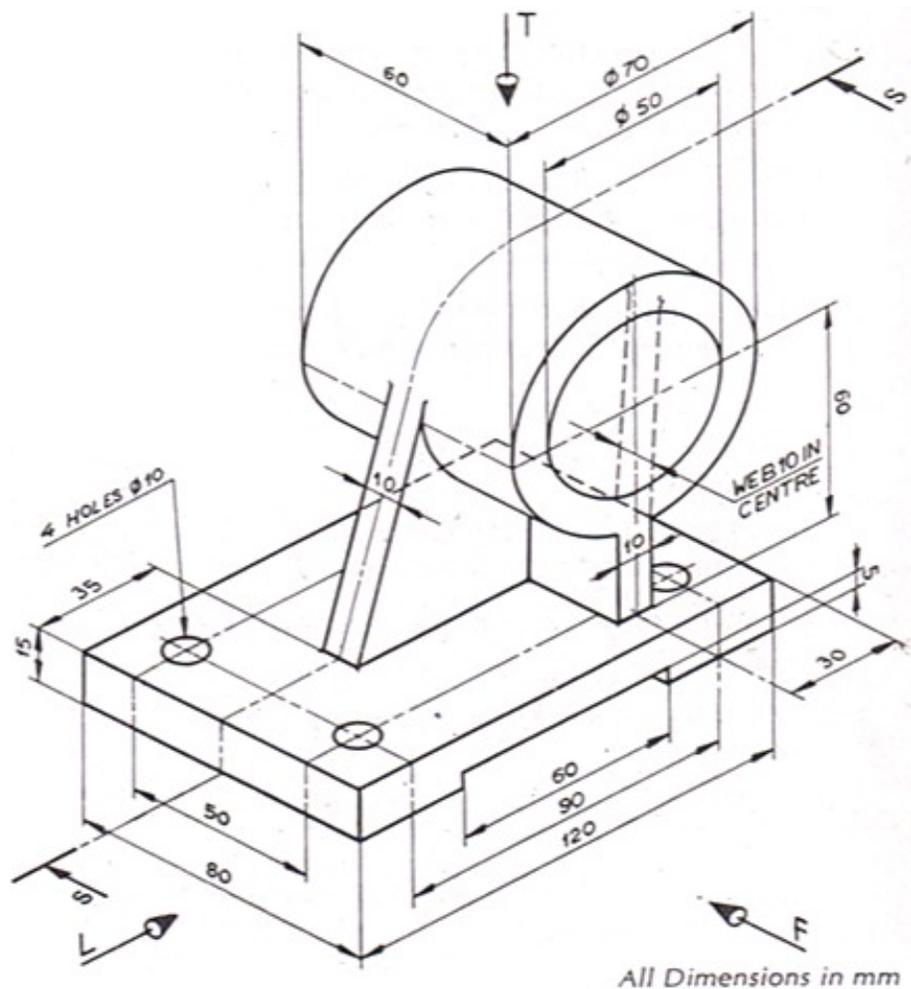
Some kids need to be really active, include active climbing, running, jumping, etc. elements.

HS Computer Aided Design 3D, Engineering

Challenge

Using the isometric drawing, recreate the isometric drawing as well as producing a set of orthographic drawings showing Front, Top, and Side

- Include Section drawing for view "S"
- Show Centerlines
- Dimension drawing in mm
- Create a title block with ID#, date, scale
- Title the drawing "Bracket"



Going Beyond Suggestion:

Create plans for what this piece attaches to.

HS Essays on Technology

Challenge

Prepare an essay on the "The Impact of Covid-19 on STEM Fields."

Going Beyond Suggestion:

Brainstorm ways to improve any issues you identify as negative.

HS Extemporaneous Speech

Challenge

Have a parent, teacher, or other responsible adult give you a topic which pertains to TSA, your community, how technology can benefit a group, success through hands-on learning, etc. and video your speech.

Going Beyond Suggestion:

Follow the spirit of the competition and make sure your speech is extemporaneous.

HS Forensic Science

Challenge

Create an interactive, resettable crime scene which could be used in to demonstrate to others how to critically assess a crime scene. In the spirit of Whodunits and escape rooms, make observation of clues and critical thinking a staple of solving your crime scene.

Going Beyond Suggestion:

Create a series of tutorial videos which demonstrate clearly how to use the skills needed for analyzing a crime scene.

HS On-Demand Video

Challenge

Create a 1 minute movie trailer which showcases your life under the "Stay-at-Home" order using the theme of a typical genre (comedy, romance, horror, etc)

Going Beyond Suggestion:

Create storyboards for the opening scene.

HS Photographic Technology

Challenge

Create a multimedia presentation showcasing how people in your community/household are handling the "Stay-at-Home" orders.

Going Beyond Suggestion:

Use the presentation to creatively sell a product.

HS Prepared Presentation

Challenge

Create and video a presentation over the topic "*TSA: Changing Lives, Changing Futures.*"

Going Beyond Suggestion:

Use a virtual meeting tool to give your speech and have a Q&A session with participants.

HS Promotional Design

Challenge

There will be a whole new class of freshman coming into the high school next year who would love to join TSA if they only knew what it was all about. Let them know! Design several elements to be used in a marketing campaign for TSA in your school.

Going Beyond Suggestion:

Run your campaign and report on the results and feedback you get.

HS System Control Technology

Challenge

Design and construct or simulate a contactless restaurant. There should be a way for orders to be automatically delivered from the kitchen to multiple tables and dirty dishes cleared to the washer. There should also be an ordering kiosk which allows for at least 2 food choices, 3 side choices, and 2 drinks as well as inputting which table the party is sitting.

Going Beyond Suggestion:

Add some automated amenities for customers of your restaurant.

HS Technology Bowl

Challenge

Design a new "look" for how Technology Bowl is conducted at TSA State. This could be a new format, new control system, etc.

Going Beyond Suggestion:

Write your own Technology Bowl questions and try them out on somebody. Address how others performed on your questions.

HS Tech Problem Solving

Challenge

Almost every student in the country is faced with having limited resources at their disposal. Create your own problem solving challenge which can be solved with the basic supplies most students have in their homes. Make sure to provide a possible solution.

Going Beyond Suggestion:

Challenge someone virtually to complete your problem then evaluate their design.