

*Design a
Dream Home
for Your
Desk Pet:
STEM Challenge*



Problem:

Your desk pet has been dreaming of a new home.

It needs your help designing and building the home of its dreams.



Challenge Constraints:

You will design and build a new home for your desk pet.

As the engineer of this project, your design must meet certain criteria.

Your desk pet's home must:

- Be made using 3 or more different materials.
- Be sturdy and not fall apart easily.
- Fit inside the box with the lid closed.



Materials Available:

Choose 3 or more materials you would like to use to construct your desk pet's new home.

Carefully plan how you will use each of the materials you choose and estimate how many of each item you will need.

Be sure not to take more materials than you need.

As you are building you may find that you need more or less materials, you can always get more materials if you need them and return any unused materials.

You will each receive your own box to use as your desk pet's home. You may use your own glue sticks, scissors, crayons, and markers.

You may choose from the following materials:

- Tape
- Liquid glue
- Craft sticks
- Yarn
- Straws
- Cotton balls
- Cloth/fabric
- Aluminum foil
- Paper
- Foam plates
- Pipe cleaners

What's Your Plan?

A good engineer always creates a plan before starting construction.

Take a few moments to decide what steps you will take to build your desk pet's home.

Remember, the home should be sturdy, fit inside your box with the lid closed, and include 3 or more different materials

Now, sketch your design, this will be your "blueprints" for building your prototype.

Be sure to include labels in your sketch.



Construction Begins:

You will begin building your desk pet's dream home today!

Be sure that your pet's home is sturdy, fits inside your box with the lid closed, and includes 3 or more different materials.

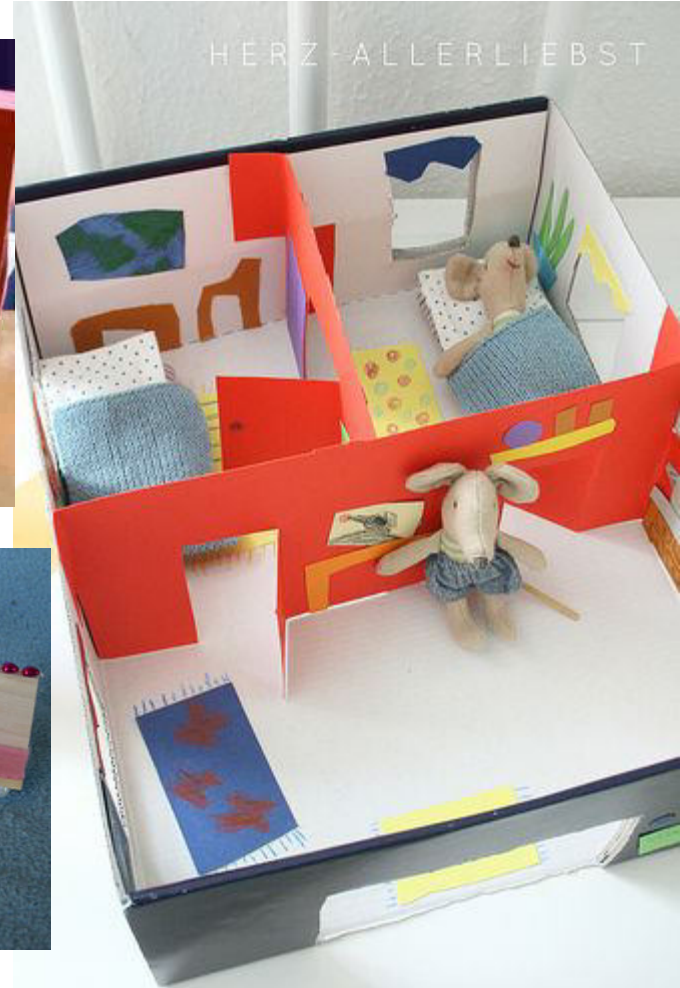
If your design doesn't go as you originally planned, you may need to adjust your blueprint.

Engineers learn from their mistakes and aren't afraid to try new things!

GET CREATIVE!



A little inspiration...





Time to Share!

Present your project to the class.

Be sure to speak loudly and explain each part of your project.



Reflection:

Answer the following questions on your paper.

1. What was your favorite part of this challenge? Why?
2. How could you improve your design?
3. What did you learn from this challenge?

Draw a sketch of your final design.

