design your own LEGO creation!

challenge submissions due April 5th, 2020 by 11:59 pm

Do you ever think about how buildings are made? I don't know all the nuts and bolts myself, but I can tell you that construction workers don't just go to a site and start building without a plan! Tons of work goes into designing and planning a building, and teams of people are needed to make it happen. This week, we want you to practice planning before you start a project, and then following that plan while you construct. If you have LEGO at home, great! If you don't, no worries! Any building material will do including wooden blocks, non-LEGO building bricks, cereal boxes, your little sister, or other toys! But before you get to building, we want you to plan it by drawing, writing, or designing with a computer.

official challenge instructions . . .



Step 1) Design your project. Your project can be anything – a house, an office building, a park, a vehicle! The sky, and your imagination, is the limit! Create a plan on paper or computer, and be sure to save it for later! Your plan could be words, drawings, pictures, or complex blueprints. How you plan is up to you, just be detailed so you and others can follow your plan later.

Step 2) (OPTIONAL) Build your project. If you want to, and have time, use your new fancy plans and designs to construct your project. Remember, follow your plans as best you can. You may notice that you need to make some changes as you go and that's okay. Just try to

take some notes by writing on your plans, typing on your computer, or taking pictures so we can see how it went for you. If you don't have time to build, don't worry. We will try to find some LEGO or building masters to bring your plans to life!

Step 3) Submit your plan, your build, and answers to the challenge questions (below). Submit your LEGO designs by uploading a picture, drawing, computer file, or video to us by email (or ask a parent or guardian to do that part for you). To participate in the challenge, we need your plan, pictures of your build (if you did one), and responses to the challenge questions.



Challenge Questions

Answers to these questions can be typed in an email, can be written and scanned and attached to an email, or you can take a picture of your answers to attach to the email. You can ask a parent or guardian to help you.

- 1. What is your first and last name?
- 2. What is the name of your 4-H club?
- 3. What did you like about this challenge?
- 4. What part of this challenge was not so fun?
- 5. What did you learn while completing this challenge?

Email your design, build photos (if you did one), and answers to the Challenge Questions to Ashley Hall at <u>a.hernandez-hall@wsu.edu</u> by April 5th, 11:59 pm.

Step 4) Check out other challenge submissions! We will be uploading the challenge submissions to our Snohomish County 4-H website on our *NEW* 4-H Stay Home, Stay Healthy Resources page: http://extension.wsu.edu/snohomish/4h/4-h-stay-home-stay-healthy-resources/. Come visit the site the week of April 6th to view and comment on other challenge submissions (remember to be kind and encouraging)!! If you want to go the extra mile, try building some of the projects that were submitted and email us pictures! We would love to see your builds!

Step 5) Be prepared for an awesome virtual badge!

There you have it. You have just completed the first ever Snohomish County 4-H Stay Home, Stay Healthy Weekly Challenge! Awesome!!

We can't wait to share your awesome work with the world.

Software to help you create your designs (with parent permission of course!!!)

LEGO Digital Design Software – free and easy to download) https://www.lego.com/en-us/ldd

LeoCAD - Free LEGO design software: https://www.leocad.org/download.html

For advanced computer users and older youth, try playing around with these programs (with parental permission of course!!!)

Fusion 360, an application by AutoDesk – free for students and educators: https://www.autodesk.com/products/fusion-360/students-teachers-educators

Blender – 3D modeling software - Free for everyone: https://www.blender.org/download/

Snohomish County 4-H Team

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