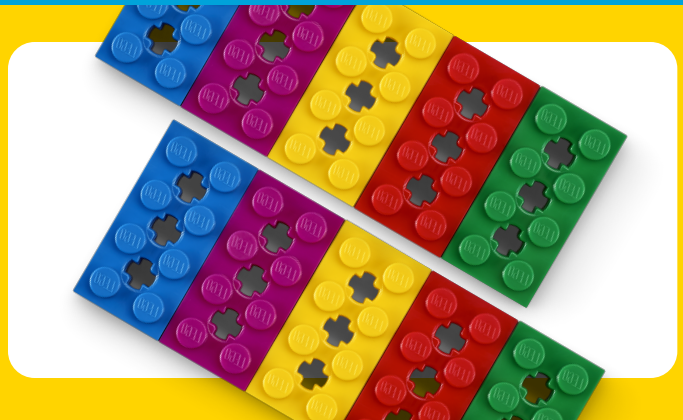


Play With Patterns

Look around – can you notice any patterns? From the bricks in your school walls to the notes in your favorite song and the designs on your best outfit, patterns are all around us everywhere.

HERE'S YOUR CHALLENGE

Can you make a structure that includes a creative pattern with the LEGO® bricks that you have available?



01/05 Prepare

Before you start building, think about what makes a successful and creative pattern:

- Do you notice any patterns around you?
- What are different types of patterns? AB repeating patterns? Addition or multiplication patterns?
- Why are patterns useful?
- What makes a pattern interesting, fun, or visually appealing?

02/05 Plan

Before you start creating, determine what materials you have available and how you might use them:

- What LEGO bricks do you have that you can use?
- Do you notice any similarities or differences in the bricks? Think about the size, shape, and color.
- What limitations do you have, and will this influence your build?
- What type of structure do you want to create?
- Can you draw a model of what you hope to create?



VOCABULARY

Pattern

Repeat

Shape

Alternate

03/05 Create

Now let's build! Use the LEGO bricks you have to create a structure that includes a pattern. You could build a house, a spiral staircase, a tree, or whatever you can imagine! As you build, check to see if your pattern is successful. Does something in your design repeat in a predictable way?

04/05 Test

Sometimes our first build isn't our best one. After you have practiced building a structure with a pattern, pause to reflect on your build. Did you successfully create a pattern? Is there a way you could improve your structure or pattern? Could you make it taller, more colorful, or include two different patterns? Make some changes to improve your design.

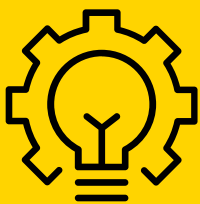


Sometimes our first build isn't our best one! Make some changes to improve your design.



05/05 Share

Show your structure to a teacher, friend, or family member. Can they see the pattern? Ask them what they like about your design. Can you explain how you created your structure and the choices you made?



Bonus Ideas

Looking to extend your learning?

- Develop an addition or multiplication table using LEGO bricks. Use the studs on top of the LEGO bricks and the dimensions of the bricks to visually represent patterns in math. Share what you created with someone else to see if they can identify the mathematical pattern.