

Name _____

Date _____

STEM Design Challenge Cards for Young Learners



Use these STEM design challenges to foster creativity and create new things! First, print these cards double-sided and cut them out. Next, choose a design challenge to complete with your family.



Create a maze for a marble using materials you have at home.

Design a structure that balances on your hand.

Build something that floats.

Design a structure out of rocks and natural materials.

Create a 3D sculpture with three different textures.

Use something light and something heavy to build something tall.

Create a ramp that makes toy cars go fast.

Design a fairy garden that keeps the rain out.

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Use these STEM design challenges to foster creativity and create new things! First, print these cards double-sided and cut them out. Next, choose a design challenge to complete with your family. (Back of cards - extension activities)



Extension

Now, can you create a structure that balances on your hand and is the same height as your hand?

Extension

Now, can you create a maze using only three household items?

Extension

Now, can you design a structure out of rocks and natural materials that is at least six inches tall?

Extension

Now, can you build something that floats and holds ten pennies?

Extension

Now, can you use something light and something heavy to build something at least a foot tall that doesn't fall down?

Extension

Now, can you create a 3D sculpture with three different textures that can hold something?

Extension

Now, can you design a fairy garden that keeps the rain out and makes bugs happy?

Extension

Now, can you create a ramp that makes toy cars go fast using something plastic?