



# POPSICLE STICK KIT

Be prepared for success, take **TECH.**





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## CHALLENGE 1

Make a catapult.  
How far can it toss the  
ping pong ball?





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## CHALLENGE 2

Create a working  
windmill using the  
blade propeller.





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# CHALLENGE 3

Design and build a car  
that moves.





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# CHALLENGE 4

Add a DC motor to your  
car build.





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## CHALLENGE 5

Add a solar panel to your car. How far does it go on one charge?





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## CHALLENGE 6

Build a bridge:  
Level up with expanding  
the span of the bridge  
(the longest distance  
between the main  
supports).





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# CHALLENGE 7

Build a greenhouse and use recycled or common material as the wall sheeting.





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# CHALLENGE 8

Design and build a  
phone or tablet holder.





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## CHALLENGE 9

Design a working wheel barrow. Pick the appropriate wheels.





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## CHALLENGE 10

Design a pulley system  
that has a platform  
that can lift a  
calculator  
or similar.





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# CHALLENGE 11

Create a maze with three elevations and have five different surfaces to drop a marble into a cup.



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# CHALLENGE 12

Build a barge that has the popsicle sticks as the platform. You can use recycled materials to build the floating base. How much weight does it hold while floating on water?





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# CHALLENGE 13

Redesign a kitchen object/tool. Use the popsicle sticks and kit materials for your prototype.





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# CHALLENGE 14

Build a prototype for an electric vehicle charging station using renewable energy sources.





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# CHALLENGE 15

Design and create  
a drone.





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# CHALLENGE 16

Build a birdhouse  
to attract these  
much needed polli-  
nators to your  
garden.



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# CHALLENGE 17

Build an octagon-shaped gazebo. Remember, carpenters measure twice and cut once so double check your side angles.



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## CHALLENGE 18

Build a new piece of  
furniture - outdoor  
or indoor.



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# CHALLENGE 19

Build a racket and backboard that can be used with a ping pong ball.





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# CHALLENGE 20

Build a flower plant holder. Make it functional with proper drainage.

