



INVENT THE SUMMER

Week 7: Solar Oven



Your Objective:

Harness the power of the sun and make a solar powered oven that can toast a marshmallow. *****WARNING***** Be sure to use an oven mitt or glove so you don't burn your hands when touching the oven.

You CAN:

- ☀ Use the heat transfer method of your choice: convection, conduction, thermal radiation or all of the above.
- ☀ Add insulation and/or reflection to improve your oven's efficiency.
- ☀ Use common household materials to build your oven. Examples include: aluminum foil, cardboard, tape & plastic wrap.

You CAN'T:

- ☀ Use glass or a magnifying glass in your oven.

Once you can melt a marshmallow, see if you can make changes to your oven to speed up the cooking process. Then put it between two graham crackers with a piece of chocolate and make s'mores!

How to avoid angry parents:

DO:

- ☀ Put something under the marshmallow so it doesn't make a mess when it melts.
- ☀ Wash your hands before you touch everything in the house.
- ☀ Make your parents some s'mores to enjoy!

DON'T:

- ☀ Toast an ant or any other living creature.
- ☀ Leave your oven in the sun all day. It could get really hot!
- ☀ Shine a death ray into someone's eyes.



Take a video of your solar oven.

Create a video of your solution. Try to keep your video under 1-minute long and include the following:

- The name of your solution.
- How does it work?
- What kind of materials did you use?
- Did you have any problems figuring out the solution?
- What was the biggest lesson you learned?

Remember, your video will be visible to anyone with an internet connection, so it's important to protect your privacy and stay safe. [Click here](#) to see our video submission and safety tips.



Ask a parent to enter your video into our contest by 11:59pm EST on July 28, 2019.

To enter our contest, you must upload your video to [YouTube](#) or [Vimeo](#). Then use our [online entry form](#) to send us the link. All entries must be completed by a parent or legal guardian.

**All submitted videos will be reviewed prior to publishing online to ensure that the rules of the contest were followed and that the content is appropriate for all ages.*

Voting

Voting will open at 12:01am EST on July 29 and close at 11:59pm EST on July 30. See our [voting rules](#) for more information.

3 Winners to be announced July 31, 2019!

1 Popular Choice Winner: Receives an *Invent the Summer* t-shirt.

1 Editor's Pick: Selected by the *Invent the Summer* team. Challenge solutions will be judged on originality, execution and presentation. The winner will receive an *Invent the Summer* t-shirt.

1 Random Choice Winner: One person from our mailing list will be selected at random to receive an *Invent the Summer* drawstring bag.