



## Make an Earth Fan

*Fan yourself with Earth's layers!*

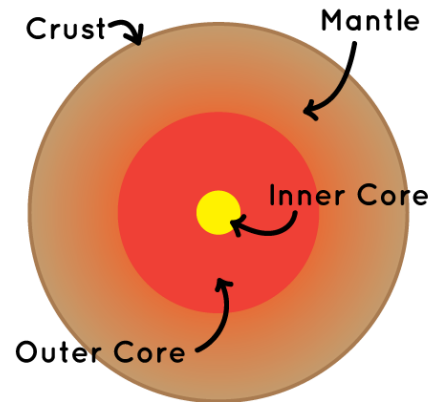
We spend pretty much all our time on Earth's **crust**. It's where all the land and oceans are. But below the crust, there's a lot going on.

The crust is just like the skin on an apple. It doesn't go very deep. But it's still deeper than you could ever dig. It's 18.6 miles (30 km) deep on land. At the bottom of the ocean, the crust is still about 3 miles (5 km) deep.

Below the crust is Earth's biggest layer, the **mantle**. It's a hot soup of molten rock. The mantle goes 1,801 miles (2,900 km) deep. Below the mantle is the **outer core**; it's made of liquid iron and nickel. At the center of Earth is the **inner core**. It's a solid center made of iron and nickel metals.

To remember that Earth is much more than just the surface we see every day, make this Earth layer fan.

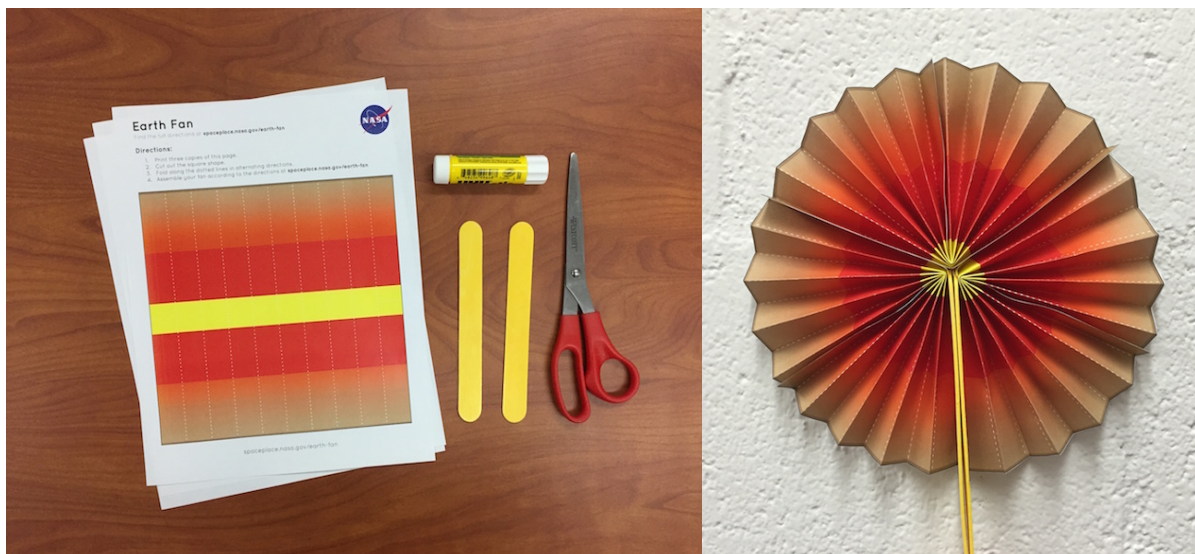
## Earth's Layers



*The colors in this diagram are the same colors used in the Earth Fan worksheet below. Remember what each color represents as you assemble and use your fan.*

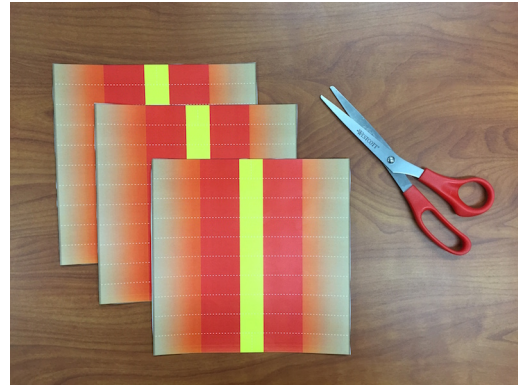
### What you need:

- 3 copies of the Earth Fan Worksheet
- Scissors
- Glue stick
- 2 jumbo popsicle sticks

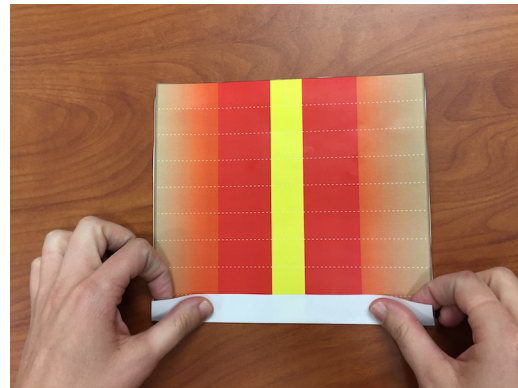


## What to do:

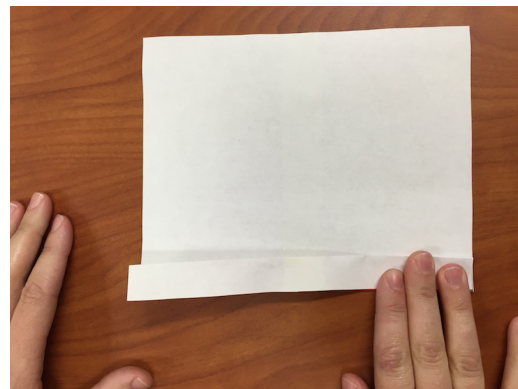
1. Cut out the three square shapes.



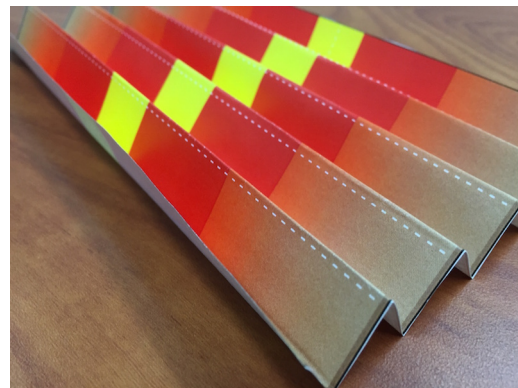
2. Fold along the first dotted line.



3. Flip over the paper and fold to the next dotted line.



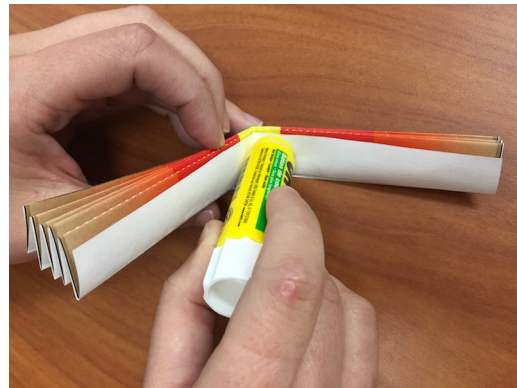
4. Keep folding, turning the paper over after each fold, until you've folded a fan.



5. Fold the fan in half.



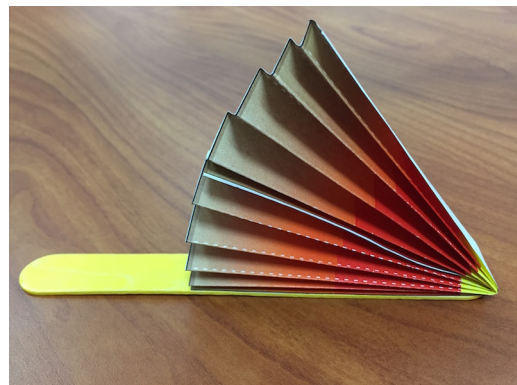
6. Glue the inside of the fold together to create a small fan section.



7. Repeat steps three through seven with the other two printouts. Now you have three small fans.

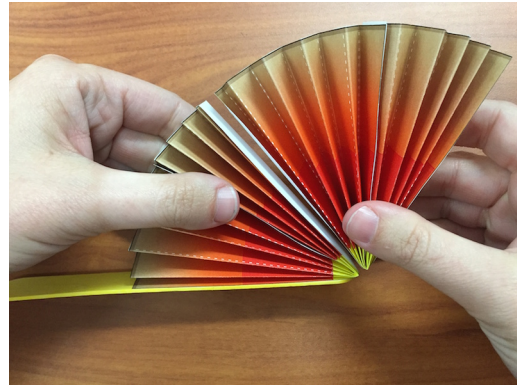


8. Glue the first section to your popsicle stick with the fold of the fan touching the top of the popsicle stick.

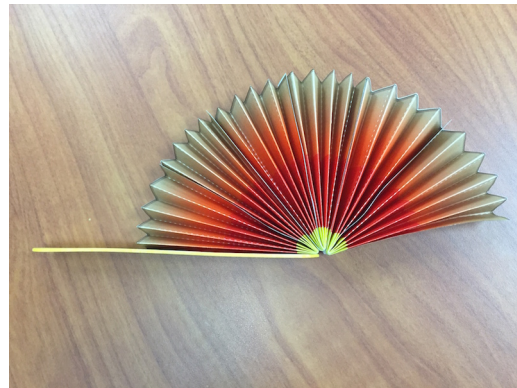




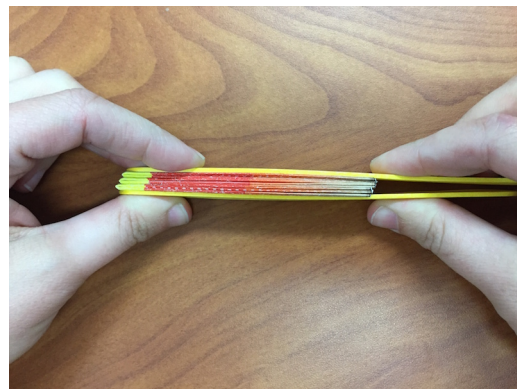
9. Glue the next fan section on top.  
Make sure the fan folds point the  
same direction.



10. Glue the last fan section on top.



11. Glue the other popsicle stick on  
top. Press down to get a good  
seal.



12. Let the glue dry for a few minutes.

13. Open your fan and cool yourself  
off.



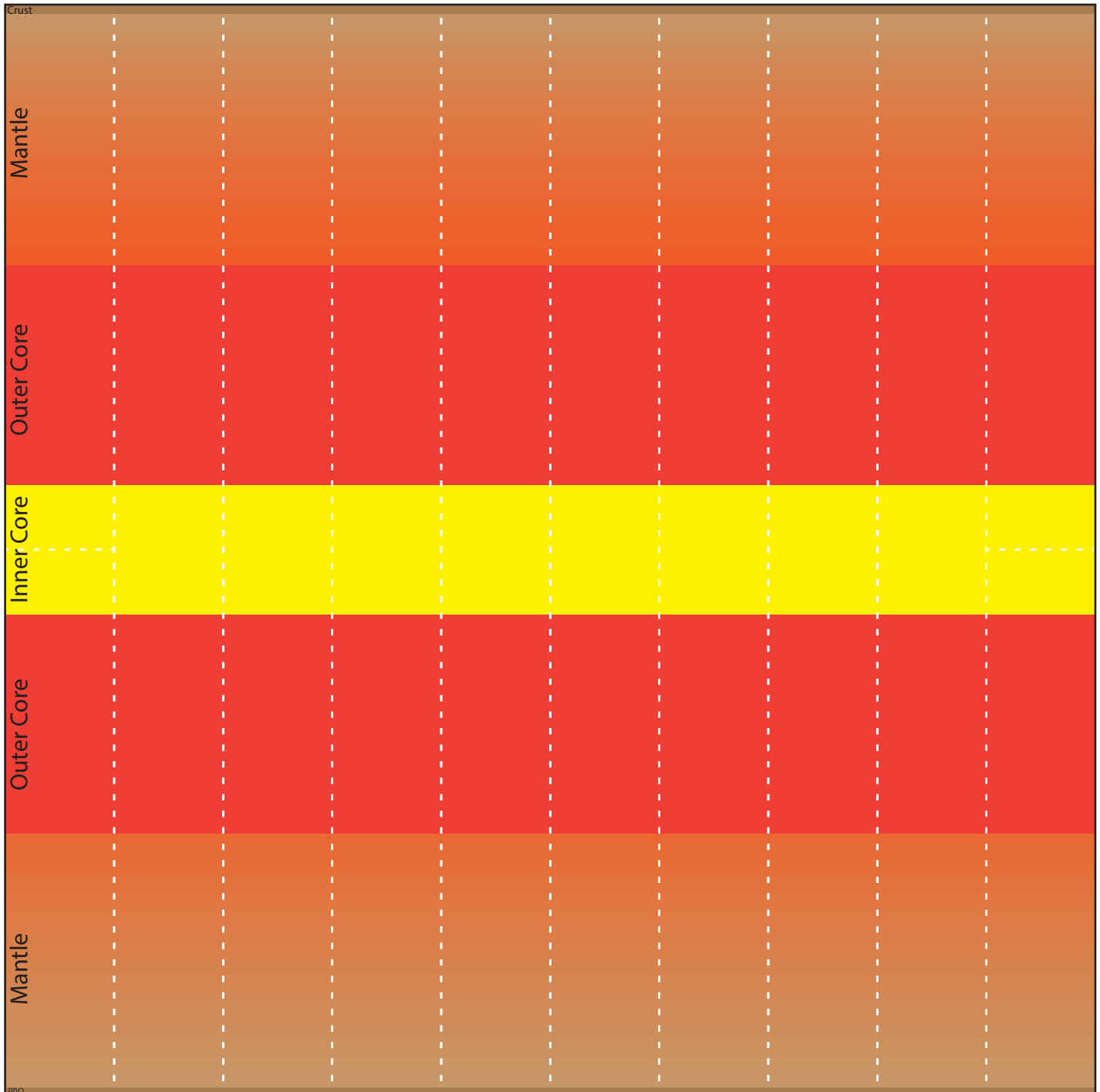
# Earth Fan

Find the full directions at [spaceplace.nasa.gov/earth-fan](https://spaceplace.nasa.gov/earth-fan)



## Directions:

1. Print three copies of this page.
2. Cut out the square shape.
3. Fold along the dotted lines in alternating directions.
4. Assemble your fan according to the directions at [spaceplace.nasa.gov/earth-fan](https://spaceplace.nasa.gov/earth-fan)



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Cut									
Mantle									
Outer Core									
Inner Core									
Outer Core									
Mantle									