

Ritz Carlton Macaroon Nutcracker



It's going to be year 2014. So Chef Andrew Yeo and his pastry team created a 14-foot (Get it? 14 as in 2014) nutcracker soldier out of macaroons and fondant. He's huge.

Just so that we understand what he's made of,

- A macaroon is a baked cookie made of whipped egg whites, sugar and flavoring or nuts.
- Fondant is a sort of icing that is primarily sugar and water beaten until fluffy.

I'm going to try to make a little nutcracker out of the same ingredients and about the same shape ... only smaller. I'll try for 14 inches tall since I'll also be honoring the coming year of 2014 (but in a smaller way). I wonder how I should plan my ingredients.

1. Do you think I will need $1/12^{\text{th}}$ of the ingredients that Chef Yeo used or some other fraction of the ingredients?
2. Explain why you think that.

The newspaper listed the ingredients that the pastry team used for this cool sculpture. I think that they wanted to impress us with its enormity.

Almond Flour: 20 pounds
Powdered Sugar: 100 pounds
Granulated Sugar: 20 pounds
Water: 5 pounds
Egg Whites: 4,106 each

3. How many dozen eggs did Chef Yeo and his team use to make the huge Nutcracker?
4. How many dozen eggs do you guess that I will need?

5. There are 8 ounces in a liquid cup measure. How many cups of water was used to make this giant nutcracker? Please show your work.
6. How many cups of water might I need?

The giant Nutcracker is covered with more than 2,000 macaroons. His eyes, nose and mouth are made out of fondant.

7. How many macaroons do you guess that I will need?



8. Would you like your teacher to take you on a field trip to the Ritz Carlton Hotel in Boston to see this creation?
9. If they let your class start to eat some of it, how many students do you guess it will take to consume the whole thing?
10. Do you think the macaroons will still taste fresh?

Sources:

http://www.boston.com/travel/blog/2013/12/whats_14_feet_tall_and_covered_with_2000_macaroons.html
<http://hoteljunkiemag.com/2013/12/02/ritz-carlton-boston-common-goes-nutcrackers/>