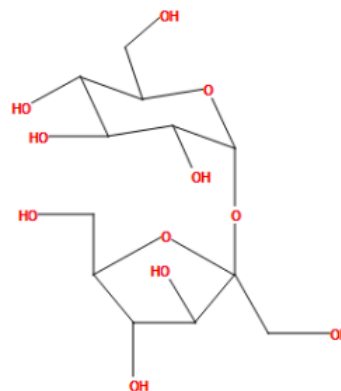




1. There is an orange-red molecule named rudolphomycin – true or false?  
**True** – it's an antitumor antibiotic – named after a character in the opera La Boheme, not the reindeer.

2. Where would you find this molecule in the holidays? →  
a) In the turkey  
b) In the wrapping paper  
c) **In the Christmas cake – it's sucrose**



3. Which element is used to make green fireworks?  
a) Magnesium  
b) Sodium  
c) **Barium**

4. Myrhh has been used to relieve gingivitis and mouth ulcers, true or false?  
**True**

5. What reaction is responsible for the browning when you bake cookies for Santa?  
a) The Hodge reaction  
b) **The Maillard reaction – the reaction of amino acids and reducing sugars**  
c) The Caramel reaction

6. Reindeer and other arctic animals eat moss containing Arachidonic Acid – why?  
a) **It's an anti-freeze – you can read more: <https://doi.org/10.1016/j.jare.2018.03.004>**  
b) It's an antibiotic  
c) It's a pro-vitamin D

7. What gives party poppers their pop?  
a) Gunpowder  
b) **Silver fulminate**  
c) Nitrogen triiodide

8. Why do some people hate brussels sprouts?  
a) Deformed basal cells in taste buds  
b) **Presence of the TAS2R38 gene leads to bitter response**  
c) No biological reason for dislike

9. How many water molecules are in the average snowflake?  
a) **180 billion**  
b) 180 million  
c) 180,000

10. The leaves of poinsettia plants contain a pH indicator compound – true or false?  
**True**