

MEET THEM



Dr Johanna Vos is an Astrophysicist at the American Museum of Natural History in New York City. She studies weather patterns on planets orbiting stars outside of our solar system, called exoplanets. She earned a Bachelor's degree in Physics with Astrophysics at Trinity College in her home city of Dublin. Next, she spent 4 years at the University of Edinburgh earning a PhD in Astronomy from the Royal Observatory of Edinburgh. Since then, she has lived and worked in New York City carrying out research, mentoring school and university students and sharing the wonders of the Universe with the public.

Watch Johanna's video (32 MINS)

ACTIVITY: EDIBLE SUN

Ingredients: round biscuit, yellow/red sprinkles, chocolate chips, strawberry laces, liquorice.

In her video, Johanna talks about how scientists can spot exoplanets using the sun. In this activity, we will take a closer look at the features of the sun. Each person needs a round biscuit with white frosting spread on top. This forms the surface of the sun.

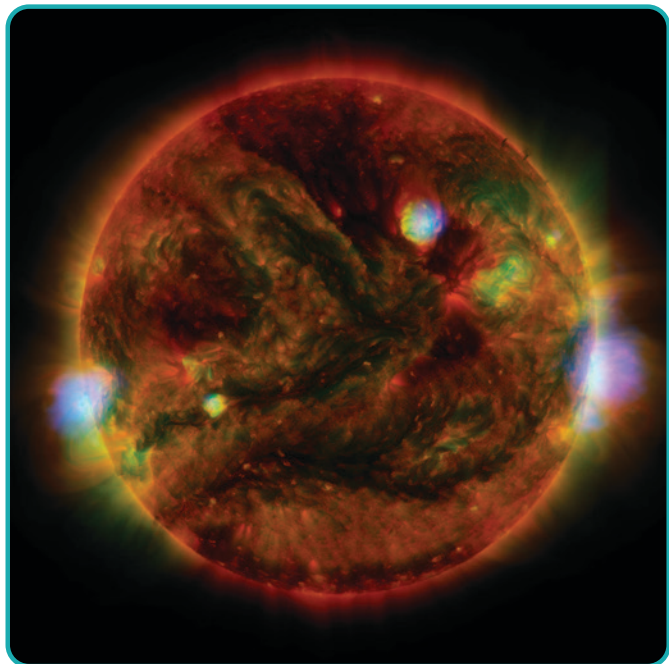


Image © NASA

- 1 Shake some yellow and red sprinkles on the frosting. These form the granular appearance of the photosphere.

Why is the surface of the sun like this?

.....

ACTIVITY: EDIBLE SUN continued

- 2 Place chocolate chips on the cookie to serve as sunspots. Sunspots appear in pairs so put two chips close to each other.

What is a sunspot?

.....

- 3 Place a few short pieces of strawberry laces on the cookie, forming small arches standing straight up. These are prominences. Prominences are generally found near sunspots, where the area is active and has a stronger magnetic field.

What are prominences?

.....

- 4 Place some liquorice above your sunspots. These act as filaments.

What are filaments?

.....

- 5 Can you add any other features onto your cookie sun?



Before you enjoy your edible sun, take a photo of it and share it with @Stemettes on Twitter or Instagram.

NEXT STEPS...

If you're aged 4-18 and you're inspired to create a **Scratch project** on the themes covered here, submit it to the About Us coding competition by 23:59 GMT on 19 December 2021 for a chance to win some amazing prizes. You can also enter the **poetry competition** on the same theme by submitting a poem. Find out more and enter online at aboutus.earth.

