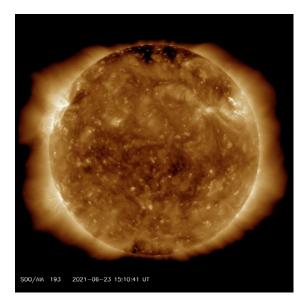
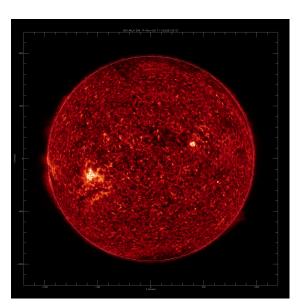
Please refer to the Teacher Resource document for information on how to use the worksheet for the activity.

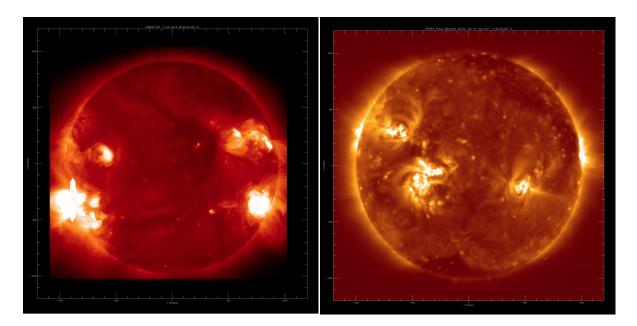
Q1. These images of our nearest star, the Sun, were taken with different types of cameras. Physicists at the Dublin Institute of Advanced Studies use these images to learn more about our Sun.

Analyse the images carefully, **noting any features or patterns** in the observations box below.





LU: 6 June 2021 RU: 17 November 2017 LL: 7 July 2012 RL: 17 November 2017





My Observations (you may wish to include diagrams):

Expected responses:

- The Sun is spherical shaped
- There seems to be fuzzy stuff/ a halo of light around the Sun
- There are explosions happening in the Sun especially at the sides
- There are lots of tiny holes in the Sun
- Whirpool/hurricane/spiral-shaped events are visible on the Sun
- The Sun looks like it's made of lava in image 2
- The Sun looks like it's on fire/burning/making light
- It looks like there is fire under the surface of the Sun
- The Sun is a different colour in every image/depending on the camera used
- The Sun doesn't look the same all the time

Students may also want to draw their own diagrams to back up their points or circle features on the Sun in the images above or printed images.



<u>Q2.</u> Note some **questions you might have** about the Sun and the things you notice in the images in Q1.

My Questions:

Expected responses:

- Why does image 2 not have any light emitting from it?
- Why are all the images different colours?
- What are the cracks in image 2?
- Does the Sun have different phases like the Moon?
- Why do they look like Moons?
- Why do they not look like the Sun in the sky that we can see from here?
- Are there Earthquakes on the Sun (Sunquakes)?
- Are there volcanos on the Sun (causing the explosions and lava)?
- Does the Sun change how it looks everyday?
- Is there weather on the Sun?
- What is the sun made of?
- Does the Sun look the same at different times of the day or month or year etc?
- Does the Sun have a climate?
- Is the Sun melting?
- Is the Sun on fire?
- Is the Sun solid?

