### **Greener trees may be sign a volcano will erupt**

Predicting volcanic eruptions is never easy. For centuries, volcanologists and seismologists have studied the activity beneath Earth that might indicate an eruption. Forecasting when a volcano might erupt has been somewhat unreliable. However, scientists from NASA and the Smithsonian Institution say they are a step closer to providing more accurate forecasts of when a volcano might blow. NASA used images from space to detect changes in the colour of leaves. The research was based on a 2019 study from McGill University. This study showed that an increase in carbon dioxide levels emitted by two active volcanoes in Costa Rica had an impact on the colour of leaves in the surrounding areas.

Current methods of predicting an imminent volcanic explosion include checking seismic activity, changes in ground height, and carbon dioxide and sulphur dioxide emissions. NASA said the new method of monitoring changes in the colour of foliage from space could help in foretelling eruptions. The science behind this is fairly straightforward. As magma moves upwards through Earth's crust, it releases carbon dioxide. Trees absorb this and their leaves become greener and more vibrant. The LiveScience website said: "These signs can help to protect communities against the worst effects of volcanic blasts, including lava flows, ejected rocks, ashfalls, mudslides, and toxic gas clouds."

**Homework:**

1. Write a full sentence answer for each question below.
2. Who studies underground activity besides volcanologists?
3. What does the article say about forecasting volcanic eruptions?
4. Where were NASA's images from?
5. When was a study conducted by McGill University?
6. Where did scientists study the CO2 levels of two active volcanoes?
7. What kind of activity do scientists check when checking for eruptions?
8. What gas do scientists check for besides carbon dioxide?
9. What does the article say magma passes through?
10. Who did a website say the new method might protect?
11. What flows are mentioned at the end of the article?

**Free Writing**

* Write about volcanoes and trees for 10 minutes