Celestial Brightness

Think and Write



Write your answers to the following questions using full sentences or pictures.

- When you look at the night sky, what do you see?
- Do all the stars look the same?
- How does the sun look during the day compared to stars at night?

Escribe tus respuestas a las siguientes preguntas usando oraciones completas o imágenes.

- Cuando miras el cielo nocturno, ¿qué ves?
- ¿Todas las estrellas se ven iguales?
- ¿Cómo se ve el sol durante el día en comparación con las estrellas por la noche?

Make your paper look like this:

I See this … /

Veo esto …

I Wonder this… /

Me pregunto esto…

- On the next few slides, we will look at some pictures and videos of the sky.
- As we look at them, write down things you notice or “SEE” on the left of your paper.
- Write down things you “WONDER” about, or have questions about, on the right side of your paper.

- En las siguientes diapositivas, veremos algunas imágenes y videos del cielo.
- Mientras los observamos, anoten lo que noten o "VEAN" en el lado izquierdo de la hoja.
- Anoten las cosas que les "PREGUNTEN" o sobre las que tengan preguntas en el lado derecho de la hoja.



Carnia Nebula: Image Credit: NASA, ESA, CSA, and STScI



Jewels of the night sky: time-lapse video, Chile - Nikon D810A



Geminid Meteor Shower: © NASA/Marshall Space Flight Center

Think and Write



Write your answers to the following questions using full sentences or pictures.

- Why does the sun appear so much brighter than other stars?
- How does this relate to other bright objects we see in the sky?

Escribe tus respuestas a las siguientes preguntas usando oraciones completas o imágenes.

- ¿Por qué el Sol parece mucho más brillante que otras estrellas?
- ¿Cómo se relaciona esto con otros objetos brillantes que vemos en el cielo?

I See this … / Veo esto …

I Wonder this… / Me pregunto esto…

Light and Sky Observations

Light through a Prism

While you watch the video, answer the following:

- "Where do these colors come from?
- Why do they appear in this order?
- What causes these amazing lights?
- Why are they different colors?
- How does this filter change the light?
- What does this tell us about light and color?"



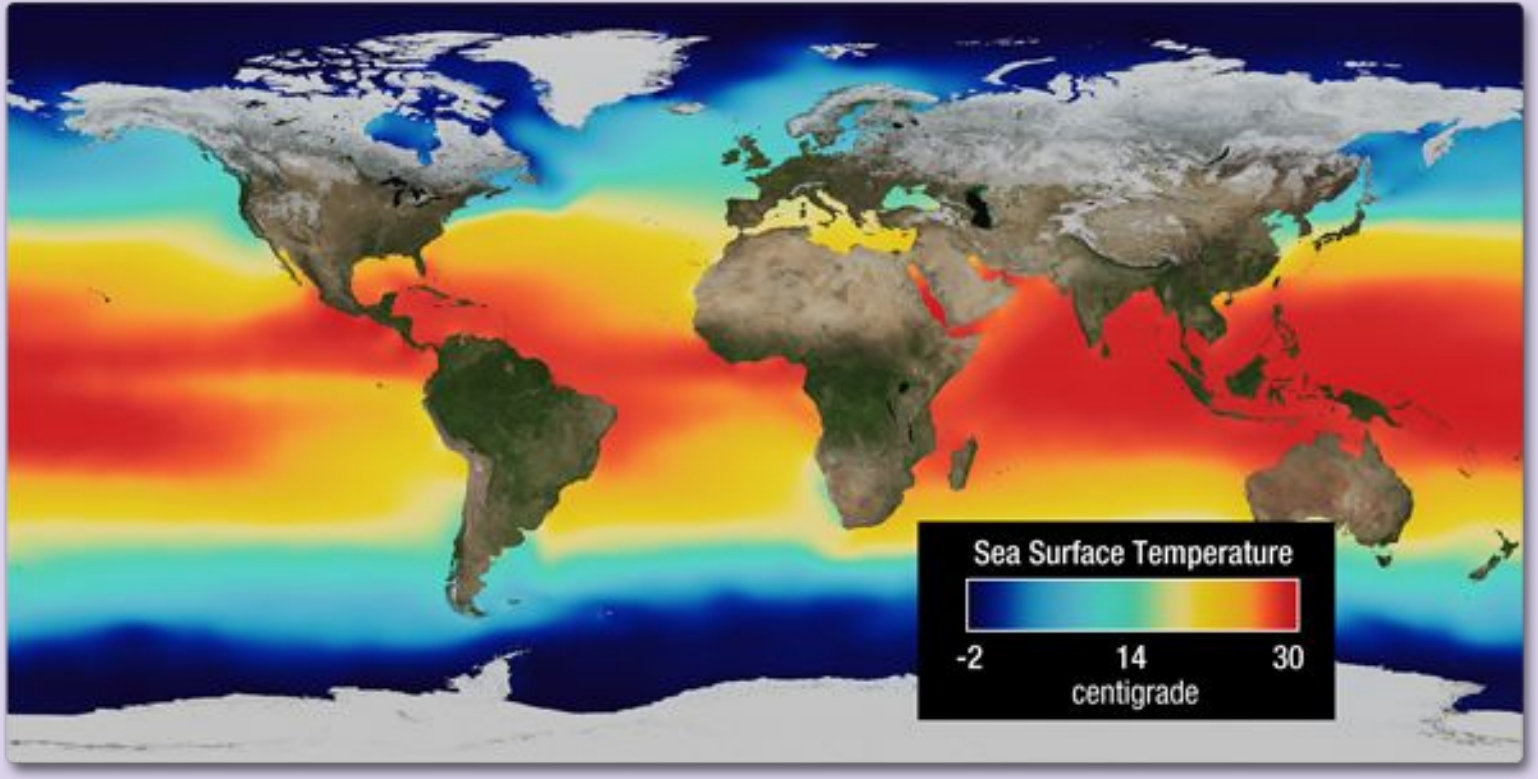
Rainbows

While you watch the video, answer the following:

- "Where do these colors come from?
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- Why are they different colors?
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- What does this tell us about light and color?"



Images and Color



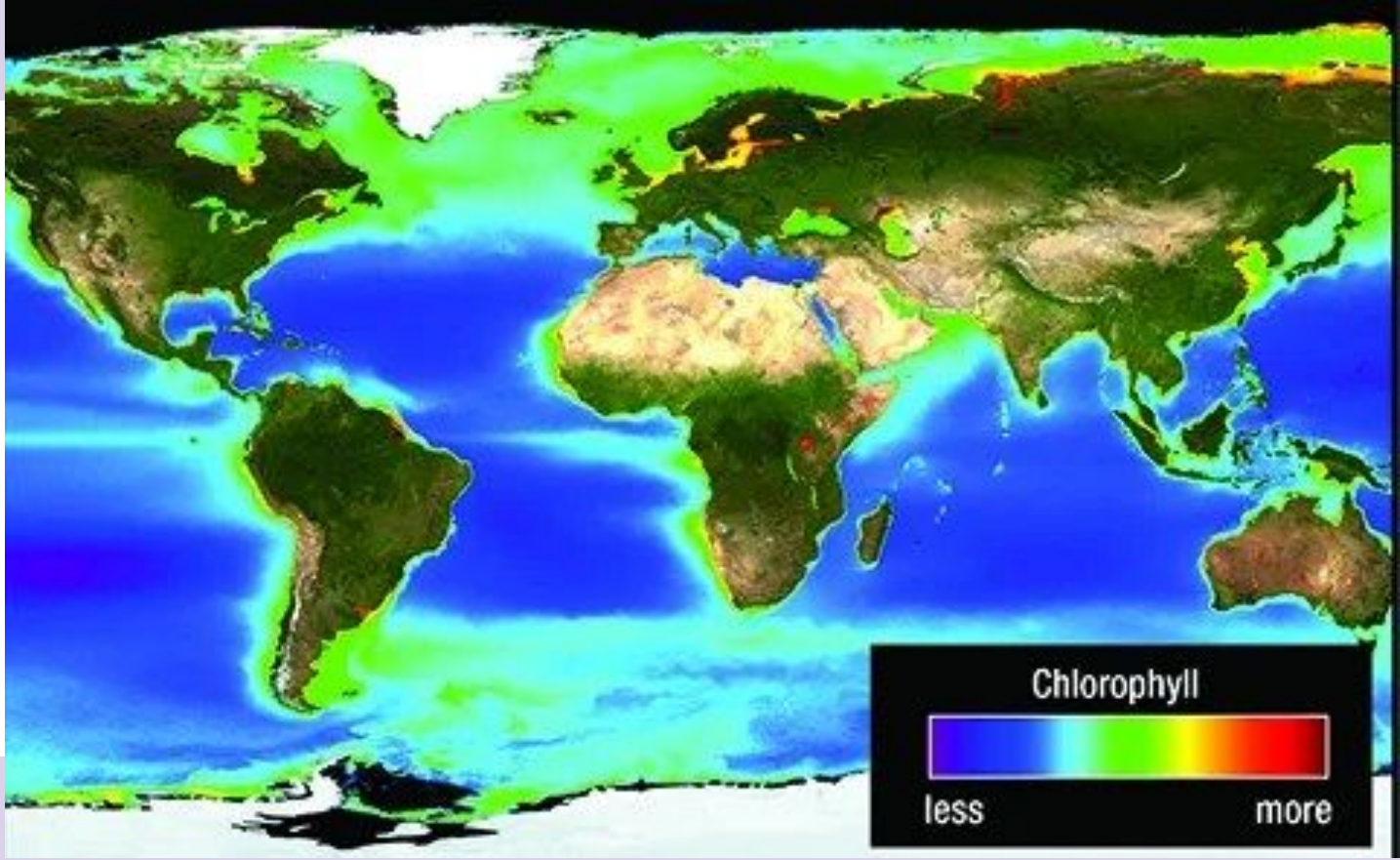
Credit: NASA/Goddard Space Flight Center

What do you think the colors on this map mean?
Is the ocean actually red in certain areas?

Use your clues from the image …

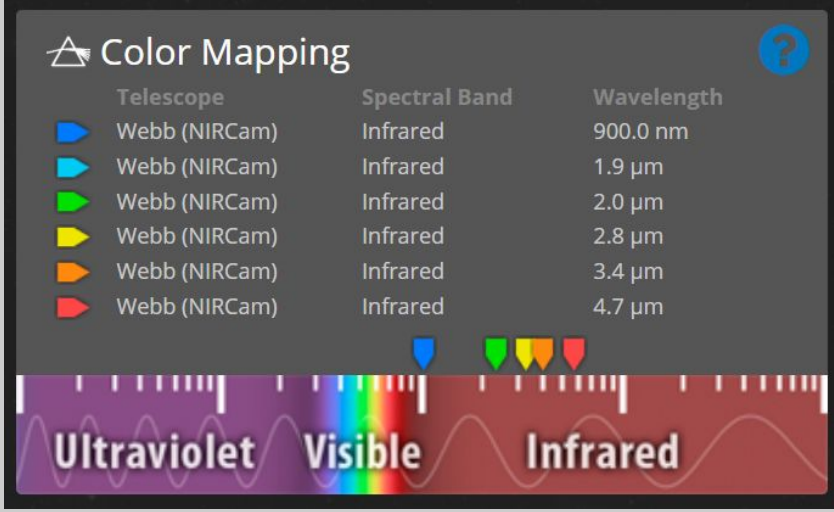
- What do you think the colors on this map mean?
- Is the ocean actually green in certain areas?

- Use your clues from the image …



Credit: NASA/Goddard Space Flight Center





All the colors you see here in this picture are actually just representing different kinds of light that is actually INVISIBLE to us! It is called **Infrared Light**, which we will talk about another day.

https://www.astropix.org/image/stsci/2025-129a



Now It's Your Turn

Nebula Color By Number

- Follow the color code that is on the worksheet
- Each number and color will work together to show you the "hidden nebula" on the page