



# Earth Science - Week at a Glance

**Monday**

Finish Doppler Slides

Graphing Red Shift

**Tuesday**

Quiz!

Coloring red/blue  
shift

**Wednesday**

No science 😞

**Thursday**

Size and scale notes  
Cosmos Episode

**Friday**

Astronomers through  
history

# Monday

## Tasks

- ☐ Bellringer question!
- ☐ Finish slides on doppler effect and shifts
- ☐ Graphing red shift activity (Due tomorrow)

## Success Criteria

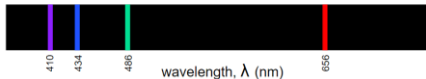
I am learning...

- ☐ ...to identify shifts in spectral lines
- ☐ ...to use red shift as a way for tracking galaxies
- ☐ ...how sound waves and light waves can be shifted in similar ways

## Bell Ringer

If this bright line spectrum is for Hydrogen on Earth. Draw how it would look if it was red shifted.

Hydrogen Emission Spectrum



## Homework

- ☐ Moon journal!
- ☐ Finish red shift graphing if not done

## Moon Phase of the Day

The Moon's current phase for today and tonight is a Waning Gibbous. During this phase the Moon can be seen in the early morning daylight hours on the western horizon. This is the first phase after [the Full Moon](#) occurs. It lasts roughly 7 days with the Moon's illumination growing smaller each day until the Moon becomes a Last Quarter Moon with an illumination of 50%. The average Moon rise for this phase is between 9pm and Midnight depending on the age of the phase. The moon rises later and later each night setting after sunrise in the morning.



# Tuesday

## Tasks

- ☐ Bellringer question!
- ☐ Review graphing red shift activity
- ☐ Quiz 1 on universe and scientific method
- ☐ Colored red/blue shift packet

## Success Criteria

I am learning...

- ☐ ...to identify shifts in spectral lines
- ☐ ...to use red shift as a way for tracking galaxies
- ☐ ...how sound waves and light waves can be shifted in similar ways

## Bell Ringer

In your own words, how can you perceive a red shift or blue shift on a bright line spectra for an element?

## Homework

- ☐ Moon journal!

## Moon Phase of the Day

Tonight the Moon will be in a Waxing Gibbous phase. Visible through most of the night sky setting a few hours before sunrise. This phase is when the moon is more than 50% illuminated but not yet a Full Moon. The phase lasts about 7 days with the moon becoming more illuminated each day until the Full Moon.



# Thursday

## Tasks

- ☐ Bellringer question!
- ☐ Review quiz answers
- ☐ Evidence for Big Bang webquest!

## Success Criteria

I am learning...

- ☐ ...to identify evidence for the big bang
- ☐ ...how scientists and astronomers collect/ed evidence to support the big bang theory

## Bell Ringer

Explain why the universe was opaque until around 380,000 years after the Big Bang?

## Homework

- ☐ Moon journal!

## Moon Phase of the Day

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# Friday

## Tasks

- ☐ Bellringer question!
- ☐ Time to finish webquest if necessary
- ☐ Size and Scale slides

## Learning Statements

I am learning...

- ☐ ...to make observations of the moon
- ☐ ...to critically think about why the moon changes throughout its cycle
- ☐ ...to determine the timeline of the universe

## Bell Ringer

What does the cosmic microwave background (CMB) represent?

## Homework

- ☐ Moon journal!
- ☐ Webquest due on Monday

## Moon Phase of the Day

Tonight the Moon will be in a Waxing Gibbous phase. Visible through most of the night sky setting a few hours before sunrise. This phase is when the moon is more than 50% illuminated but not yet a Full Moon. The phase lasts about 7 days with the moon becoming more illuminated each day until the Full Moon.