

Name _____ Date _____ Period _____ # _____

Topic 3 - Deep Space Astronomy - ESRT Flipped Videos 4a, 4b, 4c

4a) p14 Electromagnetic Spectrum Chart (2:17) Hommocks ES Department

<https://www.youtube.com/watch?v=wBYn37Xd47w&list=PL37057D7BFD1608CB&index=77>

As you move left on the chart, the _____ decreases. (0:25)

Waves with a shorter wavelength will hit (MORE / LESS) frequently. (0:46)

Shorter waves are higher _____ and higher _____. (0:51)

As you move right on the chart the wavelength _____. (1:24)

Longer waves are _____ energy and _____ frequency. (1:29)

Visible light is a small part of the electromagnetic spectrum that we can detect with our _____.

Visible (white) light contains what colors?

Longest Wavelength

Shortest Wavelength

4b) p15 Solar System Data Chart (3:30) Hommocks Middle School

<https://www.youtube.com/watch?v=FAU6085BcFk&list=PL37057D7BFD1608CB&index=75>

The Period of Revolution describes how long it takes an object to move around the _____.

This determines the length of the _____. (0:55)

Kepler's 3rd Law states that the farther an object is away from the Sun

the _____ it takes to revolve. (1:02)

The Period of Rotation describes how long it takes an object to spin on it's _____,

which determines the length of the _____. (1:24)

Venus's day (rotation) is longer than it's _____ (revolution). (1:32)

Eccentricity of orbit

Closer to one - orbit is _____.

Closer to Zero - orbit is _____.

The Terrestrial planets (M,V,E,M) have _____ equatorial diameters. (2:02)

The Jovian planets (J,S,U,N) have _____ diameters. (2:02)

Mass on the chart is measured relative to the _____. (2:21)

_____ is the most massive in the Solar System. (2:21)

Terrestrial planets will have a _____ density than the Jovian planets. (2:32)

_____ would float in water. (2:41)

4c) Characteristics of Stars Chart (3:25) Hommocks Middle School

<https://www.youtube.com/watch?v=LysEUnADpmA&list=PL37057D7BFD1608CB&index=76>

_____ is plotted along the vertical axis. ((0:26)

Surface Temperature increases from _____ to _____ along the horizontal axis. (0:38)

Red stars tend to be _____ and Blue stars tend to be _____. (0:45)

The right side shows that smaller stars are near the _____ and

_____ are near the top. (0:53)

_____ and _____ are middle aged stars. (Intermediate Stage) (1:13)

White Dwarfs are _____.

_____ stars are Early stage. (1:24)

Polaris has a temperature of _____ K and a luminosity of _____. (2:41)

Bigger stars tend to be _____ and smaller stars tend to be _____. (3:11)

Additional videos you may choose to watch are found on the flipped video website.

Electromagnetic Spectrum (13:51) Michael Sammartano

<https://www.youtube.com/watch?v=u3pjVGWecJ0>

Solar System Data ESRT Video (9:55) Michael Sammartano

<https://www.youtube.com/watch?v=Zloj1ujDKrI>