

https://www.classzone.com/books/earth_science/terc/content/visualizations/es2807/es2807page01.cfm?chapter_no=visualization

... or Google Search title below “Classzone: Observe the life stages of stars from birth to death”. While looking at interactive, answer questions below.

Classzone: Observe the life stages of stars from birth to death

What do all stars have in common?

What is the life cycle (trend) for stars with less than 8 solar masses?

What is the life cycle (trend) for stars with 8 to 15 solar masses?

What is the life cycle (trend) for stars with more than 15 solar masses?

So what are star lives dependent on?

Don't put computer away, you will need it again. Watch “The Universe: Life and Death of a Star” video clip until 19:19. Answer questions below while watching.

<http://www.history.com/shows/the-universe/videos/the-universe-life-and-death-of-a-star?m=5189717d404fa&s=All&f=1&free=false>

The Universe: Life and Death of a Star

What is the key component of stars?

What pulls parts of the cloud of gas and dust together?

What does thermonuclear fusion mean?

If you have fusion then you have a...

What is gravity trying to do to the star?

What is fighting against gravity in a star?

A star spends most of its life in this balance between fusion providing pressure to fight against the force of gravity inward. What is this stage called?

What does the color of the star tell you?

What is the most common type of main sequence star in the universe?

What is on the other end of the main sequence stars?

What is the most important thing that drives the life of a star?

Which size of a star lives longest?

How long can a star remain a main sequence star?

What does a star need to begin doing to survive gravity crushing in on it?

What does the heat from the helium fusing (burning) cause the star to do?

What happens to the gases on the outer parts of the star? Why?

What happens to the center of a sun-like star?

What is the final stage of a sun-like star?

When the video clip gets to 19:19, then go to second interactive below.

http://www.classzone.com/books/earth_science/terc/content/investigations/es2810/es2810page01.cfm
or Google Search title below "Classzone: A Star's Size".

Classzone: A Star's Size (Watch the interactive)

Where does a star begin its life?

What heats the material in the nebula?

When is a star born?

Where does a star spend most of its life?

What determines the size of a main sequence star?

To get to the next interactive, look at bottom of this website page and notice numbers. Click-on the next number, 2.

Classzone: Hydrogen Fuel Gauges (Watch the interactive)

What is the primary fuel for stars?

Do bigger or smaller stars burn fuel faster?

Classzone: Massive Sequence (Watch the interactive)

After a massive star's hydrogen is depleted in the core, what does it use for nuclear fuel?

What is its end stage?

Classzone: Stars Like the Sun (Watch the interactive)

How does a medium-sized star grow as it runs out of hydrogen fuel?

How is a planetary nebula different from a supernova?

Classzone: Small Stars (Watch the interactive)

What does a small star do most of its life?

Classzone: Initial Mass Versus Final Size (Watch the interactive)

How does the initial mass of a star compare to its final size?

Put computer away and continue watching, “The Universe: Life and Death of a Star” video clip starting at 23:18. Answer questions below while watching.

What can massive stars fuse when they run out of helium to fuse?

Why can't a massive star fuse iron together?

What happens when gravity crushes the core of a massive star?

What do supernova's provide the universe?

Where did the heavy elements in your body (carbon, calcium, etc.) come from?

What happens to the center of a massive star?

What happens to the center of very massive stars?

OTS 44	Alpha Centauri A		R136a1
Gliese 229B	Delta Pavonis		P Cassiopeiae
Epsilon Indi BB	Beta Hydri		RW Cephei
Teide 1	Chara		19 Cephei
DENIS 1048-0039	Mu Herculis Aa		P Cygni

Epsilon Indi BA	61 Virginis		HD 269810
Gliese 570D	Kappa Ceti		WR42e
LP 944-020	Iota Persei		Arches-F9
V1581 Cygni C	Muphrid A		N Carinae A
Gliese 165B	Zeta2 Reticuli		NGC 36603-A1
Gliese 623B	58 Eridani		Arches-F1
LHS 1070B	Alshain A		KY Cygni
LHS 1070C	47 Ursae Majoris		R145
Ross 614B	Mu Arae		HD 93250
Teegarden's Star	51 Pegasi		NGC 3603-C
Van Biesbroeck's Star	70 Virginis		Melnick 42
Gliese 105C	Pi Mensae		Cygnus OB2-12
LHS 292	BE Ceti		Arches-F7
DX Cancri	23 Librae		HD 93129A
Van Briesboeck 8	Lambda Andromedae A		Pistol Star
AB Doradus C	Rho Indi		WR20a
OGLE-TR-122b	109 Piscium		Peony Star
Wolf 359	HR 3497 A		R126
Oph1622 A	HR 2622		Plaskett's star
Oph 1622 B	BD-11 2670		AG Carinae
2M1207	23 Librae		S Doradus