

What is life? Definition of life

What are the requirements of life?

Move	Exceptions: Trees, Cars, Fire
Grow	Exceptions: Crystals, volcanoes
React	Exceptions: Chemicals, atmosphere
Defend	Exceptions: spacecrafts
Metabolize	Exceptions: Engines, fire, Sun
Reproduce	Exceptions: Fire, Virus (cannot reproduce outside a host cell, do not have cells)
Communicate	Exceptions: spacecrafts
<u>Evolve</u> (natural selection)	
<u>Organized</u> (decrease entropy)	

Are stars alive?

What is intelligent life?

Decoding the genome code

Cloning life

- Remember Dolly the sheep (cloned in 1997)?
- Only 1 or 2 viable out of 100 experiments
- Don't know impact on intellect & mood – more important for humans

Creating life (Scientists expect to create life within 10 years)

- This is creating life from scratch in a lab – chemicals to life
- <http://www.msnbc.msn.com/id/20249628/>

Silicon based life (computers / robots)

- Will computers be smarter than humans in the future – question may not even make sense as the distinction between humans and computers will erode away!