

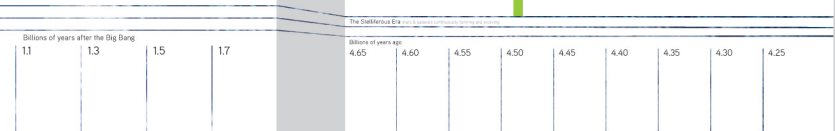


# 4

## THRESHOLD EARTH & THE SOLAR SYSTEM

### 4.65

### 4 BILLION YEARS AGO



As the first stars died, new stars formed from the clouds of atoms left behind. The remaining debris orbited around these newborn stars and eventually become planets. With much greater chemical complexity than a star, rocky planets like our Earth are places where remarkable things could happen.

### INGREDIENTS & GOLDILOCKS CONDITIONS

- New chemical elements
- Clouds of chemically rich matter
- Newly forming stars
- Gravity, accretion, & random collisions



### NEW COMPLEXITY

- Planets
- Planetesimals
- Comets/Asteroids
- Solar systems

### QUESTIONS

How does where we find natural resources shape our lives today?

Once considered a crazy idea, plate tectonics is now generally accepted. What can this story tell us about controversial ideas today?