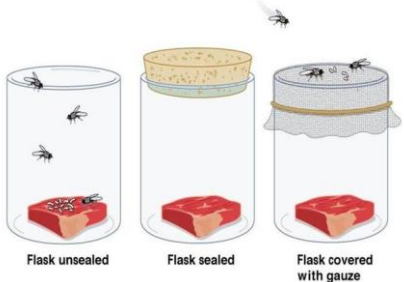
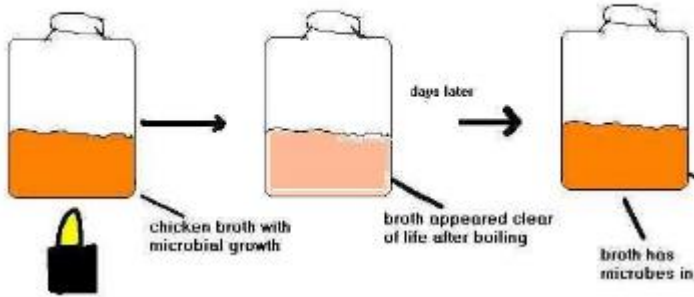
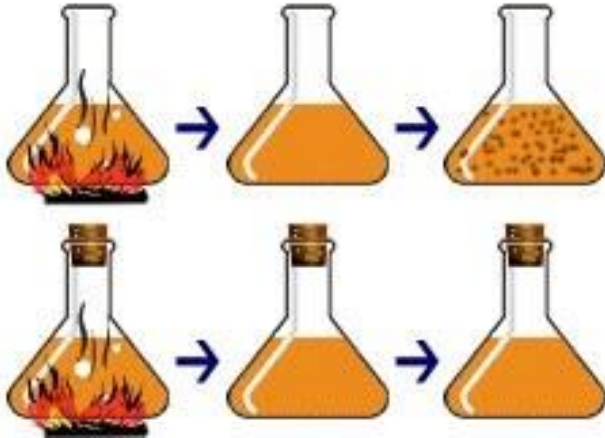
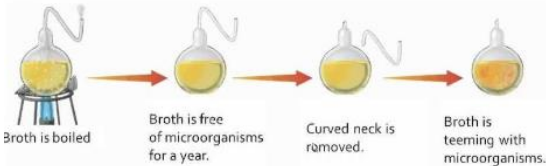


Unit 8 Topic 1 Review

1. Define biogenesis: **Life can only come from other living things (life from life)**
2. Define spontaneous generation: **The belief that life can come from nonliving matter**
3. Complete the following table:

Individual	In Support of:	Describe or draw the setup:
Francesco Redi	Biogenesis	 <p>Flask unsealed Flask sealed Flask covered with gauze</p>
John Needham	SponGen	<p>John Needham Experiment (1748)</p>  <p>chicken broth with microbial growth days later broth appeared clear of life after boiling broth has microbes in it</p>
Lazarro Spallanzani	Biogenesis	
Louis Pasteur	Biogenesis	 <p>Broth is boiled Broth is free of microorganisms for a year. Curved neck is removed. Broth is teeming with microorganisms.</p>

4. Explain the importance of Miller and Urey's experiment (what did they demonstrate): **The demonstrated that it was possible for organic molecules to form from inorganic molecules (they produced amino acids)**
5. How did Miller and Urey simulate lightning in their chamber? **Electric sparks**
6. How old is Earth? **4.6 billion years**
7. What type of cell evolved first and when? **Prokaryotic cells (~3.5 billion years ago)**

Unit 8 Topic 1 Review

8. What organism began adding oxygen to earth's early atmosphere? **Blue green algae (cyanobacteria)**
9. Explain the endosymbiotic theory: **Small cell engulfs, but does not digest, smaller prokaryotic cell... the smaller cell lives within the larger one and acts as an organelle (mitochondria and chloroplast)**
 - a. What evidence supports this theory? **The mitochondria and chloroplast having their own circular DNA; the shape and structure of these organelles is the same as bacteria**
10. Compare and contrast absolute dating with relative dating: **Relative dating looks at the position of fossils in the sedimentary rock (estimate of age)**
Absolute dating gives the exact age of a fossil using half-life of isotopes in fossil (carbon)
11. What animal life dominated the Paleozoic Era? **Amphibians**
12. What animal life dominated the Mesozoic Era? **Reptiles**
13. What animal life dominated the Cenozoic Era? **Mammals**
14. What is an angiosperm? **Flowering plant**
 - a. Why is it important? **It influenced the evolution of birds and mammals**