

Our collaborative teams use this document to ensure clarity when answering the first critical question. “What do we want each student to learn?” This document allows them to break down the standard into learning targets and “I can” statements for students. This process is done by using the following steps:

1. Break down the State summative assessment (STAAR test) to look at the frequency with which the standard is tested, is it a need to know vs. a nice to know, and how our school performed on the standard. (Box 1)
2. Determine how students were assessed for each standard (TEKS -Texas Essential Knowledge and Skills) by looking at questions from state test and previous common formative assessments (Box 2)
3. Discuss which instructional strategies were most effective according to the data and list proven practices/activities that need to be repeated in the Instructional Implications section of the document. (Box 3)
4. Provides any graphics, blank graphic organizers, or mnemonic devices we will use for this learning standard to help the students master the skill. (Box 4)

**Viruses- 4 days**

**On STAAR (State of Texas Assessment of Academic Readiness)**

TEKS	4C -Power Standard	B.4C: <u>Compare</u> the structures of viruses to cells, describe viral reproduction, and describe the role of viruses in causing diseases such as human immunodeficiency virus (HIV).
# of questions to date	14	
Average Score (State)		
District 2018	74.72%	
Rayburn 2018	68.7%	
District 2018	72.0	
Rayburn 2018	71.0	

B.4C Learning Targets (Viruses)	B.4C Date & How was it tested
I can explain what a vaccine is. I can tell you that a vaccine is a weakened strain of a virus. I can tell you how the immune system responds to a vaccine. I can explain that a virus needs a host to reproduce. I can explain that viruses are non-living and why! (because they cannot metabolize/reproduce on their own)	18- why are vaccines effective/ how do they work 18- viruses need host to reproduce (differences between cells and viruses) 17- Immune system and that HIV weakens that system 17- Viral replication (need host to do it and use host cells machinery) 16- How viruses spread, immune system purpose AGAIN (vocab heavy)

I can explain the phrase “use the cell’s machinery”.(look for amoeba sisters video)  
 I can describe how viruses are spread.  
 I can compare viruses to cells in regards to their structure (how they attach/structure and compare contrast to cells)  
 I can tell you that lytic = shorter word and shorter cycle; lysogenic = longer word and longer cycle.  
 I can use proper vocab when discussing viruses

16- Virus similarity to cells (prokaryotic) structure  
 15- Compare to cells again / structure and purpose of receptor site to cillia  
 15- can you read the question and know that viruses replicate quickly  
 14- replication (takes over the cells machinery)  
 14- Finally the lytic lysogenic question

**Instructional Implications**

- Venn diagram \*cells vs. viruses\* (not the tri diagram)
- Viral replication (have to say machinery- and explain analogy) HOST cell
- Lytic is a short word and short cycle, Lysogenic is a long word and long cycle
- HIV lab (explain how it attacks immune system and how it spreads)
  - Why is HIV so dangerous
- Antibiotics don’t work for the Flu (or any virus) - anti(bio)tics bio = life viruses aren’t alive
- Vaccines
- Herd immunity interactive
- Immune system vs viruses
- Genetic material = DNA/RNA
- Graph (infection rate graph)

**Supplemental Aid**

