STEAM Lab – Creating an Enriched Environment for Our Guinea Pigs
Kindergarten

Objectives: Students will work in a team to design an enrichment toy for the guinea pig enclosure

Materials: Observation Pages, Crayons, Pencils, Treats for Guinea Pigs (carrots, apple, spinach, parsley, bread, etc) Building Materials (boxes, cardboard tubes, etc) Small Plastic Swimming Pool

Engage: Show the following videos:
https://www.stlzoo.org/animals/enrichmenttraining/animalenrichment/

https://www.youtube.com/watch?v=Kb01iML5SQI

https://www.youtube.com/watch?v=DQYEWgBc9jc

After watching the videos discuss the following questions – Why do zookeepers add enrichment activities to animal enclosures? How do zookeepers decide which activities would be enjoyed by each animal?

Procedure:
• Give students a copy of the Guinea Pig
Observation Page

• Put guinea pigs in the swimming pool with various treats and cardboard items
• Allow students to observe the guinea pigs
• Have several students share their observations about what the guinea pigs liked and how they could tell
• In small groups allow students to brainstorm, design, draw and label an enrichment toy they could build
• After sharing the design each group will gather materials and build their idea
• When it is finished they will test the design by putting it in the enclosure with the guinea pigs and observing the guinea pigs reactions

Reflect: In a large group encourage students to share their designs and observations

Standards:
CSS.ELA-Literacy.SL.K.1
Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
CCSS.ELA-Literacy.SL.K.1.a
Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
**CCSS.ELA-Literacy.SL.K.1.b**
Continue a conversation through multiple exchanges.

**CCSS.ELA-Literacy.SL.K.5**
Add drawings or other visual displays to descriptions as desired to provide additional detail.

**CCSS.ELA-Literacy.SL.K.6**
Speak audibly and express thoughts, feelings, and ideas clearly.

**K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

**K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

**K-2-ETS1-3.** Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
Guinea Pig Observation

Guinea Pigs Like

Guinea Pigs Don’t Like