



Lamar Consolidated I.S.D. K2K connections proudly presents...

Science Seekers

An academic challenge based on 5th grade science objectives

Objectives

- TSW review/demonstrate mastery of the 5th grade science objectives.
- TSW develop and communicate solutions using various materials and tools.
- TSW analyze solutions for validity.

Agenda

Welcome The classes (2-4) will be introduced and welcomed, and the rules of the challenge* will be reviewed.

Science Seekers Challenge

A question or scenario[#] (based on all levels of Bloom's Taxonomy) will be shared with each class via a PowerPoint slide.

Example: *What type of energy is transformed into chemical energy during photosynthesis?*

Both classes will mute their microphone(s) and have 3-5 minutes to come up with a class consensus response using the materials suggested in the confirmation e-mail. Once the time is up, both sides will present their response to the other class and wait for confirmation. The teacher should help facilitate:

- students in using the resources to develop a response as well as coming up with a class consensus
- students in presenting their answer
- students in analyzing the solutions for validity

Conclusion Each class will have the opportunity to share a science related joke.

Before Your Challenge:

- Review any content related to the target objectives with your class. All questions will be related to one or more of these objectives.
- Gather a few science jokes to share at the end of the conference if time allows.
- Gather the resources the students will need for the challenge. In this challenge the students will need science textbooks, access to the Internet, triple beam balance (it would be ideal to have one for each group of students), clean glass slide (one for every triple beam balance). Other books and resources that relate to the target objectives will also be useful and can be used by the students.

During Your Challenge:

- Have your students pre-assigned to small cooperative groups. You may want to group them based on the resources that you have gathered (internet group(s), textbook group(s), etc.) and allow them to rotate between questions.
- Problems will be presented via a PowerPoint by the facilitator at one location.
- After each problem is presented, please mute your microphone and allow 3-5 minutes to develop an answer. It is great if one campus can put a timer on the document camera for this part. Students may use ANY resource that you allow to develop an answer to the question.
- Small groups work on the solution; then compare and discuss answers as a class.
- PLEASE play fair. This should be an opportunity for students to use and display their skills. Teachers should ask leading questions if their students need direction, but, as hard as it may be, don't help them!
- After the time limit (or before if both groups are ready) reply with the answer to your challenge question. It is really great to give your challengers a round of applause for correct answers.
- Keeping score is optional. Having fun is mandatory.
- Remember that the purpose of this activity is for the students to review and demonstrate mastery of the targeted science objectives, and to develop, communicate, and analyze solutions.

After Your Challenge:

- Congratulate your students on a job well done.
- Let me know if you have any questions/concerns/comments. I would appreciate any ideas or suggestions you may have that would help make Science Seekers more successful for the students.

S5.6(C) The student will compare and contrast the life cycles of animals including the Eastern Brown Pelican and Attwater's Prairie Chicken.

H5.2 (A) The student will describe the structure, functions, and interdependence of major body systems.

S5.9(A) The student will compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem.

S5.10(A) The student will examine and describe traits that are inherited from parent to offspring in plants and animals.

S5.9(C) The student will predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem.

S5.9(B) The student will analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem.

S5.10(B) The student will generate a list of examples of learned characteristics that result from the influence of the environment.

S5.5(A) The student will examine and describe some cycles, structures, and processes that are found in simple systems.

S5.5(B) The student will analyze interactions that occur in a simple system.

S5.4(A) The student will collect and analyze information using tools including computers and compasses.

Advertisement Email—information needed to find partners

Dates: **Enter date here**

Times: **be sure to include time zones**

To register e-mail **contact person** with:

- Teacher's name
- Teacher's district/campus
- Event date and time desired (Choose 1 date and time from the available listed above.)

Registration Deadline: **Enter date here**

You will receive an e-mail confirmation no later than Monday, **enter date here**

**This academic challenge is based on the wonderful challenges developed by Linda McDonald (lindamcdonald@katyisd.org) at Katy I.S.D.*

#Questions/Scenarios were put together by the one and only Doris Tomas at Jackson Elementary in Lamar Consolidated I.S.D.