

Kingdom Vacation - Day 5 (50-minute class period)

by Jessica Cleeves Dwyer

Grade Level(s)

7th grade Science

Lesson Overview

Students will “ideate” by brainstorming ideas for a vacation that addresses their kingdom’s needs statement.

Learning Objectives

Students will use the phrase “Yes, and…” to support each other to, as a group, generate at least 80 ideas for a kingdom vacation.

Standards

Standards (Utah Science Grade 7):

- Objective 3 - Classify organisms using an orderly pattern based upon structure.
 - o Identify types of organisms that are not classified as either plant or animal.
 - o Arrange organisms according to kingdom (i.e., plant, animal, monera, fungi, protist).

Learning Goals:

- Academic: Students will be able to. . .
 - o Define research/interview questions
 - o Organize information according to organism need
- Socio-affective:
 - o Build empathy for non-human organisms
 - o Interact productively in groups towards shared generation of a novel product

Preparation

- Get sticky notes and chart paper. Consider color coding sticky notes (one pad per student in each group, each student with their own color).
- Collect as many crafting and building materials as possible for prototype building (in Lesson 6).
- Consider the role and consequence of anthropomorphizing non-human organisms. The goal of the challenge is to increase empathy and identification with each kingdom by deeply considering the needs of each. At points, it is important to remind students that these are non-human organisms, and because of this we can never be certain about what they feel or want (but that this uncertainty should only motivate more concern and stewardship on the part of humans).
- Prepare potential questions to help students get un-stuck in brainstorming.

Materials and Resources

Students need:

- a pad of sticky notes (unique in color from anyone else in their group)
- chart paper
- wall space to stick their sticky note brainstorm
- writing utensils
- a chart marker (unique in color from anyone else in their group)

Teacher needs:

- timekeeping device
- room(s) set up for effective brainstorming (each group with their own table and wall space)

Activity 1: Orient to the Needs Statement (10 minutes)

Each team will use a piece of large chart paper to write their group's need statement. Each student will participate in writing the needs statement according to the following breakdown:

- Student 1 - Write the structure of the needs statement in between the unique information you've learned. ("The _____ Kingdom needs to _____ because _____.")
- Student 2 – In the first blank, write the name of the kingdom and the adjectives that uniquely describe the kingdom.
- Student 3 – In the second blank, write what the kingdom needs on vacation.
- Student 4 – In the third blank, write the "because" portion of the needs statement.

Post this chart paper above the space dedicated for the team's brainstorm to anchor their ideating to the needs statement.

Activity 2: Ideate (40 minutes)

10 minutes - Brainstorming Guidelines

- If possible, start with an improv-style warm-up, based on the tenets of “yes, and.” The idea is to encourage people to take creative risks and build on the ideas of others. One possible game is “Yes let’s.” In this game, one person shouts out an activity (e.g., “Let’s dig a hole!”) and all students shout, “Yes, let’s!” and mime digging a hole until a new student shouts out a new activity. The game continues until many people have contributed ideas.
- If not possible (because of reluctant classroom culture), ask class to brainstorm around an unrelated topic (possible topics may be “kinds of food” or similar). Scribe on the board for students, and model universal acceptance of every idea offered. If relationships with students allow, “plant a nerd” or two by asking students to volunteer seemingly silly answers to explicitly model “yes, and” thinking.

30 minutes - BRAINSTORM!!!

- Put a timer on the board in 5-minute increments, asking students for 10 ideas per 5-minute increment. At 15, 20, and 25 minutes, respectively, offer the following prompts to help students get ‘unstuck.’ Ask students to consider:
 - Technology (i.e., brainstorm ideas that use technology)
 - Social relationships (i.e., brainstorm ideas that emphasize social relationships)
 - Billion dollar ideas (i.e., brainstorm ideas as if money was no object)
 - You can also come up with other prompts to help spur students’ thinking in new directions.

Troubleshooting

Activity 1 - A safe classroom culture is critical for brainstorming success. In this modeling activity, be precise and consistent in responding to student offerings, and swift, measured, and uncompromising in not tolerating any student making fun of or putting down another student’s idea.

Activity 2

- If ideating for more than one consecutive class period, place large pieces of butcher paper securely on the walls. Stack the papers as thick as number of classes (6 classes = 6 pieces of butcher paper on top of each other, taped to the wall). As each class finishes their brainstorms, ask them to carefully roll up their butcher paper, with all of their sticky notes intact, and to write their group names on the rolled up paper).
- Keep an eye out for individual students who are particularly struggling with brainstorming, and be ready to “join their team” for a moment. Contribute a few ideas, asking them to write them on their own sticky notes. As you walk away, leave them with a question like, “where in the world could one vacation be?” and monitor their continued contributions from a distance.

Assessment

Evidence of successful student achievement:

- A wall or piece of butcher paper with over 80 ideas on it, with a roughly equal number of contributions from each student, as indicated by color of sticky note.