

STEM Taught Camp

I'm a Scientist

Jane Goodall: Day 4 Grades: 4-8

WELCOME

(5 min)

Earn sand dollars



Introduction: Welcome your students to camp. Be friendly.

Remind students they have the opportunity to earn sand dollars when they complete a task, help another student, help set up or clean up, write in their journal, read a book, etc. Tally the amount of sand dollars that each student earned from helping and record it on the weekly payroll sheet.

STEM READERS THEATER

(30 min)

- Act out story: 15 min
- Discuss story: 5 min
- Activity: 30 min

READ JANE GOODALL, DAY 4: A GROWING FAMILY

Prepare beforehand: Print out one copy of “Day 4: A Growing Family” from the Jane Goodall story. Print one coloring page for each student from the “Student Sheets” section of Day 19. Gather scissors and tape.

What you'll do:

- 1. Setup storytelling props (10 min):** Call up volunteers to help with the reader's theater for “Day 4: A Growing Family” Ask students to cut out the story props found in the story document. Remember to tape the headband ends together to fit a child's head. Students that are not helping with the story setup can color their coloring pages while they wait.
2. Gather all students and have them sit to listen to the reader's theater. Ask students to leave their coloring pages behind.
3. Assign a volunteer actor to handle each prop for story time.
4. Read the story to your students. Guide your volunteer prop holders in following the acting instructions as you read.
5. Discuss the story with your students following the discussion prompts printed underneath the story text.

Materials:

- Print one copy of “Day 4: A Growing Family”
- Three pairs of scissors
- Roll of tape



STEM LAB

(30 min)

Materials:

- Graduated cylinders
- Scoopy spoon
- Toothpicks
- Paper plates
- Parchment paper
- Trays
- 1 lb grapes
- 1 box raspberry jello
- 1 box berry blue jello
- 1 box orange jello
- 1 box lime jello
- 1 box lemon jello

MAKE A GRAPE TREAT

Set up:

1. Put out the graduated cylinders from Kea and add water to them with the pitcher. Put each jello flavor on paper plates. Divide each box onto two plates so students have more plates to gather around.

2. Set out toothpicks and cover sturdy paper plates with parchment paper for the students to put their grapes on. Student groups can put their names on their plate so they know which one is theirs. Alternatively put all the grapes on parchment paper covered trays that fit in the freezer.

Say: "Chimpanzees love fruit and Jane always had fruit around to share with them. Let's make some fancy treats out of fruit! Can you make a colorful and fun new type of grape?"

3. Have students wash their hands or use food prep gloves to take the grapes off the stem and wash them.

4. Poke a grape onto the end of a toothpick, dip it in the water, and put it in jello. Use Scoopy spoon to get powder all over the grape.

5. Place on a parchment-lined tray or plate, then place in the freezer for at least an hour or until the grapes are frozen.



MICROSCOPES

(60 min)

Materials:

- Tedros test tubes
- Petri dishes
- Tobey tweezers
- Paper
- Pencils
- Microscopes



ENTOMOLOGY EXPEDITION

Say: "So much of what we know about chimpanzees was made possible because Jane Goodall was so dedicated to learning about them. She spent much of her life observing these amazing creatures! Today we get to go on a bug hunt and lead our own observation investigation to see what we can learn about the insects that we find outside!"

1. Hand out Tedros test tubes and Tobey tweezers.
2. Teach students to pick up insects gently with the tweezers. This is for safety. If you know the insect is safe (like a worm or ladybug) they can pick it up with their bare hands. Give students lots of time to go on this bug hunt, and let them show you all the cool things they find.
3. Return to class and have students put their insect in a petri dish with the top on to observe under the microscope.
4. The students will take several minutes to observe their bugs and make a detailed drawing of what they see.
Say: "On a blank sheet of paper, draw everything you can observe about your insect. Remember to add details, use colors, and count the things you draw (such as spots, legs, or fuzzy things). On the back of the paper, draw the habitat you think your insect lives in. What do you think it eats in the wild? Does it have any predators?"



ART LAB

(60 min)

Materials:

- Fuse beads
- Pegboard trays
- Iron
- Parchment paper
- (this can be used over and over)
- Patterns for ideas
- Optional:
Yarn, cord, or thin ribbon
- Keychains



CREATE WITH PERLER BEADS

Say: "In science, learning to sort and organize things is very important. It is also an important engineering skill to make patterns and look at something and try and build it or make your own wonderful creation."

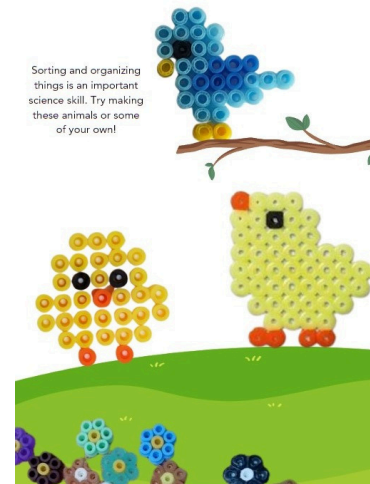
Make animals or other designs using fuse beads. These can be hung on backpacks, made into keychains, necklaces, earrings, or hair clips. These are great for eye-hand coordination, sorting, counting, and following patterns.

Set up:

Place the beads in bowls or containers. Lay out the pegboards. Have sample patterns for kids that want to use them.

Instructions:

1. Kids will make their designs by placing the fuse beads on the pegboards one at a time. Remind the kids not to bump each other or the table because the beads will fall off and they will need to start over. They can make their own design or follow a pattern.
2. Preheat an iron a little over medium heat. Place a piece of parchment paper over the beads on the tray. Keeping the iron level, gently iron the beads in a circular motion for about 20-30 seconds to fuse the beads evenly. Let it cool for a minute, then remove the parchment paper. Optional, but good- flip the beads over and replace the parchment paper and iron the other side. You can place the finished item under a heavy book so it cools perfectly flat.
3. Kids can make their creation into backpack danglers, keychains, hair clips, necklaces, etc.



STEM GAMES

(60 min)

Materials:

- Board games
- Legos
- Blocks
- Coloring supplies
- Books
- Stacking cups

Materials:

- Cups
- Balloons

Materials:

- Cups

KIDS CHOICE

Allow students time to connect with each other through a fun game or let them choose to read. If the students have not had time to draw/write in their journals, have them take some time to do so now.

Kids' Choice Instructions:

Choose between options that the teachers have set out: Board games, building with Legos, blocks, or other things, reading, coloring/drawing (include ocean related coloring pages), cup stacking.

Blowing in the Wind

Objective: Be the first to blow your cups off the table (or across a tape line) using air from a balloon.

Instructions: Set up a row of paper/plastic cups placed upside down about 6 inches from the edge of a table. The player will blow up a balloon and pinch it shut with their fingers. On "Go," the player will let the air out of the balloon to blow the cups off the table (or across a tape line). This game can be played with a time limit or competing with another player.

Alternative: Use straws instead of balloons, and set the cups 12 inches from the edge of the table or tape line.

Four Corners

Objective: The teams will quickly collect as many cups as possible and bring them to their corners.

Instructions: In a large open area, spread out several (40-100) cups upside down. Divide the players into four teams. Assign each team a corner. On "Go," one player from each team will run from their corner, grab a cup, and bring it back to their corner. Then, the next players will go and get a cup. The game will continue in this pattern until the STEM coach says "STOP." The team with the most cups wins. For extra fun, if there are four different colored cups, then the teams can only collect their own color.