

STEM Taught Camp

I'm a Scientist



Albert Einstein: Day 2 Grades: TK-3

WELCOME

(5 min)



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

(60 min)

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

Materials:

- Print one copy of "Day 2: Imagination"
- Three pairs of scissors
- One roll of tape

READ EINSTEIN: ALWAYS ASK WHY, DAY 2: IMAGINATION

Prepare beforehand: Print out one copy of "Day 2: Imagination" from the story. Print one coloring page for each student from the "Student Sheets" section. Gather scissors and tape.

What you'll do:

- 1. Setup storytelling props (10 min):** Call up volunteers to help with the readers theater. 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.



Summer Camp

Albert Einstein: Day 2

STEM TIME

(30 min)

Materials:

- Magnets
- Paper Clips



Materials:

- A variety of magnets

Explore with magnets

Say: "Today we will be rotating through stations, and experimenting with magnets the way Albert Einstein might have!"

Demonstrate the two spinning washer activity in front of the students so they will know what to do. The other magnet activities don't need to be demonstrated. Explain what to do.

Hanging paper clips

1. Make a paperclip chain and see how many paperclips the magnet will hold. Ask: Can you make it as long as your arm? Can you hook your chain to your friend's chain?

Is it Magnetic?

Instructions:

1. Place a variety of magnets and paper clips on trays or in low tubs.
2. Students explore what is magnetic in their surroundings. Let them walk all over the room or outdoors to test out the magnetic properties of surrounding materials.
3. Remind students to record their observations in their camp journal.
4. What did they discover is magnetic? What is not magnetic?

Explain: Out of all of the elements that make up everything, only 3 are magnetic. Those are Iron, Nickel, and Cobalt. If the item you found sticks to magnets, then it has one of these elements in it. Most likely it is made of Iron!

Inventing with magnets

1. Students can build fascinating things and discover the properties of magnets.
2. Ask students to invent something with magnets. It can be a game or a device to help solve a problem.
3. Explore with different materials and magnets to build a prototype or get your idea.
4. Draw what you invented.

ROBOTICS

(60 min)

Materials:

- Robots
- Mats
- Optional- candy

PIÑATA CHALLENGE

Refer to the Additional Resources for detailed instructions.



STEM LAB

(60 min)

Materials:

- Paper
- Shoe boxes
- Markers
- String
- Scissors
- Glue
- Tape
- Magnets
- Paper clips



STEM GAMES

(60 min)

Materials:

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

FLOATING MAGNET SCENE

1. Kids will create and decorate a box, using whatever theme they want. It will have a floating object in it, made possible by a magnet.
2. Lay the box on the paper. Trace around the outside of the box. This will help you to know what size to cut your paper for the inside background. Cut inside the line so the paper will fit in the box.
3. Kids will draw and cut out pictures from colored paper to use in their boxes, or just color a scene with markers. They can also use available craft supplies or stickers.
4. When finished, glue the background inside the box. Cut some paper to line the inside bottom of the box, and glue it on.
5. Create a paper object to float.
6. Cut a string about the height of the box. Tie it to the paperclip. Tape the paperclip to the back of the floating object. Tape the other end of the string to the bottom of the box so the object is floating about an inch or two from the top of the box.
7. Now tape or glue the magnet to the top of the box, either outside or inside the box, above your floating object. The magnet will hold the object up, allowing it to float.

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.

Guess Who's Missing

Objective- Albert Einstein dropped out of school, and went to Italy. Today the kids will play a fun guessing game to see who has gone missing!

Kids sit in a circle. Choose someone to be "it". He goes to the wall with his back to the circle and closes his eyes. Pick a child to leave the room, the other kids adjust the circle so the space isn't noticeable. "It" opens his eyes and has to guess who's missing. Choose another player to be "it", play continues.