Summer Camp
Amazon Adventure Day 19

4-8TH GRADE

WELCOME
(5 min)

Instructions: Welcome your students to camp. Say: "Today we get to play a fun game, code robots, and build forts!"

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 pay role sheet.

GAME TIME
(25 min)

Materials:
- Some kind of fish treat
- Pippi pippets
- Tedros test tube filled with water

DOLPHIN TRAINER

Say: "Dolphins are very smart. They can communicate and do tricks. Today I am going to be the trainer and you guys are the dolphins. Here are 3 things that dolphins do:
1st: Dolphins can jump high out of the water. Put your hands together above your head and jump up.
2nd: Dolphins can spin around. Stand and spin around.
3rd: Dolphins make noise to communicate. Let's make a dolphin sound."

Instructions: Have the students stand in a circle. Stand in front of a student and call out a number (1-3) for one of the tricks. That student has to remember which number was associated with which action, if they are wrong and don't do the action number you called out, you (the trainer) squirt them with water from Pippi pipette. If they are right and do the action you were thinking of they get a fish (goldfish cracker or gummy fish). Move on to the next player in the circle and think of a different action. If the student is right they get the fish, if they are wrong they get a spray of water. Keep moving around the circle quickly till each student gets a couple of turns.

STEM TIME
(60 min)

Materials:
- Bricks
- Cardstock paper
- Scissors
- Tape
- Glue

*Be sure all housing for robots is dry with no wet glue before placing housing on robot. Glue can damage the robot.

BUILD A DECOY FOR YOUR ROBOT

Say: "Today we are going to make a housing for our robots! This housing will act as a protection to your robot from the rain and sun, and it will act as a decoy. In the Amazon researchers use decoy robots to get closer to the animals and environment they are studying. This allows them to do their research in a way that will not disturb the wildlife. This also allows them to continue gathering information when they cannot be there in person. "

Instructions:
1. Have the students create a housing for their robots using card stock. They are welcome to be as creative as possible when creating their housing.
2. Before beginning the activity share these videos with your students: https://www.youtube.com/watch?v=rh9PwFvMS0I
3. Provide students with the materials to make their robot housing
4. Encourage them to be creative! Ask: "What kind of housing are you making for your robot? How will your housing help you during an expedition?"

STEM TIME
(60 min)

Materials:
- Cardstock paper
- Scissors
- Glue
- Tape

CODE YOUR DECOY ROBOTS

Say: "Now that you've made a housing for your decoy robot, let's learn how to code your robot, and teach it to follow commands!

Instructions:
1. Before beginning the activity share this video with your students: https://www.youtube.com/watch?v=4d09c1izr70&list=RDCMUCDRZWhedLhwllnac-RBxvyw&index=8
2. Ask: "What was your favorite part of the video? What kind of commands are you going to teach your robot decoy?"
3. Go to https://www.stemtaught.com
4. Click on Students then on the drop box click on STEMTaught programming.
5. Enter Password: yay
6. Scroll down and click on New Project under My Pet micro:bit
7. Then you'll hit New Project again. Give your Robot a name!
8. On the next page you'll click the gear icon in the upper right hand corner then scroll down and click the word extensions.
9.Type in the search bar https://github.com/YahboomTechnology/Tiny-bitLib. A box should show up underneath it saying Tiny bit Extensions for Yahboom Tiny:bit V2.0.2 , click on this.
10. Now they are ready to be creative and program their Go Bot!

FREE TIME
(30 min)

Materials:
- Books
- Board or card games
- Various art supplies to decorate journal with

GAMES, BOOKS, AND JOURNAL

Objective: Allow students time to connect with each other through a fun game or let them choose to read or draw/write in their journal. Find a student that will let you highlight their journal page and show the class what they've done to help inspire the class with their good idea.

ENGINEERING
(60 min)

Materials:
- Sheets
- Clamps
- Cardboard
- Bamboo sticks
- Other fort supplies

BUILD FORTS

Objective: Say: "Humans live in habitats just like animals! We just spent time building an animal habitat with Legos, now it's time to build a fort big enough for you to live in! Habitats are very important. They provide shelter from the wind, rain, sun, etc. What will your shelter look like?"

Instructions:
1. Set out all the fort building supplies.
2. Have students get into groups of 4 to 5 to build their forts, or build a huge fort all together.
3. Allow students to be creative and watch what they come up with!
4. Have them draw their fort using the Fort journal page.