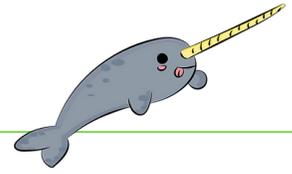




ROBOT DECOY!

Grades 4-8



MAKE A HOUSING FOR YOUR ROBOT!

Students will create a housing to protect and disguise their robots from the Arctic elements

GUTEN TAG!

10 min

STORY & SNACK

20 min

SPORTS / GAMES

30 min

Materials:

- Water Balls
- Water source to refill water balls
- Towels

Guten Tag is German for hello!

Greet your students. Be friendly. Use their name, ask a question, give a high five, or thumbs-up! Take roll. Mark down which students took a snack and tally how many snacks were given out.

Read the story:

Today's story is called Chemical and Physical Changes? Read the story to your students outside as they sit in a circle.

Water Ball Volleyball

Students will play water ball volleyball as they try to get the other teams wet!

Instructions- Organize students into three teams. Two teams will be the water ball volleyball players, and the third team will be the human net. Organize all the water ball volleyball players into pairs of two. Give each pair of players one towel. They will use their towels to launch and try to catch the water balls. The human net will be lined up in the center of the court or play area. Give each side a pile of water balls. The players will work in their teams to launch the water balls over the human net and try to drench the other players! The catch is that the human net can try to catch the water balls with their hands and throw them back at the team who launched them! When one of the volleyball teams drench another player, they get a point. If the net catches a water ball and successfully drench another player, they get a point. The game may begin with one side launching a ball. When a team drops a ball they can get a full ball to launch. As the game goes on, add more water balls to the mix to see how many balls the students can keep up with. More water balls equals more water fun!



STEM TIME

50 min

Materials:

-  Cardstock paper
-  Scissors
-  Tape
-  Glue

*Be sure that all housing for robots is dry and there is 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 ice and snow, and it will act as a decoy. In the Arctic 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. "

Explain:

Have the students create a housing for their robots using cardstock paper. They are welcome to be as creative as possible when creating their housing.

Before beginning the activity share these videos with your students:

<https://www.youtube.com/watch?v=bCxB03-Hfg>

<https://www.youtube.com/watch?v=GbBMrJEL35Y>

Instructions for Housing:

1. Provide students with the materials to make their robot housing
2. Encourage them to be creative!

Ask:

"What kind of housing are you making for your robot?" "How will your housing help you doing an expedition?"

Say - "Today we got to make a housing for your robots! Draw a picture of your decoy. Write a journal entry about your experience."

Clean up/Free play/Dismissal

Allow your students some free time. Some students may wish to finish working on their STEM project. Others may want to journal or scrapbook about their day. Other students may want to go outside to play. Clean up, pack up.

NATURE JOURNALING

15 min

CLEAN UP / FREE PLAY

