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Honors Expanded Learning Clubs

Honors Program

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Afterschool Sustainability Club

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NEBRASKA HONORS PROGRAM
CLC EXPANDED LEARNING OPPORTUNITY CLUBS
INFORMATION SHEET

Name of Club: Sustainability Club

Age/Grade Level: 3rd-5th

Number of Attendees: (ideal number) 12

Goal of the Club: (learning objectives/outcomes)

Increasing environmental awareness

Resources: (Information for club provided by)

Beyond School Bells and other online resources

Content Areas: (check all that apply)

- Arts (Visual, Music, Theater & Performance)
- Literacy
- STEM (Science, Technology, Engineering & Math)
- Social Studies
- Wellness (Physical Education, Health, Nutrition & Character Education)

Outputs or final products: (Does the club have a final product/project to showcase to community?)

No

Introducing your Club/Activities:

Sustainability club is about teaching students about humanities impact on the planet and what we can do to help preserve it. This involves learning about the environment around them and the systems that shape them and their environment.

General Directions:

Lessons should include a guided activity and a mini-lecture at the end to relate the activity with the greater theme.

Tips/Tricks:

Students need to be on task and should be allowed to ask questions and figure out the topic by themselves, with staff helping them along.

LESSON PLAN WORKSHEET

(copy table as needed)

Lesson Activity That's How the Cookie Crumbles

Name:

Length of Activity: 30ish Minutes

Supplies: Chips Ahoy or other chocolate chip cookie, toothpicks

Directions:

Put students in groups of three, give each group a cookie and three toothpicks. Introduce the students to the challenge for around five minutes; they must get the chocolate chips out of the cookie using only the toothpicks and without destroying the cookie, whichever group gets the most chocolate chips out of the cookie gets a cookie as a reward, give them five minutes to do this. After this is done then introduce the second part of the challenge, putting the chocolate chips back into the cookie, take a minute or two to read instructions and give students five minutes to do this.

Conclusion of the activity:

After the students are done trying to put the cookie back together (often unsuccessfully) relate it back to the environment. Compare the cookie to Earth, and how when we mine for things like coal and oil we are actively picking apart the Earth, and how even though we can try to put it back, the cookie/Earth will not look the same.

Parts of activity that worked:

The students were very engaged by this activity especially with the cookies being involved. Older students were able to make connections to mining and its environmental effects on their own.

Parts of activity that did not work:

Younger students often completely destroyed the cookie which meant they could not go onto the second part of the activity.

LESSON PLAN WORKSHEET

(copy table as needed)

Lesson Activity Cloudy with a Chance of Clouds

Name:

Length of Activity: 45 Minutes

Supplies: Cloud Guide, can be printed or on a device but students need to be able to see it

Directions:

Take the students outside, find a good, open, spot where they can all sit and see the sky. Take out the guide and show/point out a few different types, but then let students take over. Discuss the effects on the environment each cloud type has, and how pollution effects the formation of clouds.

Conclusion of the activity:

Students have terminology to point out clouds, and can get an understanding about how they can help the environment, and how pollution effects it.

Parts of activity that worked:

Students liked identifying the different clouds and being outside.

Parts of activity that did not work:

It cannot be too overcast or too sunny or else students can't see the different types or want to look at the sky.

Lesson Activity Name: Bugging Out

Length of Activity: 45 Minutes

Supplies: Phone or laptop to access <https://lancaster.unl.edu/insects>

Directions:

Take students outside and instruct them to go out and find three insects, they cannot take the insects out from the ground, they have to observe. If they find one they get an instructor and the instructor helps identify the insects. After 30 minutes, go back inside and tell the students to find the role of one of the insects they found has on the environment/ecosystem.

Conclusion of the activity:

Students learn more about their local wildlife and the important roles they play

Parts of activity that worked:

Going outside and identifying.

Parts of activity that did not work:

Some students are scared of bugs, not for everyone.

Lesson Activity Soil!

Name:

Length of Activity: 45 Minutes

Supplies: Power Point, shovel

Directions:

In class use PowerPoint to show the different types of soil and how they support different types of plants. Discuss how pollution like runoff harms the soil and makes it so plants can't grow. Then take them outside and show them soil from the garden vs the field, help them identify how they are different and why.

Conclusion of the activity:

Students gain understanding of their local environment and how pollution negatively effects it.

Parts of activity that worked:

PowerPoint was engaging and they loved going outside.

Parts of activity that did not work:

Everything went more or less as planned.

Lesson Activity The Circle of Life

Name:

Length of Activity: 45 Minutes

Supplies: PowerPoint

Directions:

Using the powerpoint show the food web and ecosystem of Lincoln, show how the soil, insects, prey, and predators in Lincoln interact, use past activities like the insect and soil activity to connect with students.

Conclusion of the activity:

Students gain an understanding of their local environment and what roles they occupy in it.

Parts of activity that worked:

Relating it to past activities was pretty successful and the students seemed to understand it.

Parts of activity that did not work:

Not very interactive past asking questions, could add a smaller activity within it.

Lesson Activity Name: Food Fight

Length of Activity: 45 Minutes

Supplies: School Lunch (or at least a picture/menu of what they ate)

Directions:

Take out diagram of what they ate at lunch and ask them where they think the food came from or what it is made from. Ask what impact they think their food has on the environment, emphasized the impact of the individually wrapped products. Explain how the plastic, transport, and farming techniques impact the environment and how to minimize their footprint.

Conclusion of the activity:

Students learn the impact of their food and learn where it comes from.

Parts of activity that worked:

Students liked the guessing part of the first activity and exploring where their food came from.

Parts of activity that did not work:

Maybe move away from school lunches and discuss their favorite foods or bring in food from the grocery store to make it more engaging and to emphasize how their own habits at home effect the environment.

Lesson Activity Name: Progression

Length of Activity: 30 Minutes

Supplies: PowerPoint

Directions:

Show various organisms like butterfly's, humans, dogs, and ask the students what stages of their life cycle is. Then show diagrams of their lifecycles and ask how long the students think it takes and then reveal how long each individual takes. Then go over how the environment shapes life cycles and how pollution can blunt/slow it.

Conclusion of the activity:

Students learn more about life stages and the impact the environment and pollution has in it.

Parts of activity that worked:

The interactive aspect engaged them a lot and they liked seeing how different animals grow.

Parts of activity that did not work:

Do a matching game to make even more interactive.

Lesson Activity Name: Environmental Heroes

Length of Activity: 45 Minutes

Supplies: PowerPoint

Directions:

Display famous environmentalists from a variety of different backgrounds like Erin Brockovich, Chico Mendes, Jane Goodall, Wangari Maathai, Vandana Shiva, and Greta Thunberg. Explain what they did and what their impact was/is. Show interview clips if available and clips of experts explaining their impact and how one person can do a lot.

Conclusion of the activity:

The students learn about the history of environmentalism and how people can leave large, positive impacts.

Parts of activity that worked:

The students liked learning about various people, especially ones that share their background. The videos also seemed to engage them quite a bit.

Parts of activity that did not work:

Needs to a bit more interactive so engage the students, maybe add a guest speaker? Not sure how to further engage the kids.
