

## 2023 Cloverbud Engineering Adventure: TRAVEL THROUGH TIME

(formerly Ohio 4-H Cloverbot Challenge)

Time travel has been a fascination for people over the years. Movies like *Back to the Future* or *The Terminator* have characters who travel through time. H. G. Wells 1895 novel, *The Time Machine*, made the idea of a time machine popular. The main characters in *Bill and Ted's Excellent Adventure* spend the movie learning about historical figures for a history report. Time travel has allowed characters in books and movies to interact with interesting people and events of the past or dream about the future. Exploring time travel is a great way for your Cloverbuds to connect with the past or imagine the future.

### The Challenge

Think backward or forward in time about something that interests the team. Design a model that includes moving parts or a simple machine. Your model could be a timeline, a time machine, a specific thing from a different time period (like a horse and buggy or futuristic vehicle).



### Explore the Past or Imagine the Future

Cloverbud Teams will think about:

- What historic events have shaped our present?
- What have been trends throughout history with clothing, transportation, houses etc.?
- What might your town look like in the future? How might people travel or dress in the future?
- What is the history of 4-H or what will 4-H be like in the future?

### Examples

- Your Cloverbud team is really interested in transportation. Your Cloverbuds create a model of a mode of transportation from the past.
- Your Cloverbuds imagine what their town might look like in the future. They build a model of the town.
- Your Cloverbuds are excited about castles. Build a castle with working parts like a drawbridge or catapult.



## Challenge Guidelines

- Teams must have at least two, but no more than eight members. All participants must be 4-H Cloverbud members
- Models must be constructed in an area no larger than 15"x15". A baseplate is recommended.
- Any type and quantity of interlocking bricks (i.e.: Mega Blocks, LEGOS) may be used.
- Models must feature a moving part or simple machine (lever, wedge, incline, wheel and axel, pulley, screw).
- Poster must include team name and members' names. Use the poster to highlight the overall experience.
- Rewards will be presented to all teams. Teams must be present at the Challenge in order to receive rewards.

## Project Showcase – Choose Your Location!

**Date: Tuesday, June 14**

Time: 6:30 p.m.

Where: Greene County Extension Office

Questions: Greene Co Extension Office - 937-372-9971

**Date: Thursday, June 22**

Time: 6:30 p.m.

Where: Washington Co Fairgrounds – Jr Fair Building

Questions: Washington Co Extension Office 740-376-7431

**Date: Saturday, June 24**

Time: 10:00 a.m.

Where: Nationwide & Ohio Farm Bureau 4-H Center  
2201 Fred Taylor Drive, Columbus, OH 43210

Questions: [millhouse.10@osu.edu](mailto:millhouse.10@osu.edu) – 614-247-6004

**Date: Tuesday, June 27**

Time: 7:00 p.m.

Cuyahoga County Fairgrounds: Multi-Purpose Bldg.  
19201 E Bagley Rd.  
Middleburg Heights, OH 44130

Questions: Robin Stone – [stone.363@osu.edu](mailto:stone.363@osu.edu)  
330-599-7724

**Date: Thursday, June 29**

Time: 5:00 p.m. (Check In/Set-up at 4:30 p.m.)

Perry County Fairgrounds  
5445 State Route 37 W.

New Lexington, OH 43764

Questions: Perry County Extension Office – 740-743-1602

## Team Registration

### Cost

There is no cost for clubs to register.

**Deadline to register: April 14, 2023.**

**ALL TEAMS MUST REGISTER HERE:**

[go.osu.edu/2023cloverbudengineeringadventure](http://go.osu.edu/2023cloverbudengineeringadventure)

### Questions?

Contact Christy Millhouse - [millhouse.10@osu.edu](mailto:millhouse.10@osu.edu)



## Need Interlocking Blocks?

**Returning teams** may use kits from previous years.

**New teams** may use their own interlocking blocks and base plates or may purchase a kit at a reduced cost.

### ORDER A KIT

Teams needing a kit may order one at a reduced rate thanks to funding from the Ohio 4-H Foundation!

**Reduced Kit Cost:** \$170 (maximum of 12 kits available) **Order Deadline:** Checks must be received by **April 14** to receive a kit at the discounted rate.

**Make Check Payable To:** OSU Extension, Darke County Mail to: Ohio 4-H Cloverbud Engineering Adventure c/o Teresa Rusler Heiss  
603 Wagner Ave. Greenville, OH 45331

Include: Club Name; County; Team Advisor Name; Contact Phone Number; Email Address

Watch this short video to learn more about the Cloverbud Engineering Adventure: <https://youtu.be/xrOrb3N37p0>



## 2023 Cloverbud Engineering Adventure: RESOURCES FOR CLUBS

### Meeting Timeline

#### First Meeting

- Explain the Cloverbud Engineering Adventure
- Find out what children know about the topic.
- Facilitate an activity related to the topic
- Distribute a parent handout explaining the Cloverbud Engineering Adventure. Include the dates of your meetings, field trip information, and the date, time, place of the event.

#### Second Meeting

- Facilitate an activity related to the topic
- Review the Challenge Problem
- Brainstorm a list of possible projects; select a focus

#### Subsequent Meetings

- Field trip/ Videos.
- Construct project model and create a project poster
- Continue activities related to the topic
- Practice presentation and sample interview questions.

### Project Showcase – What to Expect

#### When You Arrive

- Check In at the Registration Table. If possible, have a list of team members ready to turn in. We will use this list to complete certificates.
- Set up your poster and project in your club's designated area. Allow your Cloverbuds to set up as much as possible. Practicing in your meeting prior to the showcase will give them confidence.

#### During the Showcase

- Your club will be called to your display when it is your turn to present.
- An adult interviewer will listen to your Cloverbuds share about their project and will ask questions. Help your Cloverbuds be prepared by practicing a short presentation and answering questions. Questions will relate to what has been shared and activities done during meetings.
- When your club is not presenting, there will be fun activities

### Time to Learn!

PBS Show: Xavier Riddle and the Amazing Museum. Xavier and his friends travel through time to learn from inspirational figures:

<https://www.pbs.org/parents/shows/xavier>

From the UK National archives. Fun, short, interactive videos exploring the past.

<https://www.nationalarchives.gov.uk/education/families/time-travel-tv/>

Resources about time travel:

<https://www.pbs.org/wqbh/nova/time/>

Video about the Passage of Time (What does it mean to talk about the past, present and future):

<https://www.youtube.com/watch?v=u7GbQ2YH8Ck>

Watch the Jetsons (how people in 1960 imagined the future):

<https://www.youtube.com/watch?v=ayWynigrT3w>

Books: Time Jumpers books by Wendy Mass; Ranger in Time books by Kate Messner; Magic Tree House books by Mary Pope Osborne; Now and Then (Usborne Books); Past, Present and Future books by Linda Bozzo; If I Built Series by Chris Van Dusen; If You Were a Kids series by Josh Gregory and Sebastia Serra.

**CHECK OUT THESE CLOVERBUD READING ADVENTURES DESIGNED TO GO WITH THE 2023 CHALLENGE:** If I Were a Kid in a Medieval Castle; If I Built a Car and What You Never Knew About Beds, Bedrooms and Pajamas.

You can find these and more at

<https://u.osu.edu/cloverbudconnections/reading/>

