

# Windyville Challenge

## MacGyver Windmill Activity

Dear Families,

I am excited to share an amazing learning opportunity that our third grade class is participating in. We are taking part in a special hands-on windmill project produced by the Digital Transformation Center (DTC) in partnership with the University of Dayton Research Institute (UDRI). This project connects science, engineering, and creativity in a way that is meaningful and engaging for students.

Throughout this project, students will explore how wind energy can be turned into motion. They will plan, build, test, and improve their very own handheld windmills while using the Engineering Design Process just like real scientists and engineers. As part of the project, students will also have the exciting chance to 3D print their windmill designs.

As part of this experience, we will be taking a field trip to UDRI on **[Insert Date]**. During our visit, students will explore real research, work with UDRI engineers, and collaborate with high school students who are focused on STEM learning. This is a unique opportunity for our students to learn from real-world experts and student mentors in a different setting.

To help support this project, we are asking for donations of clean, recyclable materials.

Examples include:

- cardboard from cereal boxes or packaging
- construction paper
- scrap paper
- paper towel tubes
- or other lightweight paper materials that could be reused for building projects

If you are interested in volunteering during our classroom build time or joining us on the field trip, please let me know. Your support would be greatly appreciated.

Thank you for helping us make this a meaningful and exciting experience for our students. I am truly excited to get this project started and to see the amazing ideas our students bring to life. Please feel free to reach out with any questions or check out the **DTC website** for more information about the project, project timelines, and insights.

Sincerely,

**[Your Name]** 3rd Grade Teacher

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Please return the bottom portion of this letter by **[Insert Due Date]**:

Student Name: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

I give permission for my child to attend the field trip to the University of Dayton Research Institute on **[Insert Date]**. I understand that my child will be supervised by school staff and will follow all school rules and expectations during this trip.

Guardian Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I am interested in chaperoning the field trip: ☐ Yes ☐ No