Challenge Resource & Pacing Guide 2026-27
Use this pacing guide to help you plan out how to participate in the NASA TechRise Student Challenge.

Challenge Overview:
The NASA TechRise Student Challenge invites teams of sixth to 12th-grade students to design, build, and launch experiments on NASA-supported test flights. Guided by an educator, student teams affiliated with U.S. public, private, and charter schools can submit ideas for experiments to test on a high-altitude balloon. A panel of judges will review the submitted experiment ideas and select 60 winning entries. Each winning team will receive $1,500 to build their experiment and an assigned spot to test it on a NASA-sponsored flight operated by commercial flight provider – Aerostar.

CHALLENGE LAUNCH VIDEO: https://youtu.be/nDTuYVHUvrg

CHALLENGE WEBSITE: https://www.futureengineers.org/nasatechrise

KEY DATES:
- Entries due: November 2, 2026, 11:59 PM PT
- Winners Announced & Experiment Build Begins: January 19, 2027
- Winner Showcase: May 18, 2027
- Experiments Shipped to Future Engineers: May 19, 2027
- Experiments Launch: Summer 2027

WHO CAN ENTER: This is a challenge for SCHOOLS in the United States. U.S. public, private, or charter schools that serve sixth to 12th-grade students can assemble a team (or multiple teams) and enter. Minimum of 4 students per team. No maximum number of students per team. Proposals must be submitted by a team lead that is a teacher or employee of the school.

NGSS STANDARDS ALIGNMENT
Middle School: MS-ETS1-1, MS-ETS1-2, MS-ETS1-3, MS-ETS1-4
High School: HS-ETS1-1, HS-ETS1-2, HS-ETS1-3, HS-ETS1-4

GETTING STARTED:

Resource Type	Title	Description	Duration
Video	Challenge Video	Watch the NASA TechRise Student Challenge Video.	1 min
Slide Deck PDF	Challenge Overview Slides	Get to know NASA's TechRise Student Challenge. Explore the challenge page, familiarize yourself with the challenge resources and learn the steps to participate in the challenge.	5-10 min.
PDF & Word Template	Proposal Example & Template	Review the NASA TechRise Proposal Example & Template.	20-30 min.

HIGH-ALTITUDE BALLOON:

Resource Type	Title	Description	Duration
Slide Deck PDF	About High-Altitude Balloons Slide Deck	Use the About Ballons slide deck to learn all about high-altitude balloons and the environments they will provide your payload.	20 min
PDF	High-Altitude Balloon Design Guidelines	Review the High-Altitude Balloon Design Guidelines prior to planning your experiment.	5-10 min
Slide Deck PDF	High-Altitude Balloon Brainstorm Slide Deck	Use this slide deck to brainstorm possible high-altitude balloon experiments.	30-45 min
Worksheet PDF	High-Altitude Balloon Brainstorm Worksheet	Use this worksheet with the slide deck to help brainstorm possible high-altitude balloon experiments.	
Slide Deck PDF	High Altitude Balloon Plan Your Experiment Design Slide Deck	Use this slide deck to start planning your experiment. First, learn about microcontrollers and how they can be used in your payload design. Next, learn the different types of hardware and components that can be used to plan out your experiment.	45-90 min
Worksheet PDF	High-Altitude Balloon Explore Components Design Worksheet	Use this worksheet with the slide deck to plan a high-altitude balloon experiment design.	45-90 min
PDF & Word Template	Proposal Example & Template	Use this proposal example and template to create your NASA TechRise Proposal. Then submit your ENTRY to enter the competition!	Varies