

FLUID POWER ACTION CHALLENGE

Procedures for a “in-school” event.

The following is a list of steps that event hosts and teachers should take to plan and execute the Action Challenge.

Actions	Deadline	✓
<i>Prior to Challenge - Teachers</i>		
<ul style="list-style-type: none"> Read <i>Notes for Teacher-Facilitators</i> file carefully, paying attention to how much time will be required both on your part and that of your students. 		
<ul style="list-style-type: none"> Receive and check contents of shipment of kits against packing list. If any items are missing, contact support@mechanical-kits.com 		
<ul style="list-style-type: none"> Review documentation and support materials available 		
<i>Set overall timeframe for project and detail length of “learning episodes” (e.g. 3 X 1-hour classes per week)</i>		
<ul style="list-style-type: none"> Estimate timeframe over which the students will do the Workshop activities and the timeframe for design and building their device and finishing their portfolio 		
<ul style="list-style-type: none"> Set the date for the Challenge event when the four-member team(s) will build and demonstrate their device 		
<i>Progression through to the Challenge</i>		
<ul style="list-style-type: none"> Watch the Introduction to Fluid Power video 		
<ul style="list-style-type: none"> Review the documentation for the team 		
<ul style="list-style-type: none"> Introduce materials, tools and construction methods by building a Design Process Cube and demonstrate drilling a hole in the plunger of a syringe 		
<ul style="list-style-type: none"> Build the Lifter and Rotating Platform Devices 		
<ul style="list-style-type: none"> Review the Challenge Scenario in detail 		
<ul style="list-style-type: none"> Make students aware of the importance of the Design Process and how to score points in the Portfolio 		
<ul style="list-style-type: none"> Explore the materials and tools available for building the Challenge Scenario device 		
<ul style="list-style-type: none"> The team builds a prototype and writes/illustrates the team’s Portfolio 		
<ul style="list-style-type: none"> Interview questions will be written responses documented in the portfolio by all team members, each responsible for one question 		
<i>Teacher and Host</i>		
<ul style="list-style-type: none"> Organize an in-school Challenge Event and ensure communication channels are open with Host 		
<ul style="list-style-type: none"> Have students complete and submit media release forms 		
<ul style="list-style-type: none"> Facilitate an “in-school” Challenge Day: team(s) build, test and demonstrate device; teacher uses Judges rubric to evaluate the team’s work and its device including interview questions. 		
<ul style="list-style-type: none"> Teacher submits two-minute demo video, the “in- school” scoresheet and portfolio for up to three teams to Host. 		
<ul style="list-style-type: none"> Host will receive scoresheets and portfolios and video of operating device from all schools. Review scoresheets Parts, A, C and D verify the points and select the winners of each category. 		
<ul style="list-style-type: none"> Complete and distribute certificates to students 		
<ul style="list-style-type: none"> Complete and submit feedback form to NFPA 		