

NM MESA Day 2010 Frequently Asked Questions
Last Updated: March 3, 2010

This document is intended to clarify any information pertaining to the upcoming MESA Day/Region Design events. This document also acts as an addendum to the MESA Day Handbook and will be followed at each competition.

GENERAL INFORMATION:

Please note that the qualification process and location has changed for MESA Day. An email was sent detailing the qualification process and a new date and location will be announced ASAP. (1/14/10)

The new date and location for the 2010 MESA Day is **April 17, 2010 at West Mesa High School in Albuquerque**. As a reminder the only teams qualifying for the new MESA day is the top (1st place) team in each event, at each level (MS & HS) per region. (1/25/10)

Make sure and review updated Logistics Guide for MESA Day, available on the website. (3/3/10)

PREPARED DESIGN ABSTRACT:

Q: How do we submit our abstract for Region Design?

A: Look for instructions from your Regional Coordinator. Most may be done via email to your RC (9/15/09). PLEASE SAVE the document with your school, event, and team in the file name when submitting. (11/4/09)

Q: What header do we use for our Abstract?

A: **Put your school name, event, and team (A, B, C, D, or E)**. Do not put student names. If your school has more than 1 team submitting an abstract they can be consolidated into one document for submittal, but no more than one abstract per page. (9/15/09)

Q: How many judges will be reviewing our abstract?

A: At each design and at the state level, each abstract will be reviewed by 2-5 judges and the final score will be an average of all the reviewing judges. (9/15/09)

Q: Do we need to resubmit our abstracts?

A: As part of the pre-registration process, YES all prepared teams will need to resubmit their abstract and you are encouraged/allowed to modify and improve abstract as needed. (3/3/10)

Q: How do we submit our abstract(s) for MESA Day?

A: All abstracts will need to be individually saved as a Microsoft Word or PDF document with the School Name, Team, and Event as the document name (Ex. Mesaville High School Robotics A). During the registration process there will be a section provided to UPLOAD each document. The only abstracts that will be accepted will be those uploaded by deadline. (3/3/10)

PREPARED DESIGN Q&A SESSION:

Q: How many judges will conduct the interview?

A: Depending on the number of available judges, there will be 1-2 per team. To maintain consistency there will be an answer rubric provided to each judge so that all judges are scoring consistently. (9/15/09)

ON SITE EVENTS:

Q: Will any information be provided for the on-site events?

A: No, all on-sites are remaining on site. Use the general resources provided on the NM MESA website for a starting point. (9/15/09)

Q: Are events different for MESA Day than Regional Design?

A: Yes, all competitions will be different. They may be similar in topic, but different in content and/or scoring. (3/3/10)

PREPARED EVENTS:

Q: What devices will be impounded?

A: As an update to the handbook, all PREPARED EVENT DEVICES (Roller Coaster, Robot, and Windmill) will be impounded at the start of the event competition during the registration process. This is to ensure fairness for all teams and to avoid last minute modification by teams testing later in the event. Once your device is submitted to impound, no changes will be allowed until it is time for the team trial and changes are allowed only per event rules. (11/4/09)

PREPARED DESIGN WIND ENERGY CHALLENGE:

Q: Where do you suggest we get materials?

A: You can make your windmill out of nearly anything, but if you want to purchase items, KidWind has been working with NM MESA for the last couple of years to provide assistance to our windmill competition. They have provided a code that is good for 20% of all online orders. They do take purchase orders and you must use code when ordering. www.kidwind.com; CODE: KWNMMESA20. (9/29/09)

Q: Can we use a counterweight to lift the mass in our design?

A: No, per General Rules, the ONLY energy that can be used to lift the mass has to come from the fan/blown wind. Energy can be transferred, but it cannot be stored (like in a battery) and additional energy cannot be added by any other external item. (11/4/09)

Q: Do we need to provide our own weight for Wind Energy?

A: Yes, as part of the rules you are being scored on the largest mass you raise in the shortest amount of time. So you need to provide your mass and device. We will only have the testing materials (fan, table, etc.). (1/14/10)

Q: Is there a maximum weight?

A: No, but review the scoring rubric as it is not efficient to hoist a mass over what you will be given a point score for. (1/14/10)

Q: What is the width of the table?

A: The handbook says APPROXIMATELY (the squiggly line) 30". But, we cannot guarantee the width of the tables at each facility. So, please be prepared to operate on a table that may not be 30" wide by having a wide base that can balance on a skinnier table, etc. (2/8/10)

Q: Can we have our weight being pulled from the side?

A: Per the handbook, the work area is the area behind (in the back end) the table. So, the weight MUST be pulled from the rear of the testing area and NOT the side. (2/8/10)

PREPARED DESIGN ROBOTICS:

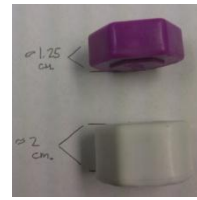
Q: Any tips on building our own course?

A: When using the electrical tape, it stretches. Try minimizing the stretch so that it does not shrink and "pull" your maze in storage. Also, when testing/making course, make sure that your surface is clean and smooth (no dirt and no ripples in the paper, etc.). (9/15/09)

Q: Where do we get the cars?

A: MESA purchased at Wal-Mart (under \$1/piece) and they are should be available at any store that carries hot wheels, but because they are 2009 cars, you should try to purchase before they stop making them and they become “collector” items. (9/15/09)

Q: What is the height of the weights?



A: 1.25 cm. for the Middle School and 2 cm. for the High School. See Picture: (11/4/09)

Q: Where do you get the weights and the cars?

A: The weights have been discontinued from the site so use similar weights in trial testing. Dimensions and photos are in this document and the parameters. (1/14/10)

Q: Do we need to bring weights and cars?

A: No, they will be provided as testing materials to maintain consistency. (1/14/10)

Q: Will the course be the same for MESA Day (dots in same location)?

A: No, the dots will be placed in a different location. All else about the course remains as outlined in parameters. (3/3/10)

Q: How strict are you going to be on the 7x12 Start Box size requirements?

A: VERY! This was a problem for many teams at Region Designs. The device (robot) must fit entirely (no overhang) in the provided size area at ALL times of operation (so no long ejecting parts, etc.). (3/3/10)

Q: How strict are you going to be on the “Out of Buffer Zone” Penalty?

A: VERY! Many devices at Region Design had wide “fronts” which made the device go out of the buffer zone each time the device was at an angle. Each time will be counted as a penalty, so build devices accordingly. (3/3/10)

PREPARED DESIGN ROLLER COASTER:

Q: Can we use tape across the top of our roller coaster path to secure walls?

A: No, you cannot use tape as that would be considered creating a tube/shoot at a point in the course. (9/15/09)

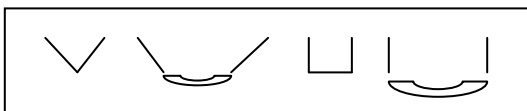
Q: There are lots of sizes of “medium” marbles, can you clarify your description?



A: See picture: (9/15/09)

Q: On the walls can you clarify what you mean by they cannot curve?

A: The intention is to create a truly open top so that the walls are not keeping the rider contained by any force except the natural forces of the coaster and there is no pinching to create a tube or shoot. Essentially the walls have to be $\geq 90^\circ$ parallel to each other and have to extend in a way that there is $\geq 90^\circ$ angle between the track surface and each wall. So the following walls/track surfaces are allowed: (9/15/09)



The following walls/track surfaces are not allowed:





Q: Does the start hill have to be a complete downward drop?

A: No, angled downward drop is meant to mean it can slant. (9/15/09)

Q: Is there a size limit on the popsicle sticks? Can they be colored?

A: No, there is too much variance to regulate, but they do need to be "Standard" popsicle sticks and NOT tongue depressors, paint sticks, or anything else. If they come colored than they are OK to use. But you cannot paint sticks to make them colored. (9/29/09)

Q: Can we paint rollercoaster?

A: No, paint is not an allowed material and can alter the course and stability of structure. (9/29/09)

Q: Can we use poster board? Can we use Manila Folders?

A: By definition, poster board is a type of cardboard so yes. Also, by definition, manila folders are made out of manila paper which is not a cardboard, so no. (9/29/09)

Q: Can we bend the popsicle sticks?

A: You can break them and use pieces. But, NO you cannot bend them by wetting and resetting them. The process alters the "intent" of the popsicle sticks and if they are not in their original condition the judges cannot verify that the materials used have not been altered and that they are in fact "true" popsicle sticks. (11/4/09)

Q: Can we have a base?

A: Yes, you can as long as it is built out of the allowed materials. The base becomes part of the device itself (to adhere to the free standing rule) and thus must fit all material and size constraints. (1/14/10)

Q: Can we use coffee straws or jumbo straws?

A: No, the only straws allowed are standard drinking straws. Any other type of straw has a high variance of strength and stability. (1/14/10)

Q: Can we use "Scotch" brand packing tape or other type of tape?

A: No, the intention is for true scotch (school/office supply) tape and not the "scotch" brand. (1/25/10)

Q: What are the dimensions of the catch cup?

A: The cup is approximately 2" high and 4" across the top rim. (1/25/10)

Q: Can we bring our own marble to use?

A: No, the only marble allowed will be the one provided as part of the testing materials. (3/3/10)

Q: Many teams scored perfect in this event, how will you rank teams?

A: The Event Coordinator is currently coming up with a more detailed scoring rubric so that ties will be avoided and teams can be fairly ranked. Please check back prior to competition. (3/3/10)