Michigan Crossroads Council – STEM Cardboard Sled Race

**Theme:** Winter STEM Olympics

**Date:** Saturday February 10, 2017 at Kensington Metropark, Milford

**Fee:** $10 per individual racer sled, $20 per team sled (up to 3 people)

**Your Mission**: Design and construct a person powered, cardboard or corrugated cardboard sled able to withstand a partial descent down the Kensington Metropark Sled Hill.

**Registration & Race Times**

February 10, 2017 Registration @ 10:00 am - Cub Scouts, 12:00 pm - Boy Scouts/Venturer and 1:00 pm - Corporate and Open Races

Races begin @ 10:00 am

Design and build a person powered, corrugated cardboard sled capable of withstanding the descent down the Kensington Metropark sled hill. How creative can you be using only corrugated cardboard as a building material? There are awards for the best design and team spirit. Come join the fun!

Awards

Top O’ The Hill Award – Most attractive or spectacular looking toboggan.

Vogue Award – Best details on sled

STEM Integration – Representing Science, Technology, Engineering and Math.

Spirit Award – Most spirited and/or best organized team. Looks don’t matter here.

Go Fast – Class I for Cub Scouts, Class II for Boy Scouts, Class III - Open and Corporate

Rules for all sleds:

Safety and fun are our objectives. Competition is secondary. For safety, you have to follow these rules. For fun, you need to follow them with a smile on your face and remember that this is an event organized and ran by volunteers who work very hard to ensure everyone has a safe and fun time. See you at Kensington Metropark!

Construction

• Your sled must pass inspection in order to be allowed on the hill.

• **All participants must be able to stop their sled!**

• Your sled must be free of sharp edges, pointy objects, or any other feature that may be deemed dangerous by the inspectors. If you are unable to remove such objects from your sled, you will not be allowed to race.

• Only corrugated cardboard may be used, held together with tapes & glues.

• Your sled may NOT be wrapped in plastic, tape, shrink wrap, or anything else.

• Absolutely NO use of the following:

o Corrugated plastics or other corrugated materials

o Non-corrugated cardboard such as carpet tubes

o Cardboard that is bonded to other materials

o Epoxy reinforced cardboard

o Tar based substances

o Epoxy glue

o Fiberglass resin

o Two-part varnished or any other two-part substances

o Glues that harden into solids

o Screws of any sort or material, including plastic

o Mechanical fasteners

o Nails

o Staples, even covered in tape

• Only seams and joints may be taped, not the whole toboggan.

• *You must be able to stop your sled*. Keep this important feature in mind when designing and building your sled.

**These rules are in place for your safety, the safety of those coming down the hill after you, and for the all the kids that ski and sled on the hill throughout the winter.**

Participation

• The pilot must have read and understand the rules and register the sled

• All riders must have read and understand the rules

• If you do not pass inspection, you may not be allowed to participate or may not be allowed on the hill at all.

• All occupants of a sled MUST provide and wear protective head gear (i.e. bicycle, ski helmet, etc.).

• No more than 3 occupants will be permitted on any one sled.

• To qualify as a finisher, you must be in or on your sled rather than chasing it or being chased by it as you cross the finish line.

• If you have a fast time, you may race more than once.

• If you wish to race again or against someone special, there will be match racing after the heats. Talk to the registration desk about “Grudge Matches”.

**All participants must be able to stop their sled!**

You must be able to explain or demonstrate the ability to stop your sled at the time of inspection. Failure to do so may result in disqualification and/or the sled will not be allowed to race.

**Winter STEM Olympics - Cardboard Sled Race Entry Form**

**Saturday, February 10, 2017 at Kensington Metropark, Milford**

Please type or print legibly!!

 **Class I – Cub Scouts/Webelos (if any rider on the sled is over 12, you are class II)**

 **Class II – Boy Scouts/Venturer (Age 13 and Above)**

 **Class III – Corporate/Open (Age 13 and Above)**

Pilot’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team/Sled Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mailing address: Street \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

City \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_State \_\_\_\_\_\_\_\_\_Zip \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit/Group/Company: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Going down a hill in a cardboard sled has inherent risks that are obvious. I, signed below, confirm that I understand those risks, have read and understand the Rules for the Cardboard Sled Race and agree to them. I also release Kensington Metropark, the City of Milford, Michigan Crossroads Council and all employees and/or volunteers of above from the responsibility of injury and destruction of property.

A parent’s or guardian’s signature is required for all persons under 18 years of age.

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Pilot Date Rider Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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