Design Brief: Maryland Pride Preakness Hat

Problem:
You have come to the Preakness with no hat to wear! (Gasp!)
(The Preakness is a famous horse race at the Pimlico race track in Baltimore, Maryland. People like to wear fancy hats to the Preakness!)

Goal:
To engineer a hat that displays Maryland pride.

Constraints: Good news! Your team is prepared for this kind of situation. You gather the following items from your cars and teaching bags:
- 16 fuzzy sticks
- Some clear tape (just 5 cm of tape left – drat!)
- Crayons and scissors
- A State Flags coloring book; it has a ready-to-color image of the Maryland flag (see Appendix A-2 for a sheet of black-and-white Maryland flags for you to cut and use.)

You’ve got 12 minutes to create your first attempt at a Maryland Pride Preakness hat.

Criteria: Your hat should:
1. Support itself for at least 10 seconds on a team member’s head without falling off.
   Cannot Support Itself = 0 points   Can Support Itself = 3 points
2. Include a correctly colored Maryland flag.
   Incorrectly Colored = 0 points   Correctly Colored = 3 points
3. Hold the flag as high as possible; higher is better; measurement is from top of head to bottom of flag.
   \[0 – 10 \text{ cm} = 0 \text{ points}\]
   \[11 – 20 \text{ cm} = 1 \text{ point}\]
   \[21 – 30 \text{ cm} = 2 \text{ points}\]
   \[31 – 40 \text{ cm} = 3 \text{ points}\]
   and so on ...

~ This Design Challenge was created by Pamela Lottero-Perdue, Towson University ~