



The Washington State Math Council's High School
2012 Team Project Competition
Primary Importance!

Teams will use data available at the Web site <http://www.nationalpolls.com/> to make predictions about the Republican candidates who will come in 1st, 2nd, and 3rd in the Republican primaries and caucuses in the 2012 presidential election.

The Team Project is composed of three components; a written report (70% of the total points), a presentation (15% of the total points) and a display (15% of the total points). Half of the points awarded to the written report will be determined by the accuracy of teams' predictions regarding the outcomes of the Republican primaries and caucuses that take place on or before March 6, 2012. (If the team advances to the state competition, predictions will continue through April 10 primaries and caucuses.) The way in which these points will be awarded is described below under the heading, "Scoring." The scoring guide for the Team Project describes how the remainder of the points for the Team Project will be awarded.

For each primary or caucus **completed between January 15 and March 7 (between January 15 and April 10 for state competition)** each team will predict:

- a.) which candidate will place first, second, and third in terms of percent of the vote they will get;
- b.) what percent of the vote your predicted candidates will get (specify to the tenth of a percentage point.)

These predictions must be submitted via e-mail 7 days before the primary or caucus begins for each of the states. Late predictions will not be accepted and will be scored zero. Late predictions will not eliminate a team from the competition and they may continue to submit timely predictions. Submit predictions to Mark Roddy at mroddy@seattleu.edu

Scoring:

PLACE POINTS: If you predict a candidate's place (1st, 2nd, or 3rd) correctly, you get 30 points. If you predict a candidate's place and you are off by 1 you get 20 points. If you predict a candidate's place and you are off by 2 you get 10 points. If you are off by more than 2 you get zero points for that candidate.

PERCENTAGE POINTS: For each of your three predictions you start with 30 points. The absolute value of the difference between your prediction and the actual percent of the vote gained by the candidate will be deducted from 30 for each prediction. However the score will never be less than zero.

The sum of your place points and your percentage points determines your score for each of your three predictions. The sum of these points weighted by the electoral college values* for each state across all the primaries and caucuses that are

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completed on or before March 6 will determine 50% of your project's written report score. This weighted sum will be turned into a percentage of the possible points, multiplied by 76 (The number 76 comes from the fact that the written report has a total of 152 possible points.) and added to the rest of the written report score. (See scoring guide for details.)

Here's an example of scoring on a single primary or caucus:
Let's say the candidates are A, B, C, and D,

	Your Predictions		Actual Results		Your score	
Place	candidate	% points	candidate	% points	Place	Percentage
1 st	B	38%	B	34%	30	26
2 nd	D	28%	F	33%	20	29
3 rd	A	18%	D	29%	20	16
4 th			A	4%		

So, for this primary you got $30+26+20+29+20+16=141$ points (180 were possible).

Here's another example:

	Your Predictions		Actual Results		Your score	
Place	candidate	% points	candidate	% points	Place	Percentage
1 st	B	38%	C	35%	10	21
2 nd	A	35%	A	30%	30	25
3 rd	C	20%	B	29%	10	15
4 th			D	8%		

So, for this primary you got $10+21+30+25+10+15=111$ points (180 were possible).

*Weights will be determined by the number of Electoral College votes assigned to each state. For example, Arizona, which gained congressional seats through the 2010 census reapportionment, now has nine congressional seats and so has nine votes in the electoral college. Adding together the Electoral College votes of all the states that are currently scheduled to hold Republican primaries or caucuses on or before March 6 gives a total of 185. Arizona's 9 votes then constitute $9/185 = 0.04865$ (rounded to the 5th decimal place) or 4.865%. Texas, by contrast has 36 Electoral College votes and so will have a weight of $(36/185=0.19459)$ 19.459%.