Winter Weather Challenge 6DMS

NAME:	DATE:
STUDENT #:	TEACHER:

Analyzing the Forecast: Student Sheet #1

Underline and analyze these forecasts using the key in your student edition.

Forecast Issued	Forecast for Tuesday, January 28 th
48 hours	Mostly cloudy. Highs in the upper 30s. Northwest winds 10-15 mph.
40 hours	Mostly cloudy. Highs in the upper 30s. Northwest winds 10-15 mph.
32 hours	Mostly cloudy with a slight chance of snow or chance of freezing rain in the afternoon. Highs in the mid 30s. Northwest winds 10-15mph. Chance of precipitation 30%.
24 hours	Winter storm watch in effect from Tuesday morning through Wednesday afternoon. Chance of snow in the morning then snow likely in the afternoon. Snow accumulation up to 1 inch. Highs in the mid 30s. North winds up to 10mph. Chance of snow 60%.
16 hours	Winter storm watch in effect from Tuesday morning through Wednesday afternoon. Slight chance of freezing rain. Snow and sleet in the morning then snow likely in the afternoon. Snow and sleet accumulation up to 1 inch. Highs in the upper 20s. North winds 10-15 mph. Chance of precipitation 70%.
8 hours	Winter weather advisory in effect from 10am Tuesday to 7am Wednesday. Slight chance of snow in the morning. Then snow likely in the afternoon. Snow accumulation up to 1 inch. Highs around 30. North winds 10-15 mph. Chance of snow 70%.
Decision must be made	Winter storm warning in effect from 9am this morning to 7am Wednesday. Snow and sleet likely in the morning. Then snow and freezing rain in the afternoon. Snow and sleet accumulation of 1-2 inches. Highs in the lower 30s. North winds 5-15mph. Chance of precipitation 80%.

1.	What trends or patterns do you see in the forecast?
2.	Would you recommend that the Superintendent close schools in this situation? Why?

Winter Weather Challenge 6DMS NAME: DATE: STUDENT #: TEACHER: Sample Decision Matrix: Student Sheet #2 Shade each box according to the forecast and conditions for each category. **Forecast Forecasted Temperature Probability** Watch/ Frozen Green-Issued Weather of **Precipitation** warning/ 40° or higher **Precipitation Conditions** Amount advisories Yellow-Mid-Green—Dry Green- Less Green-None. Green-none to-upper 30's Yellow-Rain Yellow—Advisory than 40% or no $(33-39^{\circ})$ Yellow- 40% Red-Watch or Red- Frozen accumulation Red-32° or Precipitation to 70% Warning Redless Red-Greater Measurable than 70% accumulation 48 hours 40 hours 32 hours 24 hours 16 hours 8 hours **Decision** needs to be made 1. Did you decide that school should remain open or be closed? Why?

2.	How did the Decision Matrix influence your decision?