

PUNXSUTAWNEY PHIL WEATHER LEARNING ACTIVITY

In this activity, students will:

1. Review and discuss the vocabulary words (see Vocabulary)
2. Observe and record daily weather temperatures and sun and cloud conditions on a graphic organizer
3. Calculate weekly means and summarize data at the end of six weeks
4. Analyze historical data and current data to make future predictions

Science Standards:

Earth Standards (observing and describing weather)

Scientific Inquiry (record and organize observations and make predictions)

Mathematics Standards:

Number, Number Sense and Operations (addition and mean)



VOCABULARY

DATA: information, especially for the use of analysis or basis for a decision

EVIDENCE: Facts or observations on which a conclusion can be based.

MEAN: The sum of a set of numbers divided by the number of elements in the set. In our Punxsutawney Phil log, the seven (days of the week) and our recorded daily high temperatures are added up and divided by the number seven. For example:

<u>Day</u>	<u>Daily High Temperature in Degrees</u>
Monday	42
Tuesday	38
Wednesday	20
Thursday	25
Friday	28
Saturday	40
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Sum Total	$193 / 7 = 27.571$ or rounded, 28

OBSERVE: To watch carefully, especially with attention to details or behavior for the purpose of arriving at a judgment

PREDICTION: a statement or claim that an event will happen in the future

TABLE: A Graphic Organizer having columns and rows and used to document information; a chart.

TEMPERATURE: degree of hotness or coldness

WEATHER: The state of the atmosphere with respect to heat or cold, wetness or dryness, calm or storm, clearness or cloudiness

PUNXSUTAWNEY PHIL WEATHER LOG
WAS PHIL CORRECT?

On February 2, 2006 Punxsutawney Phil:

? did see his shadow (there will be six more weeks of winter) ? did NOT see his shadow (spring is on the way!)

Every day, record the **daily high temperature** and whether the day was **sunny (S)**, **cloudy (C)**, **partly sunny (PS)** or **partly cloudy (PC)**.
At the end of six weeks, complete the information on the next page and have a discussion about whether or not you think Punxsutawney Phil was correct in his prediction!

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	WEEKLY AVERAGE
WEEK #1				2-2	2-3	2-4	2-5	
WEEK #2	2-6	2-7	2-8	2-9	2-10	2-11	2-12	
WEEK #3	2-13	2-14	2-15	2-16	2-17	2-18	2-19	
WEEK #4	2-20	2-21	2-22	2-23	2-24	2-25	2-26	
WEEK #5	2-27	2-28	3-1	3-2	3-3	3-4	3-5	
WEEK #6	3-6	3-7	3-8	3-9	3-10	3-11	3-12	

At the end of the six week period, determine:

1. AVERAGE HIGH TEMPERATURE FOR SIX WEEKS

Weekly Mean

Week #1 _____

Week #2 _____

Week #3 _____

Week #4 _____

Week #5 _____

Week #6 _____

TOTAL: _____ and divide by 6 = _____
Average High Temperature for Six Weeks

2. COUNT THE NUMBER OF SUNNY DAYS: _____

3. COUNT THE NUMBER OF CLOUDY DAYS: _____

4. COUNT THE NUMBER OF PARTLY SUNNY DAYS: _____

5. COUNT THE NUMBER OF PARTLY CLOUDY DAYS: _____

6. WERE THE MAJORITY OF THE DAYS SUNNY, CLOUDY, PARTLY SUNNY OR PARTLY CLOUDY WOULD YOU SAY?

7. THIS YEAR'S PREDICTION: What was Punxsutawney Phil's prediction for this year? Do you think he was correct or incorrect and why do you say that?

8. PAST DATA: The recording of Punxsutawney Phil's "seeing his shadow" or "not seeing his shadow" began in 1887; the results are as follows:

saw his shadow (six more weeks of winter)	95
no shadow (spring is on the way!)	14
no record	9

Based upon this data, and the data that you collected this year, what is your prediction for next year? Why do you say that?

9. WHAT DID YOU LEARN: What kinds of things did you learn from doing this activity about the weather?
