

WELCOME TO THE SERT

TEMPERATURE SURVEY ACTIVITY



Department of Facilities Management
Montgomery County Public Schools
45 W. Gude Drive, Suite 4000
Rockville, MD 20850
240-314-1090
www.greenschoolsfocus.org

ADULT SPONSOR GUIDE:

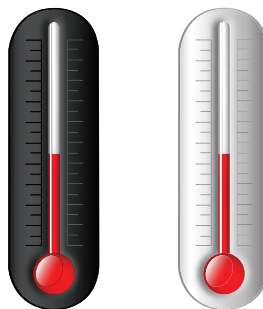
PROCEDURES AND CONSIDERATIONS FOR A BUILDING TEMPERATURE SURVEY

Purpose: To provide a relatively comfortable, energy efficient learning environment.

- First and foremost: discuss conducting a temperature survey with your administration and building service staff.
- Make sure you have their full support and assistance.
- Inform your school staff about the temperature survey. (see sample email)
- Contact your SERT Facilitator and inform them of your planned survey.
- When planning your survey, pick a day when outside temperatures are in the normal range and not at an extreme for the winter heating or summer cooling season.
- Inform school staff on the day of the survey to please not open windows or block ventilation units.
- Follow room temperature data gathering procedures sheet.
- When complete, have the SERT team tabulate the data as shown in the example and present results to your administration, building service manager and SERT Facilitator.

INSTRUCTIONS FOR ENERGY DATA COLLECTION*

1. Students should inform their teacher they will be involved with SERT duties.
2. Students should report to the SERT Team Sponsor's Classroom.
3. Pick up a "SERT Team" Hall Pass, Map, Data Chart and a Thermometer.
4. Students should look at the hall pass. The number on the pass matches a location on the map. Go to those rooms that are assigned to the pass number. (look at the map legend).
5. Enter the classrooms quietly.
6. Point the thermometer 6 to 12 inches above the surface of 3 desks in the middle of the room (do not point at a person). Average the readings. This should give you an average for the room. Students should record this in their data table.
7. If the classroom has a thermostat, take a reading with the thermometer no more than 12 inches above the wall surface at the thermostat. Record this in your data table.
8. Look at the windows. If they are open, write that down in the comments column.
9. Look at the ventilation unit. If it is blocked with books or other items, write that down in the comments column.
10. Students should gather data for all of the rooms in their area.
11. Students should return to SERT Team Sponsor's classroom.
12. Students should put the thermometers, passes, data charts and maps back into the box.
13. Next Steps: Tabulate and analyze the data and if necessary work with your building service team to develop a plan.



*The instructions found here are for secondary students. Elementary green teams can adapt this activity to an appropriate level by increasing support and supervision.

SHERWOOD HIGH SCHOOL

STUDY SAMPLE

On November 20, Green Team volunteers took the temperature of every accessible room in the school. Temperatures were taken between 9:15 a.m. and 10:00 am. The outside temperature ranged from 46 – 51 degrees from 9:00 a.m. to 11:00 am. The results of the survey are as follows:

The hottest room was room B208. The recorded temperature was 97 degrees. The room has no windows and is generally extremely hot on a daily basis.

Only seven rooms in the building were below 70 degrees. The coolest of these is the gym at 67 degrees

The rooms in the chart on next page are those that require immediate adjustment. These rooms had temperatures ranging from 74 to 97.9 degrees. Some of these teachers indicated that they hoped adjustments would be made soon as they are very uncomfortable. Five of these teachers opened the windows to cool the room even though we had asked that the windows remain closed for the survey (I assume it got so hot that it was unbearable with the windows closed).

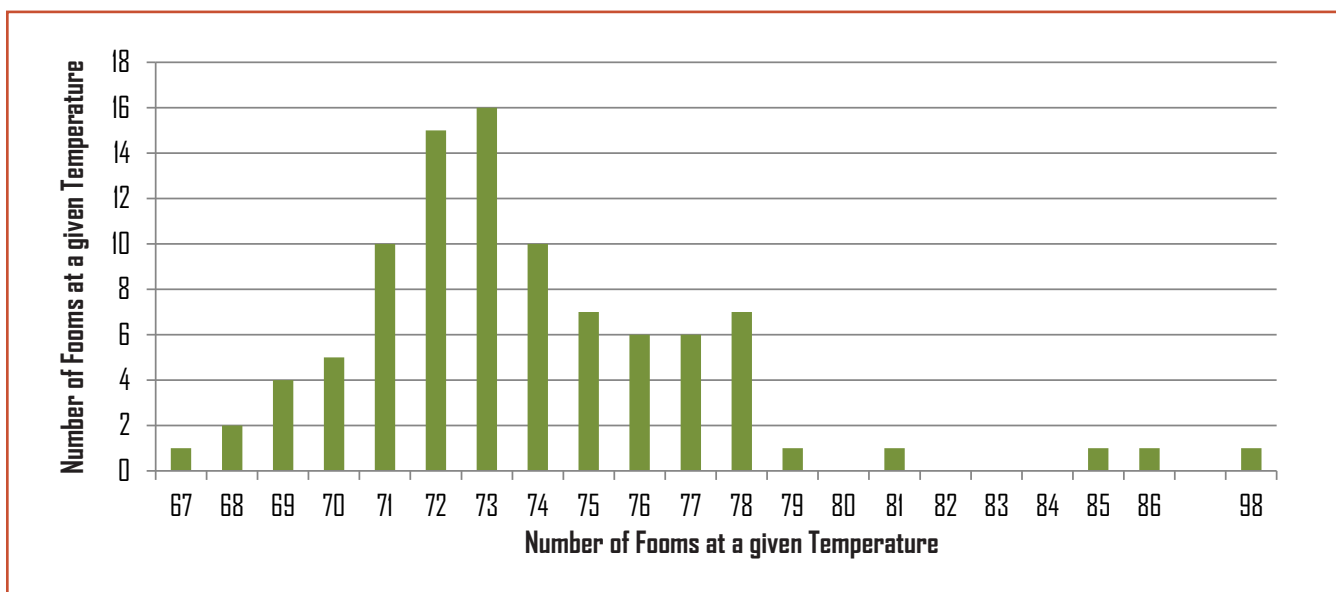
SHERWOOD HIGH SCHOOL

STUDY SAMPLE

ROOMS WITH EXCESSIVE HEAT

Room #	Wall by the Thermostat	Comments
208	97.9	
221	85.9	
238	85.1	
296	80.5	window opened
298	79.4	window opened
132	78.3	
251	78.3	
271	78.3	
122	78.0	
258	78.0	window opened
146	77.8	
241	77.6	
250	77.4	
260	77.4	
204	77.3	
208	77.3	
120	76.6	
253	76.6	

Room #	Wall by the Thermostat	Comments
118	76.3	
139	76.1	
151	75.9	
294	75.9	
262	75.8	window opened
237	75.6	
242	74.9	window opened
261	74.9	
283	74.9	
125	74.8	books on heater
116	74.6	
264	74.6	
108	74.5	
148	74.2	
248	74.2	
110	74.1	
252	74.1	
128	74.0	
215	74.0	



If you have any questions, please contact the SERT office 240-314-1090 or email SERT@mcpsmd.org.

SHERWOOD HIGH SCHOOL

STUDY SAMPLE

ROOM TEMPERATURE DATA ON NOVEMBER 20

Room #	Wall by the Thermostat	Comments	Room #	Wall by the Thermostat	Comments	Room #	Wall by the Thermostat	Comments
208	97.9		148	74.2		217	72.1	
221	85.9		248	74.2		230	71.9	
238	85.1		110	74.1		281	71.9	
296	80.5	window opened	252	74.1		128	71.8	
298	79.4	window opened	128	74.0		257	71.8	books on heater
132	78.3		215	74.0		117	71.7	
251	78.3		138	73.8	books on heater	266	71.7	
271	78.3		232	73.8	window opened	292	71.7	
122	78.0		272	73.8		141	71.6	books on heater
258	78.0	window opened	273	73.8	books on heater	123	71.5	
146	77.8		228	73.8		119	71.4	
241	77.6		233	73.4		211	1.4	
250	77.4		136	73.3	books on heater	255	71.3	books on heater
260	77.4		246	73.3		259	71.3	
204	77.3		249	73.2		293	71.1	window opened
208	76.6		202	73.1		107	70.9	
120	77.4		135	72.9		226	70.9	
253	77.4		243	72.9		245	70.8	
118	77.4		115	72.8	books on heater	143	70.6	window opened
139	77.3		150	72.8		263	70.6	
151	77.3		210	72.8		111	70.4	
294	76.6		285	72.7		147	70.4	
262	76.6	window opened	229	72.6		212	70.4	
237	76.3		247	72.6		219	70.1	
242	76.1	window opened	109	72.5		244	70.1	
261	75.9		130	72.5		213	69.3	
283	75.9		268	72.4		218	69.1	window opened
125	74.8	books on heater	262	72.4		149	68.9	
116	74.6		282	72.4	window opened	265	68.6	
264	74.6		239	72.3		137	67.8	
108	74.5		278	72.3		145	67.7	
						276	67.4	gym