

# WESTERN SCHOOL OF TECHNOLOGY AND ENVIRONMENTAL SCIENCE

## Environmental Science

*Western's Environmental Science program is intended for science-oriented and/or environmentally motivated students who plan to attend a four-year college or university immediately after high school. Students are required to earn eight science credits for graduation. Many science courses are offered at the honors, gifted and talented (GT) and advanced placement (AP) levels. Western offers research and internship positions for some students during their senior year.*

**BCPS Magnet Transportation Information:** *Western School of Technology & Environmental Science (Southwest Area) Transportation is provided at community pick-up points only for students who are zoned for high schools in the Southwest or Northwest areas, as well as those who would otherwise attend Dulaney or Towson High School.*

**Open House:** Thursday, November 3, 2011 6- 8 p.m.

## 2012-2013 Assessment Guidelines


**Assessment Date:** Saturday, January 21, 2012 **Assessments by appointment**

**Assessment reminders will be mailed to all applicants.** Parents/Guardians of applicants who have NOT received notification at least five (5) days prior to the assessment date MUST contact the school to verify/schedule an appointment.

**Parent(s)/guardian(s)** should contact both the school and Magnet Office immediately if the applicant cannot attend or complete the scheduled assessment due to an unforeseen illness or emergency. Please be aware that assessments will not be rescheduled without documentation verifying the illness or emergency.

**Inclement Weather Date:** Saturday, January 28, 2012, at the previously scheduled appointment time

**Inclement Weather:** In the event that schools are closed due to inclement weather, weeknight magnet assessments will be postponed. Weekend magnet assessments will be postponed if the snow emergency plan is put into effect for Baltimore County. Postponed assessments will occur on the designated inclement weather date.

<p style="text-align: center;"><b>Western School of Technology &amp; Environmental Science</b> 100 Kenwood Avenue Catonsville, MD 21228</p>	<p><b><u>Directions to Western:</u></b></p> <p><b>From the north:</b></p> <ul style="list-style-type: none"> <li>• Take 695 West towards Glen Burnie to the Wilkens Avenue East Exit 12B.</li> <li>• Turn right on Wilkens Avenue, go under the beltway and turn left on Kenwood Avenue (there will be a sign to the Beltway Towson on Kenwood Avenue).</li> <li>• Stay on Kenwood Avenue past the entrance to the beltway.</li> <li>• Western will be at the top of the hill on your left.</li> </ul> <p><b>From the south:</b></p> <ul style="list-style-type: none"> <li>• Take 695 North towards Towson to the Exit 12C Wilkens Avenue Exit.</li> <li>• As you come off the exit, stay straight to the stop sign.</li> <li>• Turn left at stop sign on Kenwood Avenue.</li> </ul>
	
<p style="text-align: center;"><b><u>Magnet Coordinator</u></b> Lisa Gleason 410-887-0849 lgleason@bcps.org</p>	

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### Prior to the Assessment

This **MUST** be completed prior to coming to the audition.

Complete the 2012-2013 Applicant Self-Evaluation included with these guidelines.

**How to prepare for the test:** Applicants can review science concepts that include metric units of measure, the scientific method, ecosystem structure, energy flow, the atmosphere, population biology, and physical and chemical properties

A sample practice test has been included with these guidelines.

### On the Day of the Assessment

The assessment takes approximately 2 hours.

It is the responsibility of the parent(s)/guardian(s) to:

- ensure that the applicant attends the assessment on the scheduled date and time.
- contact the schools if scheduled magnet assessment appointments conflict.

*Failure to attend an assessment WILL result in disqualification.*

### Registration Information

Applicants must attend the school-based assessment for the program to which they applied. All students will be contacted regarding a specific appointment time.

Students should plan to arrive at least 15 minutes prior to their assessment time and report to the front lobby of Western. Assessments will start at the designated time. Students should be accompanied by at least one parent/guardian. **There will be no assessment provided for applicants arriving after the assigned assessment time.** Parents may stay in a designated area during the assessment.

### Assessment Description

Applicants will need to bring two #2 pencils to take the assessment. Applicants will complete a math assessment and a practical assessment.

On assessment day, students will take a two part practical assessment. There will be a written portion as well as a hands-on portion of the assessment which involves the use of basic scientific observations.

Written Assessment (20 points): Applicants will be asked to write a response that focuses on the process of a scientific investigation.

Practical Assessment (20 points): Applicants will be asked to complete a scientific investigation. The assessment will measure the students' ability to understand scientific results and follow scientific procedural directions.

Documented testing accommodations, as appropriate to the assessment will be provided.
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### Magnet Events

<b>Magnet EXPO!</b>	<b>Saturday, September 24, 2011</b> <b>Crowne Plaza Timonium</b>	<b>10 a.m. - 2 p.m.</b>
<b>Magnet Application Meetings</b>	<b>Tuesday, September 27, 2011</b> <b>Woodlawn HS Auditorium</b>	<b>Program starts at 6 p.m.</b>
	<b>Wednesday, September 28, 2011</b> <b>Kenwood HS Auditorium</b>	<b>Program starts at 6 p.m.</b>
<b>Application Deadline</b>	<b>Wednesday, November 30, 2011</b>	

Application packets are available at [www.bcps.org/offices/omp](http://www.bcps.org/offices/omp). Applications must be hand delivered or postmarked on or before **November 30, 2011**. Late applications are not processed

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### Preparation for the Environmental Science Magnet Assessment

#### I. The Scientific Process

Be aware of the following parts of a scientific experiment and their definitions

- i. Independent variable
- ii. Dependent variable
- iii. Hypothesis
- iv. Theory
- v. Control
- vi. Data

#### II. Observations

- a. Obtain a specimen from nature and make as many scientific observations of the specimen as possible
  - i. Make sure observations are scientific and are not biased.
  - ii. Use resource diagrams, magnifying glass, ruler, etc., to help you.

#### III. Experimentation

- a. Follow the directions for an at home experiment on the internet at [www.sciencebob.com/experiments/lavacup.php](http://www.sciencebob.com/experiments/lavacup.php)
- b. Conduct the experiment that is described on the webpage. Be sure to follow instructions in a step by step process. Make observations as you proceed.
- c. Practice being a scientist and experiment with the four options in the "Make It An Experiment" section.

# WESTERN SCHOOL OF TECHNOLOGY & ENVIRONMENTAL SCIENCE

## APPLICANT SELF-EVALUATION 2012-2013

### Environmental Science

**DO NOT include this worksheet with your application.**

**Important:** All applications must be postmarked by the application deadline of **November 30, 2011**. Incomplete applications will not be considered for admission.

#### **Admission Criteria**

Magnet Program	Admission Criteria
Environmental Science	<ul style="list-style-type: none"> <li>✓ Algebra I or higher in grade 8</li> <li>✓ B average (2.5 or better) in English/Language Arts, Mathematics, Social Studies and Science</li> <li>✓ Satisfactory Attendance (94% or higher)</li> <li>✓ Performance on Magnet Assessments (written assessment and practicum)</li> </ul>

#### **Magnet Assessment Date**

On January 21, 2012 from 8 a.m. -2 p.m. all assessments by appointment, (inclement weather date: January 28, 2012), all applicants will be required to attend the assessment held at Western School of Technology and Environmental Science. Applicants should be accompanied by at least one parent/guardian. All applicants will be contacted regarding a specific appointment time.

#### **Placement Prior to the Lottery**

According to Superintendent's Rule 6400, *at the high school level where the number of qualified applicants exceeds the number of available seats, up to 20% of the seats may first be filled with candidates who show exceptional commitment and promise in the specialized program as evidenced by their performance on the approved magnet assessment(s). The remaining seats will be filled using the centralized random lottery selection process from the remaining pool of qualified applicants.* Specifically, applicants who earn the highest combined scores on the program assessments may fill up to 20% of the seats available in the magnet program.

#### **Qualifying for Admission**

The applicant must earn at least 80 points from the stated criteria in order to qualify for admission.

#### **How to Calculate Your Grade Average**

Convert your marking period grades to points (A=4, B=3, C=2, D=1, E=0). Then divide by the number of marking periods.

Subject	Last Year's Report Card				Current Year's Report Card	Total Points	Total Marking Periods (4 or 5)	Grade Average
	1 <sup>st</sup> marking pd. grade/points	2 <sup>nd</sup> marking pd. grade/points	3 <sup>rd</sup> marking pd. grade/points	4 <sup>th</sup> marking pd. grade/points (if applicable)	1 <sup>st</sup> marking pd. grade/points			
<b>English/Lang Arts</b>								
<b>Math</b>								
<b>Science</b>								
<b>Social Studies</b>								

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Criteria		Scoring		My information	My Score
<b>Admission Criterion #1</b> Math Enrollment	Algebra I	Algebra I and higher	10 points	My current math course is _____ (record math course here)	_____/10 pts
		Algebraic Thinking 2	5 points		
		Pre-Algebra, Math 8, or below	0 points		
<b>Admission Criterion #2</b> Grade Average  (see "How to Calculate Your Grade Average")	"B" average or higher (2.5 or higher)	<b>English/LA, Mathematics, Social Studies and Science:</b>		English/Lang. Arts Average: _____	_____/10 pts
		Score 10 points each for a grade average equaling "B" or higher (2.5 or higher)		Mathematics Average: _____	_____/10 pts
		Score 0 points for each grade average less than "B" (less than 2.5)		Science Average: _____	_____/10 pts
				Social Studies Average: _____	_____/10 pts
<b>Admission Criterion #3</b> Attendance	94% Attendance  Total unexcused absences in Grade 7 -plus- first quarter/trimester in Grade 8	Total unexcused absences in Grade 7 -plus- first quarter/trimester in Grade 8 = 14 days or less.	10 points	Total unexcused absences in Grade 7 (all quarters/trimesters) = _____ days -plus- Total unexcused absences in Grade 8 (first quarter/trimester only) = _____ days  <b>Total unexcused absences = _____ days</b>	_____/10 pts
		Total unexcused absences in Grade 7 -plus- first quarter/trimester in Grade 8 = 15 days or more.	0 points		
<b>Admission Criterion #4</b> Written Assessment	Score on assessment determines total points earned.	Applicants may earn up to 20 points.		To be determined on January 21, 2012.	_____/20 pts
<b>Admission Criterion #5</b> Practical Assessment	Score on assessment determines total points earned.	Applicants may earn up to 20 points.		To be determined on January 21, 2012.	_____/20 pts
<b>Points to Qualify</b>	80 points	<b>My Score:</b>			_____/100 pts

**DO NOT include this worksheet with your application.**

**FOR STUDENT SELF-ASSESSMENT USE ONLY – does not indicate qualification for programs.**