YORK MEMORIAL COLLEGIATE INSTITUTE





R.U.S.H. (Roadmap to University Success with Honours) APPLICATION

PRE-AP and AP: HIGH LEVEL ENRICHMENT PROGRAM

(RUSH Application 2020-2021 to be attached to the Application for Optional Attendance)

Student:	School:	
Home Address:	Phone:	
Email Address:		

The goal of York Memorial's R.U.S.H. program is to nurture knowledgeable and ethical students of the highest standard. York Memorial's R.U.S.H. students should enter this program with a desire to engage their curiosity, and to persevere through worthwhile challenges.

The **R.U.S.H. Program** offers a rich and challenging curriculum with the specific aim of preparing students for university through a combination of disciplined study, independent and group research, enhanced curriculum and creative projects. Our expectation is that R.U.S.H. students with the Pre-AP courses in grades 9 to 11 will enroll in our AP (Advanced Placement) courses in their senior years. These internationally recognized courses offer students the opportunity to undertake first-year university studies while still in high school and to gain credit (upon successful completion of their AP exams) at most universities worldwide in addition to every single university in Ontario.

In September 2019 the R.U.S.H. Program at York Memorial had over 400 students enrolled in either the R.U.S.H. or AP Program (grades 9 – 12) and as such, was one of the **largest specialized programs in the TDSB**. We are also the only school in the TDSB that offers a full Pre-AP and AP Program. In addition, York Memorial is the largest public Pre-AP and AP school in all of Ontario!

In addition to offering excellent academics, the R.U.S.H. program also strongly encourages participation in our vast array of extra-curricular activities. When our students graduate from this program they will be ready to enter their university or college program of choice with confidence and increased understanding.

In order to apply for the RUSH program, students must complete the <u>attached package</u>. Included in the package is the following:

- Leadership and Extracurricular Involvement Summary Form
- □ An Admission Test for Math, Science & English
- A copy of your Final June Grade 7 Report Card and Grade 8 Interim Report Card
- A declaration form stating that you have completed the admission package independently For further information, please contact the Guidance Department at (416) 394-3000-Ext.20040) (http://schools.tdsb.on.ca/yorkmemorial)

DUE DATE:

✓ Please return all **RUSH** Applications under Optional Attendance and for Area students by **January 31, 2020**.
 EARLIER is recommended.

SCHOOL CHOICE:

If you do not get into the RUSH Program, are you also applying to regular attendance at YMCI? Yes 🛛 No 🖵

R.U.S.H	Leadership and Extracur	ricular Involvemen	t Summary Chart	WORKL COLLEGIA, T
	2020/2021 R.U	J.S.H. Application		
Student:		Current School:		
TDSB Student No.:		Date of Submission:		The second is a second se

Leadership and/or Extracurricular Activity	Description of Activity	Number of Hours Committed to Activity	Supervisor Name and Contact Number	Supervisor Signature



TDSB is committed to creating an equitable school system where the achievement and well-being of every student is fostered through rich, culturally authentic learning experiences in diverse, accepting environments where all are included, every voice is heard, and every experience is honoured.

OPINION ESSAY

Task:	Express your opinion on ONE of the following topics below.
Topics:	Should cell phones be banned in TDSB classrooms? OR
	Should it be mandatory for all TDSB students to be involved in at least one extra-
	curricular team/club each year?
Required:	Write a series of three paragraphs developing your main idea with supporting
	details (proof, facts, examples).
	The length of your opinion essay should be approximately 350 words.
	Please use the graphic organizer (below) to plan your essay.

Staten	Statement:			
Circle	One: Agree or Disagree			
	Reasons for My Opinion	Examples From My Experience		
1				
2				
3				



Grade 8: Rubric for an Opinion Piece

Categories Reasoning	Level 1 The student:	Level 2	Level 3	Level 4
 complexity of ideas 	 writes a few simple, undeveloped ideas 	 writes and develops a variety of simple ideas 	 writes and develops ideas of some complexity 	 develops ideas fully to create greater understanding
 exploration of social issues and clarification of personal concerns 	 states facts about a social issue, but shows little under- standing of it 	 shows some under-standing of a social issue 	 shows understanding and personal concern about a social issue 	 shows thorough understanding and commitment about a social issue
 number and relevance of supporting details 	 provides very few facts supporting his or her point of view 	 provides some sup- porting evidence for his or her point of view 	 supports his or her point of view with relevant facts 	 supports his or her point of view fully with relevant facts
Communication	The student's opinion pi	ece:		
– purpose (to express an opinion)	- states facts	 attempts to persuade 	– is persuasive	 is very persuasive
– voice (opinion)	 contains no clear opinion or point of view 	 contains an opinion somewhat clearly expressed 	 contains an opinion or point of view expressed clearly 	 contains an opinion or point of view expressed clearly and convincingly
– clarity and precision of ideas	 contains few ideas and facts clearly stated 	 contains some ideas and facts clearly stated, but which may be repetitive 	 contains ideas and facts that are mostly clearly stated 	 contains all or almost all ideas and facts clearly and concisely stated
– word use and vocabulary	 contains little or no evidence of new vocabulary 	 contains some new vocabulary 	 contains vocabulary that suits the purpose and audience 	 contains new words or special terminology that supports the opinion presented
 sentence variety (structure, type, length) 	 relies on one sentence type 	 contains a variety of sentences 	 contains a wide variety of sentences 	 contains a wide variety of sentences used effectively
Organization	In the student's opinion pi	ece:		
 overall structure (introduction, body, conclusion) 	 there is no clear overall structure or organization 	 there is some evidence of a structure or organization 	 the organization is log-ical and appropriate 	 the organization sup- ports the purpose and enhances the argument
	 very little attempt has been made to define the issue in the introduction 	 the issue is mentioned in the introduction, but is not clearly defined 	 the issue is defined in the introduction, and the introduction and conclusion are connected 	 the introduction clearly defines the issue, captures the reader's attention, and is connected to the conclusion
	 there is no summary or clear call to action 	 some attempt has been made to summa- rize the issue 	 the final paragraph summarizes the issue and suggests further action 	 the issue is summa- rized and the action required is clear and compelling
Conventions	In the student's opinion p	piece:		
– grammar, spelling, punctuation	 there are several major errors or omissions 	 there are several minor errors or omissions 	 there are only a few minor errors or omissions 	 there are practically no errors or omissions



YORK MEMORIAL R.U.S.H ADMISSION TEST

MATHEMATICS & SCIENCE

MULTIPLE CHOICE: Choose the **ONE BEST** answer to each question. Bubble your response on the **ANSWER SHEET** (page 8). **YOU MAY TEAR OFF THIS SHEET FROM THE PACKAGE HOWEVER SUBMIT IT FOR SCORING**.

1

- 1) Kaitlyn has learned 21 of the 84 songs in her piano playbook. What percent of the total number of songs in the playbook has Kaitlyn learned?
 - **A)** 21%
 - **B**) 25%
 - **C**) 63%
 - **D**) 75%
- Hawks are birds that have physical characteristics such as cone-shaped heads and long, tapered wings. These characteristics help hawks fly quickly and for long distances.



The physical characteristics described above mainly allow the hawk to

- A) increase both lift and drag.
- B) decrease both lift and drag.
- C) increase lift and decrease drag.
- D) decrease lift and increase drag.

3) The nesting habits of four types of birds are described in the table below.

Nestina	Habits
Nesting	nabits

Type of Bird	Nest Description
Baltimore oriole	The nest hangs from thin branches in tall trees.
Barn swallow	The nest is attached under the roof of a house or barn.
Downy woodpecker	The nest is dug into rotting or decaying trees.
Belted kingfisher	The nest is built in tunnels or burrows.

If all the dead branches and dying trees in a wooded area are removed, which bird's nesting habit would be most affected?

- A) Baltimore oriole
- **B**) Barn swallow
- C) Downy woodpecker
- D) Belted kingfisher
- 4) A student draws diagrams of her house and the location of the sun in the sky. Which diagram below does **NOT** correctly represent the location of the sun at the time indicated?



7:00 p.m.



5) A simplified diagram of a system using solar energy is shown below.



To recharge the battery for later use without lighting the bulb, which of the following switches should be closed?

- A) Switch S only
- B) Switches R and S only
- C) Switches R and T only
- D) Switches R, S and T
- 6) At a school carnival, a group of 47 students played the Fish Pond game. Each student in the group won a prize. A stuffed animal was won by 24 students, a rubber ball was won by 7 students and the rest of the students won a baseball cap.

What fraction of the group won a baseball cap?

- A) $\frac{16}{47}$
- **B**) $\frac{31}{47}$
- C) $\frac{24}{24}$
- 47
- **D**) $\frac{7}{47}$

 The bar graph below shows the number of seniors who graduated over a four-year period from York Memorial C.I.



What is the total number of seniors who graduated over the four-year period?

- **A)** 280
- **B**) 285
- **C**) 290
- **D**) 295
- 8) The data table to the right shows the mass of an 800 gram block of ice as it melts to a 600 gram block of ice. If the current rate of melting continues, how many more minutes will be required for the 600 gram block of ice to reach a mass of 500 grams?
 - **A**) 15
 - **B**) 30
 - **C**) 45
 - **D**) 60

Data Table			
Time (minutes)	Mass of Block of Ice (grams)		
0	800		
15	750		
30	700		
45	650		
60	600		



Which statement about the proposed law is supported by the model?

- A) The proposed law will protect the lake because plant roots between the wetland and the lake will stop pollution from entering the lake.
- **B)** The proposed law will not protect the lake because animals that live in or near the lake add pollution to the lake.
- **C)** The proposed law will protect the lake because the high elevation of the land will block pollution from entering the lake.
- **D**) The proposed law will not protect the lake because groundwater will carry pollution from the wetland directly into the lake.
- 10) The line plot shows the number of bags of grapes,

grouped by weight, to the nearest $\frac{1}{8}$ pound.



- How many bags of grapes had a weight of $\frac{3}{8}$ pound or less?
- **A**) 8
- **B**) 3
- **C**) 5
- **D**) 13

- 11) The microwave oven heats the broccoli, but not the dish handles or the plate underneath. Which statement **BEST** explains why this happens?
 - A) The microwave oven creates radiation and the radiation is absorbed by the broccoli but passes through the dish and the plate.
 - **B)** The microwave oven heats using convection currents and the currents collide with the broccoli but slide over the smooth dishes.
 - C) The microwave oven heats the air and the hot air heats the broccoli but the dishes do not conduct heat, so they stay cool.
 - **D**) The microwave oven produces heat, which flows through the floor of the microwave into the dishes and up out of the dishes into the broccoli.

- 12) A partial food web from the Texas Piney Woods is shown to the right. How many types of organisms in this food web obtain energy directly from producers?
 - **A**) 2
 - **B**) 3
 - **C**) 4
 - **D**) 5



13) The graph below shows the growth of Jake's tomato plant for 10 days. How tall was the tomato plant on day 7?



- **D**) 20 cm
- 14) Which point on the number line below represents a number that is less than -2.5 but greater than -7.5?



15) Consider the pattern below. If you were to extend this pattern, how many dots would there be in diagram 5?



16) Students fill a cart with books. The cart has a handle on each end.



Which actions will make moving the cart in one direction easiest for the students?

- A) Student 1 pulls the cart to the left while Student 2 pulls the cart to the right.
- **B)** Student 1 pulls the cart to the left while Student 2 pushes the cart to the left.
- C) Student 1 pushes the cart to the right while Student 2 pushes the cart to the left.
- **D**) Student 1 pushes the cart to the right while Student 2 pulls the cart upward.
- 17) The diagram to the right shows a model of a sample of gas particles at room temperature.

Which diagram **BEST** shows the results of removing heat from this sample until it freezes?







18) Ethan drew a triangle on the coordinate grid shown below. If he reflects the triangle in the *y*-axis, what will be the new coordinates of the vertices of the triangle?



- 19) Krista and Jerome read a total of 23 books over the summer. Krista read 5 more books than Jerome. How many books did Jerome read?
 - **A**) 9
 - **B**) 14
 - **C**) 4
 - **D**) 19

20) A student measured out 10 mL of four clear liquids and added one drop of a different coloured dye to each liquid. One of the liquids was water. The student then carefully poured each liquid into a graduated cylinder and let the mixture settle for 30 minutes. The student observed that the liquids had separated into layers, as shown in the diagram. Which of the following procedures would help the student indentify the layer of water?

A) Stir the liquids, let them settle and then identify the bottom layer as water.

- **B**) Drop a piece of ice into the graduated cylinder, let the ice settle and then identify the layer just above the ice as water.
- C) Add water to the graduated cylinder, let the mixture settle and then identify the layer that increases in volume as water.
- **D**) Carefully pour each layer into separate plastic containers, place the containers in a freezer and then identify the liquid that takes the longest to freeze as water.



21) The diagrams below represent structures in organisms that all have a similar function. What is the main function of the labelled structures in each organism?



Earthworm

Moist skin

Fish



- A) circulation of blood
- **B**) digestion of food
- C) production of hormones
- **D**) exchange of gases

- 22) Which human body systems are directly involved in reflex actions such as knee jerk, blinking and jumping when startled?
 - A) circulatory and respiratory
 - **B**) digestive and excretory
 - C) nervous and muscular
 - **D**) reproductive and skeletal
- 23) The letters X, Y and Z in the graph below show the percentage of Earth's total water from freshwater, salt water and ice (not necessarily in that order).

Percentage of Earth's Total Water



Which list **CORRECTLY** identifies X, Y and Z in the graph?

	Х	Y	Z
A)	freshwater	salt water	ice
B)	freshwater	ice	salt water
C)	ice	freshwater	salt water
D)	salt water	ice	freshwater

24) Frederick used a diagonal board to divide a rectangular garden into two equal sections as shown in the diagram below.



What is the length of the diagonal?

- **A**) 13 m
- **B**) 17 m
- **C**) 7 m
- **D**) 30 m
- 25) A circular mirror has a diameter of 12 centimetres. What is the area, in square centimetres, of the mirror?
 - A) 6*π*
 - **B**) 12π
 - C) 36π
 - **D**) 72*π*
- **26)** A pair of sandals is on sale for 20% off the original price. If the original price is \$16.00, then what is the sale price?
 - **A)** \$12.80
 - **B**) \$19.20
 - **C**) \$3.20
 - **D**) \$12.00
- 27) The diagrams below represent four simple machines. The arrows in each diagram indicate the direction of the force being applied.

Which machine is changing the direction of the force being applied by the person?



- 28) Buoyancy describes the concept that
 - A) all objects float in water.
 - B) objects denser than water will float in it.
 - C) less dense objects will float in more dense fluids.
 - D) objects must be filled with air in order to float.
- 29) Mr. Pereira wrote 83.041 on the board and asked students what it meant. Three students gave the following responses.
 - Colett responded eighty-three and forty-one hundredths.
 - Cosimo responded eighty-three and forty-one thousands.
 - Christopher responded $8 \times 10 + 3 \times 1 + 4 \times \frac{1}{100} + 1 \times \frac{1}{1000}$.

Which student(s) were **CORRECT**?

- A) Colett only
- B) Cosimo only
- C) Christopher only
- **D**) Cosimo and Christopher only
- 30) Sophie gathered the following information on a given day at the dog park.
 - There are 32 dogs playing at the dog park.
 - 15 of the dogs are puppies.
 - 11 of the dogs are not puppies and have long hair.
 - There are 6 more dogs that have long hair than dogs that do not have long hair.

	Dogs That are Puppies	Dogs That are Not Puppies	Total
Dogs with Long Hair			
Dogs That Do Not Have Long Hair			
Total			

How many dogs at the park were puppies that had long hair?

- **A**) 13
- **B**) 6
- **C**) 7
- **D**) 8

FOR YMCI STAFF ONLY SCOPED'S DEPODT					
<u>C6</u>	SCOKEK'S KEPUKI				
60	6/	60	IUIAL		
$\overline{10}$	$\overline{10}$	$\overline{10}$	30		



ANSWER SHEET

EXAMPLES OF

NAME

COMPLETE MARK

ACADEMIC INTEGRITY DECLARATION FORM

This **academic integrity declaration form** must be completed and attached to your completed **R.U.S.H. application package**.

Only student admission packages accompanied with **this form** will be evaluated.

- I, the undersigned, declare that the admission package has been composed and written by me alone, and that no part of it has been copied by manual or electronic means from any work by any other person(s), present or past, including tutors and tutoring services.
- I understand that penalties for submitting work which is <u>not wholly</u> my own or distributing my work to other students is considered an act of Academic Dishonesty and is subject to school consequence from a grade of zero for the written submission and being ineligible to apply to the YMCI R.U.S.H program.

For more information about Academic Honesty, please access the following TDSB link: http://zwebppfprd.tdsb.on.ca/detail.aspx?id=1783

Student Last Name (Please Print)

Student <u>First</u> Name (Please Print)

Parent/Guardian <u>Last</u> Name (Please Print)

Parent/Guardian <u>First</u> Name (Please Print)

Date (Please Print)



Student Signature

