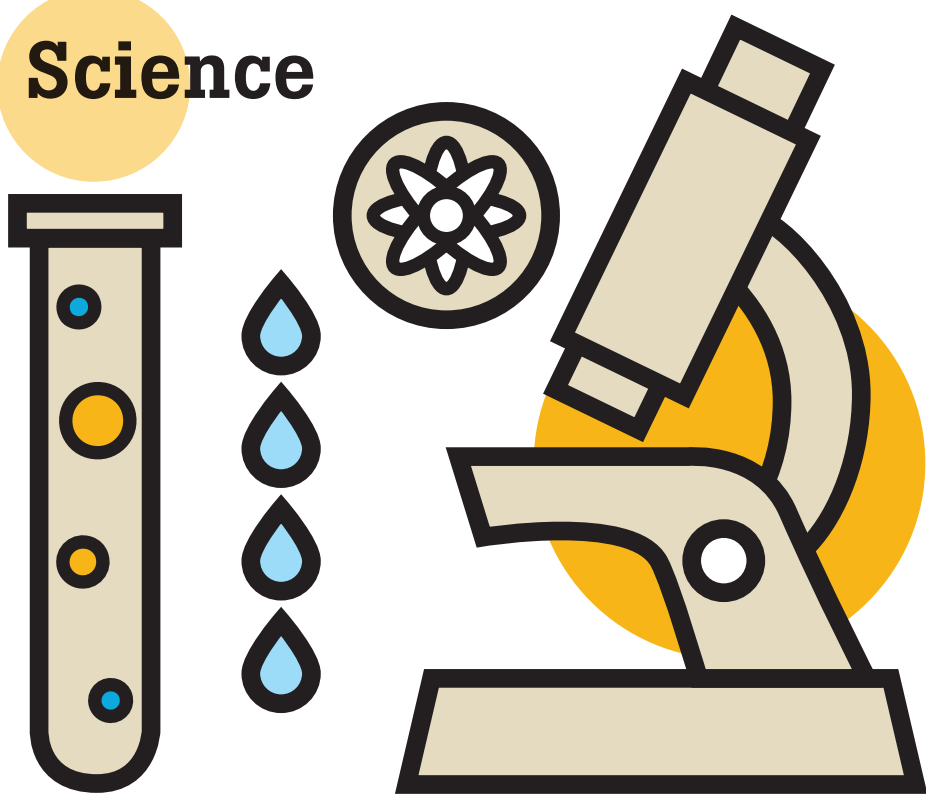
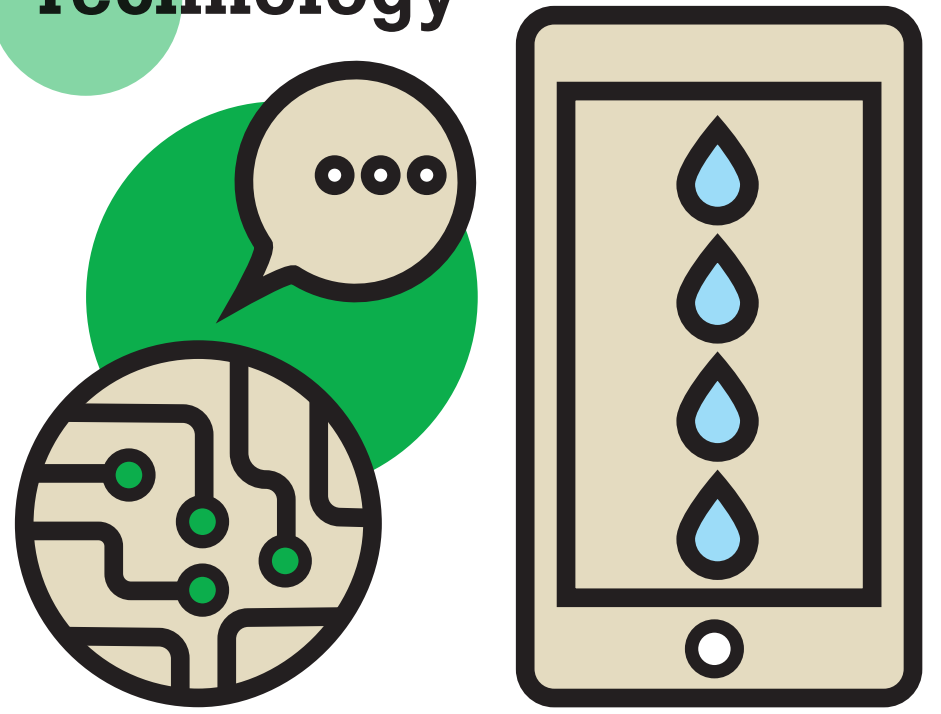


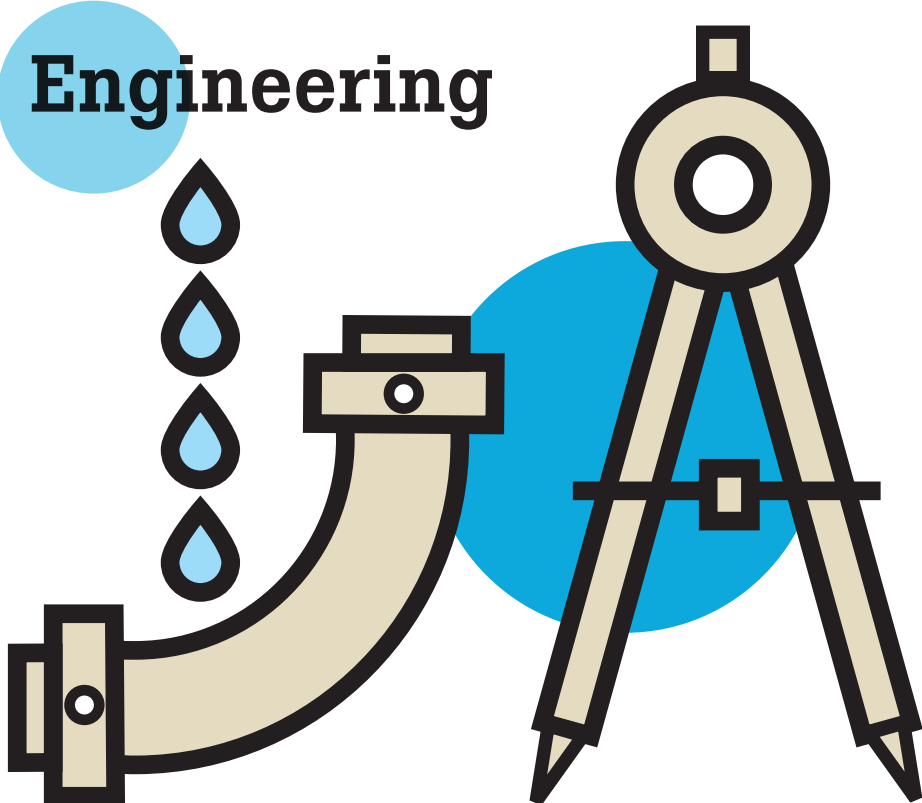
## Science



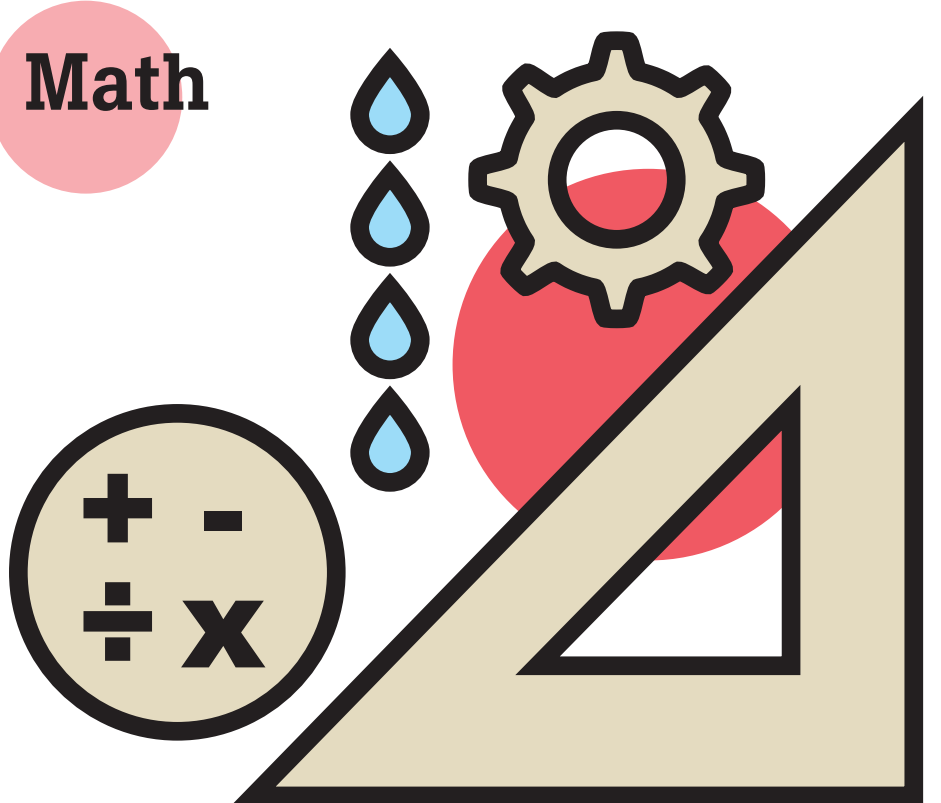
## Technology



## Engineering



## Math



# STEM

## Annual MWRA Poster & Writing Contest - 2018/2019 School Year

**SCIENCE IS A WAY OF THINKING.** Science is observing and experimenting, making predictions, sharing discoveries, asking questions, and wondering how things work.

**TECHNOLOGY IS A WAY OF DOING.** Technology is using tools, being inventive, identifying problems, and making things work.

**ENGINEERING IS A WAY OF MAKING.** Engineering is solving problems, using a variety of materials, designing and creating, and building things that work.

**MATH IS A WAY OF MEASURING.** Math is creating sequences, (1, 2, 3, 4...), developing patterns, (1, 2, 1, 2, 1, 2...), and exploring shapes (triangle, square, circle), volume (holds more or less), and size (greater than, less than).

When we think of STEM we tend to think of people and the many STEM careers, but it's more than that! MWRA's John J. Carroll Water Treatment Plant, the MetroWest Water Supply Tunnel, the Deer Island Wastewater Treatment Plant, and the Outfall Tunnel are all examples of STEM projects.



### POSTER CONTEST

Use your creative skills to design a poster showing how STEM is being used at the MWRA Water and/or Wastewater Treatment Plants.

POSTERS WILL BE JUDGED IN 4 CATEGORIES:

Gr. K-2, 3-5, 6-8, and 9-12.

Gr. K-2: S in STEM - How is **SCIENCE** used at the MWRA?

Gr. 3-5: T in STEM - How is **TECHNOLOGY** used at the MWRA?

Gr. 6-8: E in STEM - How is **ENGINEERING** used at the MWRA?

Gr. 9-12: M in STEM - How is **MATH** used at the MWRA?

Posters should be no smaller than 8.5" x 11" or no bigger than 18" x 24". Posters received bigger or smaller than these dimensions will not be judged.

### WRITING CONTEST

Use your creative skills to write an essay, story, or poem focusing on how STEM is used at the MWRA Water and/or Wastewater Treatment Plants.

WRITING WILL BE JUDGED IN 2 CATEGORIES:

Gr. 3-5 and 6-8.

Writing entries may focus on **SCIENCE**, **TECHNOLOGY**, **ENGINEERING**, **MATH** or any combination of these. Writing entries must be no more than 2 single sided pages. Double sided entries will not be judged.

Entries must be postmarked by Wednesday, March 6, 2019. Early entries are encouraged!

MAIL ENTRIES TO:

MWRA School Program,  
2 Griffin Way, Chelsea, MA 02150

To see if you are eligible to participate, to obtain official rules, and to download forms and student labels, visit us on-line at [www.mwra.com](http://www.mwra.com) and follow the link to the School Program page.



MWRA School Education Program  
2 Griffin Way  
Chelsea, MA 02150

Dear Educator,

It's time again for the MWRA's Annual Poster & Writing Contest. The contest helps students make the connection between the environment and their faucets and drains. I hope that you will consider participating.

**STEM** is this year's topic. Students are being asked to use their creative skills to design a poster and/or write an essay, poem or story showing how STEM is being used at the MWRA Water and/or Wastewater Treatment Plants.

Enclosed please find all necessary forms as well as a flyer announcing the contest. We ask that you please post the flyer in your classroom.

The contest deadline is **Wednesday, March 6, 2019**. Early entries are encouraged and can be sent at any time. All entries must be mailed to:

**MWRA School Contest**  
**2 Griffin Way**  
**Chelsea, MA 02150**

The contest is open to any student who lives in or attends a school located in the MWRA Service Area. To see if you are eligible to participate, to get additional information, and to download forms and student labels, visit us online at [www.mwra.com](http://www.mwra.com) and follow the link to the School Program page.

If you would like additional contest packets or have questions pertaining to the contest, please contact Danielle DiRuzza, MWRA School Program Administrative Assistant, at [Danielle.DiRuzza@mwra.com](mailto:Danielle.DiRuzza@mwra.com) or 617-305-5681.

Meg Tabacsko, Manager

*Meg Tabacsko*

MWRA School Education Program



## 2018/19 MWRA Poster & Writing Contest Rules & Details

### Poster Contest



Question	Answer
Who is eligible for the contest?	All Massachusetts students in grades K-12 who attend school in one of MWRA's service communities and /or any student who lives in the MWRA district. Prizes are awarded in four categories: K-2, 3-5, 6-8, and 9-12. All artwork must be the student's work, and only individual (not group) entries will be accepted. Only one entry per student.
How will entries be judged?	Judging is based on originality, clarity of message, use of materials, and quality of work.
What size should entries be?	Posters should be no smaller than <b>8.5" x 11"</b> and no larger than <b>18" x 24"</b> . <b>Note:</b> Posters will be returned only if indicated on the registration form.

### Writing Contest



Question	Answer
Who is eligible for the contest?	All Massachusetts students in grades 3-8 who attend school in one of MWRA's service communities and /or live in the MWRA district. Prizes will be awarded in two categories: 3-5 and 6-8. Only individual (not group) entries will be accepted.
How will entries be judged?	Judging is based on factual accuracy, originality, creativity, clarity of thought, readability and persuasiveness.
How long should entries be?	Entries should be no longer than <b>two</b> single-sided pages and may be typed or written neatly in ink. <b>Note:</b> Writing entries will not be returned.

### All Contests

Question	Answer
When is the contest deadline?	Entries must be postmarked by <b>Wednesday, March 6, 2019</b> . Early entries encouraged.
What are the packaging instructions?	A Student Label must be attached to each entry. The label must be taped or glued securely to the back of the entry ( <b>no paper clips or staples</b> ). You may create your own label or neatly write information on the back of the entry as long as all information is included. Teachers must fill in the Contest Registration Form stating the grade level(s) and number of entries. If there are entries from more than one grade level, fill out separate forms.
Can entries be dropped off at the MWRA?	We prefer entries be mailed to: MWRA School Program, 2 Griffin Way, Chelsea, MA 02150. Entries may be dropped off in Chelsea between the hours of 9:00 a.m. and 4:00 p.m., Monday through Friday only.
What are the prizes?	The first place winner(s) in each category receives a \$100 gift card. Second prize is a \$50 gift card and third prize is a \$25 card. Honorable Mention Awards will recognize other outstanding entries and each student who participates receives a certificate.
When will winners be announced?	Winners will be notified by beginning of April. Prizes will be awarded at a ceremony on <b>Friday, May 24, 2019</b> at the Deer Island Treatment Plant. Contest winners, their families, teachers and principals are all invited to attend the ceremony.
Where can I get more information?	For information or to download forms, go to <a href="http://www.mwra.com">www.mwra.com</a> and click on <b>school program</b> .

## Frequently Asked Contest Questions (students)

### General Questions about the Poster & Writing Contests

**Q. What are the Contest Topics?**

- A. How STEM is being used at the MWRA Water and/or Wastewater Treatment Plants is the topic for the Poster and Writing Contests.

**Q. What are the categories?**

- A. In the poster contest there are (4) categories Gr. K-2, 3-5, 6-8 and 9-12. In the writing contest there are (2) categories Gr. 3-5 and 6-8.

**Q. What are the prizes?**

- A. First prize in each category is a \$100.00 gift card, 2<sup>nd</sup> prize is a \$50.00 gift card, and 3<sup>rd</sup> prize is a \$25.00 gift card. In each of the (6) categories there is a 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, and (4) honorable mention winners. All winners, including honorable mention winners, are invited with their families to an **Awards Ceremony** at Deer Island on **Friday, May 24, 2019**. Everyone who enters the contest will receive a Certificate of Participation – suitable for framing!

**Q. What information needs to be included with my poster, writing or writing entry?**

- A. All poster and writing entries must have a completed Student Label attached to the back of the entry. Labels should be securely taped or glued to the back of the entry. Please **Do NOT** use staples or paper clips to attach the student label. Please **Do NOT** attach labels to the front of the entries. You may create your own label or neatly write information on the back of your entry as long as all the information requested on the student label is included.

**Q. Where do I get a Student Label?**

- A. Ask your teacher for one or you can download labels from this webpage.

**Q. May I submit more than one entry?**

- A. You may only submit one entry in each contest. If you are in Grade 3-8, you may participate in both the poster and writing contests.

**Q. Can groups of students work together?**

- A. Only individual work will be accepted for posters and writing entries.

**Q. Will my entry be returned?**

- A. Posters will only be returned if requested. Writing will not be returned.

**Q. What is the contest deadline?**

- A. Entries must be **postmarked by Wednesday, March 6, 2019**.

**Q. How will I be notified if I win?**

- A. If you are a winner, your teacher will be notified via email sometime in April, 2019.

**Questions about the Poster Contest**

**Q. What is the poster topics?**

- A. Gr. K-2 to focus on the S in STEM – How is Science used at the MWRA?  
Gr. 3-5 to focus on the T in STEM – How is Technology used at the MWRA?  
Gr. 6-8 to focus on the E in STEM – How is Engineering used at the MWRA?  
Gr. 9-12 to focus on the M in STEM – How is Math used at the MWRA?

**Q. What makes a good poster?**

- A. Make sure your poster is on topic. Don't try to include too many ideas or activities on your poster. A single message, clearly illustrated, is more effective. If you use lettering, make sure it can be read from across the room. And, please check your spelling!

**Q. Do posters have to be drawings?**

- A. No, posters can be any form of art you choose to express the topic. You can create a collage with pictures cut out of a magazine, you can use pieces of fabric or you can create a drawing using markers, crayons, paints, or charcoal. We are looking for unique and creative works of art.

**Q. Are there size requirements for the posters?**

- A. **YES** - Posters must be no smaller than **8.5" X 11"** and no bigger than **18" X 24"**. Posters smaller or bigger than these requirements will **NOT** be judged. Be sure to attach a Student Label to the back of your poster.

**Q. How will my poster be judged?**

- A. MWRA staff will select the strongest posters from the entries in each category. Then a panel of judges will score the posters on originality, clarity of message, creative and artistic use of materials, and quality of work.

**Questions about the Writing Contest**

**Q. What is the writing topic?**

- A. The topic for both categories (Gr. 3-5 and Gr. 6-8) is how STEM is being used at the MWRA Water and/or Wastewater Treatment Plants. Focus may be on Science, Technology, Engineering, Math or any combination of these.

**Q. What makes a good writing entry?**

- A.** First, be sure your entry addresses the question. As good as a piece might be, if it isn't on topic, it can't win a prize. Then, use your creativity to make your entry stand out. The reader should remember your work because there was something unique about it. An essay can be just as creative as a poem or dialogue, if it has a clear theme and develops it cleverly.

**Q. How long should my writing entry be?**

- A.** Writing entries are limited to **two** pages. Entries may be written neatly in ink or done on the computer. Please use only one side of the paper and be sure to attach a Student Label securely to the back of your entry.

**Q. How will my writing entry be judged?**

- A.** MWRA staff will select the best entries in each category. Copies will be given to a judging panel, which will first read and rate them and then meet to decide the winners. Writing entries will be judged on factual accuracy, creativity, originality and persuasiveness.

### Frequently Asked Contest Questions (teachers)

**Q. What is the topic for this year's contest?**

A. How STEM is being used at the MWRA Water and/or Wastewater Treatment Plants.

**Q. Does the entire class have to participate?**

A. While some teachers have their entire class participate, others make it optional or offer it as a means of extra credit. If you only have a few entries, we do ask that you still complete the Contest Registration Form and make sure the students fill out the Student Label and attach it securely to the back of the entry. Please **Do Not** attach the student label to the front of the entry or use staples or paperclips.

**Q. Where do I get the Registration Form and Student Labels?**

A. You can download all the forms from this page. Contest Information packets are mailed to teachers on the MWRA's database in December. If you did not receive a packet and would like to receive a packet and be added to the database, please contact Danielle DiRuzza at [Danielle.DiRuzza@mwra.com](mailto:Danielle.DiRuzza@mwra.com) or 617-305-5681.

**Q. If the entire class participates, should I sort through and only send in the best?**

A. No, please send them all. This helps us to know how many students took part in the contest and enables us to send a Certificate of Participation to every entrant. **Please note:** we send blank certificates of participation for you, the teacher, to fill in the names.

**Q. May I assist my students in any way?**

A. We encourage class discussion to make sure the students stay on topic, but we ask that all work be done by the students themselves. We do allow teachers to assist students in grade K-2 with labeling and mounting of posters.

**Q. Do posters have to be labeled and mounted?**

A. No, but posters must be no smaller than **8.5" X 11"** and no larger than **18" X 24"**.

**Q. Must the writing entries be done on a computer?**

A. No, they can be written neatly in ink. Writing entries should be no longer than 2 pages and use only one side of the paper.

**Q. When is the contest deadline?**

A. The contest deadline is **Wednesday, March 6, 2019**. Entries must be postmarked by this date and early entries are encouraged. Entries should be mailed to:

**MWRA School Contest  
2 Griffin Way  
Chelsea, MA 02150**

If you still have questions, contact Meg Tabacsko at [meg.tabacsko@mwra.com](mailto:meg.tabacsko@mwra.com).



## 2018/19 MWRA Contest Registration Form

To be completed by the teacher and submitted with every packet of entries. Each individual entry must have a Student Label securely attached to the back of the entry. **NO STAPLES or PAPERCLIPS, please!**

(please print)

School Name: \_\_\_\_\_

School Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Teacher: \_\_\_\_\_

School Phone: \_\_\_\_\_

Teacher's Email Address: \_\_\_\_\_

Fill in the entry information in the table below:

Entry Type	Number of Entries Included	Grade
Poster *		
Writing		

\* Posters will only be returned if indicated below. If nothing is indicated, the posters will be recycled. Please return posters: YES \_\_\_\_\_ NO \_\_\_\_\_

All entries should be sent to: **MWRA School Contest**  
**2 Griffin Way**  
**Chelsea, MA 02150**

**FOR OFFICE USE ONLY**

Entries Received: \_\_\_\_\_ Entered on Database: \_\_\_\_\_

Certificates Sent: \_\_\_\_\_



**MWRA SCHOOL CONTEST STUDENT LABEL**

*To be GLUED or TAPED only to the BACK of every entry*

**Student Label**

Student's Name: \_\_\_\_\_ \*Grade \_\_\_\_\_

\*School: \_\_\_\_\_

\*Address: \_\_\_\_\_

\*City: \_\_\_\_\_ \*Zip: \_\_\_\_\_

\*Teacher: \_\_\_\_\_

\*Teacher's Email: \_\_\_\_\_

**Student Label**

Student's Name: \_\_\_\_\_ \*Grade \_\_\_\_\_

\*School: \_\_\_\_\_

\*Address: \_\_\_\_\_

\*City: \_\_\_\_\_ \*Zip: \_\_\_\_\_

\*Teacher: \_\_\_\_\_

\*Teacher's Email: \_\_\_\_\_

**Student Label**

Student's Name: \_\_\_\_\_ \*Grade \_\_\_\_\_

\*School: \_\_\_\_\_

\*Address: \_\_\_\_\_

\*City: \_\_\_\_\_ \*Zip: \_\_\_\_\_

\*Teacher: \_\_\_\_\_

\*Teacher's Email: \_\_\_\_\_

**Student Label**

Student's Name: \_\_\_\_\_ \*Grade \_\_\_\_\_

\*School: \_\_\_\_\_

\*Address: \_\_\_\_\_

\*City: \_\_\_\_\_ \*Zip: \_\_\_\_\_

\*Teacher: \_\_\_\_\_

\*Teacher's Email: \_\_\_\_\_

**\*\* TEACHER MAY COMPLETE THESE BLANKS PRIOR TO COPYING**