**GEOTRICITY 2.0 SUMMATIVE TASK**

**INTRO:**  You will be introduced to the spaces for re-design during a presentation on Tuesday morning. Consider what you would love to have in your neighbourhood, what would benefit the community, and what would contribute to an inviting space that will bring the community together. You will need to explain why you think your project is the best possible use of space and how it is sustainable, so make sure you choose something that you believe in!

**PHASE 1: BRAINSTORMING AND INTRODUCTION (TUESDAY MORNING)**

Take time to come up with as many ideas as you possibly can. When you have a few top ideas begin sketching out your plan and thinking about the specific details. When you’ve narrowed down your plan to one or two top picks, start to use the following questions to help focus your thinking and come up with a main idea:

* What does your plan need? Consider the infrastructure (under the surface and behind the scenes systems that will make your plan work). Think about cost, long term maintenance and support, etc.
* What will make the community excited and engaged in your project? Do you already know about something your neighbours would like to have? Have you seen something in another neighbourhood that you know your community will love?
* How can you connect ideas from land use from the community to ideas in the school environment?
* How will you sell this to your peers and their families? What makes this idea great?
* What sets your idea apart from any other potential plans? If someone else has a similar concept, what will make yours the best possible choice?

During the brainstorming process, all groups will have the opportunity to see the different spaces in a slideshow presentation. You will also be asked to:

* Take a series of measurements that will help you to create a scale model of the project area.
* Decide on a reasonable scale and then construct a drawing on graph paper using your scale.
* Submit your scale along with your final design to the teachers to receive your materials/manipulatives to build your model.

**PHASE 2: PROTOTYPE PLANNING (TUESDAY AFTERNOON)**

Create a final design including measurements, have your design approved. Once your group has settled on a finalized design, you will need to create a sketch on graph paper that includes ALL of the measurements that you will use to build your scale model. Start by considering the actual size of the space, decide on the size of your project, then scale the measurements down using the scale you’ve used to create your triangle. Along with your detailed design diagram, you will be asked for a list of desired building materials (3 must have, 3 nice to have, and any others you hope to include). Label these materials on your diagram so we can see how they will be used. Remember that we are on a very tight timeline, so your model needs to be something you can complete in a few hours! Bring your completed design to the teachers, you must get it signed for approval before you can start to collect your building materials.

**PHASE 3: CONSTRUCTION (TUESDAY AFTERNOON/WEDNESDAY MORNING)**

Actually build a model or create a model using technology, and using the scale and measurements that you had approved by staff. Your models will be viewed by staff, students and community judges, so remember that presentation is important – make it something you’ll be proud to show off. Keep in mind we are on a tight timeline and use your time effectively!

**PHASE 4: MEDIA PRESENTATION (WEDNESDAY MORNING)**

You will need to create a “pitch” for your product.

* Name your product.
* Prepare a one-page advertisement (e.g., by hand or using technology, such as Google Slides or Docs) highlighting the purpose of your design and the advantages of having it in our school community; (i.e., sustainability, cost, suitability for school environment, etc.)

**PHASE 5: CULMINATING TASK** **(WEDNESDAY AFTERNOON)**

On the final afternoon of the project, we will share our projects with everyone here at Robert Service as well as judges from the community and families and friends from our neighbourhood. People will be asked to vote for their favourite designs, so be prepared to be enthusiastic and share your plan/”pitch” in a way that will make people excited to support your project.

**GEOTRICITY 2.0 PROJECT PLANNER**

**TEAM MEMBERS:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***PHASE 1: BRAINSTORM AND SITE VISIT:***

***GUIDING QUESTIONS:***

* What are some possible uses of the space?
* What does your community need/want? What will make the community excited and engaged in your project? Do you already know about something your neighbours would like to have? Have you seen something in another neighbourhood that you know your community will love?
* What does your planned use of space need? Consider the infrastructure (under the surface and behind the scenes systems that will make your plan work). Think about cost to build and maintain, types of long term maintenance and support it will need, safety, etc.
* How will you sell this to your peers and their families? What makes this idea great?
* What sets your idea apart from any other potential plans? If someone else has a similar concept, what will make yours the best possible choice?
* How can you connect ideas from land use from the community to ideas in the school environment?

***SITE VISIT ORGANIZER:***

DESCRIBE HOW YOU DETERMINED ALL MEASUREMENTS DURING YOUR SITE VISIT. BE SPECIFIC!

DRAW A SKETCH OF THE AREA TO HELP YOU KEEP TRACK OF ALL MEASUREMENTS.

PROPOSED SCALE AND CALCULATIONS:

***PHASE 2: FINAL DESIGN***

DESCRIBE YOUR PROPOSED PROJECT, AND GIVE 3 REASONS WHY YOU BELIEVE THIS IS THE BEST PLAN FOR THE SPACE. HOW IS IT IS SUSTAINABLE? USE ADDITIONAL PAPER IF NECESSARY.

LIST 3 POSSIBLE PROBLEMS PEOPLE MIGHT HAVE WITH THE DESIGN/PROJECT YOU HAVE CHOSEN. HOW WILL YOU RESPOND TO THESE PROBLEMS? EXPLAIN. USE ADDITIONAL PAPER IF NECESSARY.



WHAT SCALE HAVE YOU CHOSEN TO USE? WHY IS THIS THE MOST LOGICAL CHOICE?

WHAT 3 MATERIALS/MANIPULATIVES ARE YOUR “MUST-HAVE” ITEMS FOR BUILDING YOUR SCALE MODEL?



WHAT 3 MATERIALS/MANIPULATIVES ARE YOUR “NICE-TO-HAVE” ITEMS FOR BUILDING YOUR SCALE MODEL?



WHAT OTHER MATERIALS DO YOU PLAN TO USE TO BUILD YOUR SCALE MODEL?

PLEASE REMEMBER TO LABEL ALL MATERIALS ON YOUR DIAGRAM!!!!

WHEN YOU HAVE COMPLETED ALL PARTS OF THIS PLANNER, BRING IT TO A TEACHER ALONG WITH YOUR SCALE TRIANGLE AND YOUR COMPLETED DESIGN DRAWING FOR APPROVAL.

TEACHER APPROVAL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GEOTRICITY 2.0 PROJECT SUCCESS CRITERIA**

**TEAM NAMES:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **CATEGORY** | **SUCCESS CRITERIA** | **LEVEL/ COMMENTS** |
| **Measurement:**  -research, describe, and report on applications of volume and capacity measurement  – solve problems that require conversions  involving metric units of area, volume, and  capacity | -Sketches and scale drawings are provided  -Site Visit Organizer completed  -Measuring tools have been used correctly  -All side lengths and angles are measured correctly  -Process for determining side lengths and angles is fully explained, mathematically correct | **4 3 2 1 R**  **CONSISTENT CONSISTENT SOMEWHAT INCONSISTENT NO**  **EXEMPLARY EFFECTIVE SOMETIMES INACCURATE EVIDENCE** |
|  |
| **Number Sense and Numeration:**  -solve problems involving proportions, using concrete materials, drawings, and  variables | **Scale drawing and calculations**  -A reasonable scale has been selected  -Scale calculation steps have been applied correctly  -Scale calculations are correct  -Accurate construction  -Measurements and angles are correct  **Final design and scale**  -Diagram has been constructed  -Appropriate level of detail included  -Model is constructed precisely and to scale  -All measurements and angles are correct  -Materials have been used appropriately and with care |  |
| **Geometry and Spatial Sense:**  -demonstrate an understanding of the geometric properties of quadrilaterals and circles and applications of geometric properties in the real world | **Planning and design**  -Designs are appropriate to the space  -Evidence of notes and problem solving; community walk booklet completed |  |
| **TOTAL** | |  |

**COMMENTS:**

**A successful project will include:**

* Correct measurements (planner, diagram, model)
* Scale
* Well thought out design plan that uses the space in a way that will benefit the community
* Carefully constructed design/diagram with all measurements and angles correct and to scale
* Clear justification of the selected design that fully explains the benefits and possible drawbacks of the chosen project
* Carefully constructed model built with precision and accurate measurements and angles

**MEDIA PRESENTATION – Rubric – 1 PAGE ADVERTISEMENT**

***3.4. Students will create a media text of some technical complexity for a specific purpose and audience, using appropriate forms, conventions, and techniques.***

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| **CATEGORIES** | **LEVEL 1** | **LEVEL 2** | **LEVEL 3** | **LEVEL 4** |
| **Knowledge/Understanding of Content** – Have you demonstrated an understanding of what an Ad is? | Demonstrated little knowledge and understanding of what an Ad is | Demonstrated some knowledge and understanding of what an Ad is | Demonstrated considerable knowledge and understanding of what an Ad is | Demonstrated a high degree of knowledge and understanding of what an Ad is |
| **Use of Planning, Critical and Creative Processes** – Have you organized your information using appropriate techniques and conventions for an advertisement, with your audience and purpose in mind? Have you demonstrated creativity in the creation of your Ad? | Uses planning, critical and creative thinking process with limited effectiveness | Uses planning, critical and creative thinking process with some effectiveness | Uses planning, critical and creative thinking process with considerable effectiveness | Uses planning, critical and creative thinking process with a high degree of effectiveness |
| **Communication –** Have you conveyed the intended message in your Ad? Is your message clear and easy to understand? Does it effectively promote your product? | The intended messages in the ad were conveyed with limited effectiveness | The intended messages in the ad were conveyed with some effectiveness | The intended messages in the ad were conveyed with considerable effectiveness | The intended messages in the ad were conveyed with a high degree of effectiveness |
| **Application of Knowledge and Skills –** Have you demonstrated appropriate knowledge and skills for a media text in your Ad? e.g. techniques used, appropriate form, etc.? | Applies knowledge and skills about a media text with limited effectiveness | Applies knowledge and skills about a media text with some effectiveness | Applies knowledge and skills about a media text with considerable effectiveness | Applies knowledge and skills about a media text with a high degree of effectiveness |

**GEOTRICITY PLANNING- RUBRIC**

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| **CATEGORIES** | **LEVEL 1** | **LEVEL 2** | **LEVEL 3** | **LEVEL 4** |
| **Use of Planning skills –** Is your idea well thought out? Have you demonstrated a logical consideration of infrastructure, cost, long term maintenance, sustainability? | Uses planning skills with limited effectiveness | Uses planning skills with some effectiveness | Uses planning skills with considerable effectiveness | Uses planning skills with a high degree of effectiveness |
| **Use of Processing skills** – Were you able to decide on a reasonable scale based on the measurements taken? | Uses processing skills with limited effectiveness | Uses processing skills with some effectiveness | Uses processing skills with considerable effectiveness | Uses processing skills with a high degree of effectiveness |
| **Use of Critical/Creative Thinking** – Were you able to create a sketch that includes all measurements you will use to build the scale model? Have you included a list of must have building materials in along with your sketch and included how they will be used. | Uses critical/creative thinking processes with limited effectiveness | Uses critical/creative thinking processes with some effectiveness | Uses critical/creative thinking processes with considerable effectiveness | Uses critical/creative thinking processes with a high degree effectiveness |