

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject / Course:** | Math | **TC Name:** | Andrew Smithe |
| **Grade Level:** | 7 | **AT Name:** | Adam Pelton |
| **Topic:** | Trapezoids | **Room # / Location:** | 207 |
| **Time of Class:** | 40 mins | Date: | Oct 28th 2010 |

1. **Curriculum Expectations and Goals for the Lesson**
   1. **Expectations:**

|  |
| --- |
| determine, through investigation using a variety of tools (e.g., concrete materials, dynamic geometry software) and strategies the relationship for calculating the area of a trapezoid, and generalize to develop the formula [i.e., *Area* = (*sum of lengths of parallel sides* x *height*) ÷ 2] (***Sample problem:*** Determine the relationship between the area of a parallelogram and the area of a trapezoid by composing a parallelogram from congruent trapezoids.);  solve problems involving the estimation and calculation of the area of a trapezoid;  estimate and calculate the area of composite two-dimensional shapes by decomposing into shapes with known area relationships (e.g., rectangle, parallelogram, triangle) (***Sample problem:*** Decompose a pentagon into shapes with known area relationships to find the area of the pentagon.); |

* 1. **Goals:**

|  |
| --- |
| * **The students will be able to calculate the area and perimeter of squares and rectangles** * **The students will be able to calculate the area and perimeter of a triangle** * **The students will be able to build upon these skills and break down trapezoids into easier to manage shapes and calculate the area in smaller more familiar parts** |

1. **Pre-assessment and Accommodations/Modifications**

|  |  |
| --- | --- |
| **Pre-assessment:** | **Accommodation/Modification** |
| **Academic Needs:**   * **Students who finish early** | * **Students who finish early can work on their graphing unit test** |
| **Behavioural/Social/Emotional Needs:**   * MC, CM, TP, QH, CT, CM are very chatty | * Keep them within close proximity so that they will be less likely to chat and also are easier to catch if they do. * Pace the lesson so that they are engaged as much as possible |
| **Physical Needs:**   * **SM and KT have vision limitations** | * **Use a large font on the SmartBoard/PowerPoint presentations** * **Make printouts of class notes available if possible** * **Offer photocopies of another student’s notes** * **The smart board presentations can be broadcasted to another PC** |
| **Cultural Needs:**   * **None** | * **N/A** |

1. **Learning Environment:**

|  |
| --- |
| **The students will sit at their desks throughout the instruction portion of the lesson.**  **Students will hand out material**  **Students will be paired off to use manipulatives (premade teams)**  **I will call on them on an individual basis to contribute to work on the board.** |

1. **The Overview/Agenda:**

|  |
| --- |
| **Parallelogram Quiz**  **Review of perimeter and area – rectangles, parallelograms and triangles**  **Area and perimeter of trapezoids** |

1. **Resource Materials:**

|  |
| --- |
| * **Math makes sense 7** * **Laptop** * **Flash drive** * **Smart presentation for area review** * **triangle quiz (22)** * **Trapezoid handout (22)** |

1. **Content and Teaching Strategies:**

|  |  |  |
| --- | --- | --- |
| **Time** | **Strategy** | **Detailed Description** |
| **15** | **Introduction** | * **Go over quiz results from parallelograms** * **Hand out quiz for triangles** * **Give the students instructions/expectations for the quiz**   + **Formula**   + **Identify Variables**   + **Solve**   + **Units** |
| **5** | **Instruction** | * **Go over characteristics of a trapezoid** * **Hand out the trapezoid hand out** * **Tell the students to pair up (groups will be made ahead of time)** * **With their partners tell them to manipulate the shape any way they like to make finding it’s area simpler** |
| **10** | **Application** | * **Some solutions they may develop:**   + **Two triangles and one rectangle**   + **One parallelogram and one triangle**   + **Diagonally to get 2 triangles**   + **Some students may think to append their whole shape to their partners’ and find half of the area of that parallelogram** |
| **10** | **Consolidation** | * **Go over the possible solutions on the smartboard** * **Introduce them to the final formula** * **Assign problems 1, 2, 3, 4 from page 228** * **Tomorrow’s quiz will be on today’s content** |

1. **Reflection**
   1. **Effectiveness of the Lesson:**

|  |  |  |
| --- | --- | --- |
| **What was effective or ineffective about the lesson?** | **How do you know?** | **What steps will you take to improve?** |
|  |  |  |
|  |  |  |
|  |  |  |

* 1. **Effectiveness as a Teacher:**

|  |  |  |
| --- | --- | --- |
| **What was effective or ineffective about you as a teacher?** | **How do you know?** | **What steps will you take to improve?** |
|  |  |  |
|  |  |  |
|  |  |  |