| MATH 10 GMF       |                       | Name:   |  |
|-------------------|-----------------------|---------|--|
| INDEPENDENT STUDY | (UNIT 3 MEASUREMENT ) | Period: |  |

- Chapter 4 Systems of Measurement and Conversions
- Chapter 6 Surface Area, Volume, and Capacity

Over the next two weeks, you will review/refresh surface area and volume formulas for a cube, rectangular prism, square/rectangular pyramid, cylinder, cone, and sphere, and use them in practical application problems involving conversions. You will be given a formula sheet with this Independent Study outline. Please keep this for reference for the entire study.

## **EXPECTATIONS:**

- You will bring both your workbook and textbook to class each day.
- · You will work independently to understand and apply surface area and volume formulas.
- You will submit/show completed work to be checked for understanding before moving on to the next focus. I will initial the level for you once checked and agreed upon comprehension.
- You will hand in your study plan before the test for evaluation on what was completed.
- The test on Conversions, Surface Area, Volume, and Capacity will be on Monday, Jan 13<sup>th</sup> (subject to change). Thus, you will want to try to follow the outlined timelines as closely as possible.
- Please do all work in pencil and be prepared to correct your misunderstandings and mistakes.

## TIMELINE: Dec 16<sup>th</sup> – Jan 13<sup>th</sup> (WB = Workbook, TB = Textbook)

| Date to Complete     | Focus   | Examples to Study  | Independent Work  | Teacher<br>Initials |
|----------------------|---|--|---|---------------------|
| Dec 16 <sup>th</sup> | Linear Perimeter & Area<br>Section 3.1 – Page 118   | WB: Pg 119 Ex 1 Pg 122 Ex 2 Pg 124 Ex 3 Pg 127 Ex 4              | Worksheet : Converting distances  |                     |
|                      |   |  | WB: Pg 121 Q 4,5,6  |                     |
|                      |   |  | TB: Pg 150 Q1,6-8   |                     |
| Dec 16 <sup>th</sup> | <b>Linear Conversions</b> Section 3.2 – Page 131  | WB: Pg 131 Ex 1 Pg 133 Ex 2 Pg 136 Ex 3                          | Worksheet: Surface Area of 2D Figures WB: Pg 134 Q 4-6 TB: 159 Q 4,5,7  |                     |
| Dec 17 <sup>th</sup> | Surface Area of Cubes and<br>Rectangular Prisms<br>Section 3.3 – Page 142 & 6.1<br>– Page 124 | WB: Pg 142 Ex 1(CH3),<br>Pg 139 Ex 6 (CH6),<br>Pg 143 Ex 7 (CH6) | Worksheet: Surface Area of 3D Figures WB: Pg 145 Q1-3 (CH3) WB: Pg 145 Q 11 (CH6)  TB: Pg 232-234 Q 1, 6 (1-bottom page |                     |
|                      | Volume of Cubes and   | WB: Pg 158 Ex 1  |   |                     |
| Dec 18 <sup>th</sup> | <b>Rectangular Prisms</b>   |  | WB: Pgs 159, 162 Q 1, 3-5   |                     |
|                      | Section 3.4 – Page 158  | TB: Pg 248 Ex 1, Pg 178 Ex 3                                     | TB: Pg 182 Q 3, 5   |                     |

| Dec 19 <sup>th</sup>                   | Surface Area of Cylinders Section 6.2 – Page 149 & Section 3.3 – Page 142 | WB: Pg 152 Ex 2 (CH6),<br>Pg 146 Ex 2(CH3)     | WB: Pgs 147-148, 151 Q 4, 5, 8, (CH6) Pg 153 Q 4,5 (CH3)  TB: Pg 171 Q 1 |  |
|--|---|--|--|--|
| Dec 19 <sup>th</sup> /20 <sup>th</sup> | Volume vs Capacity<br>Volume of Cylinders<br>Section 6.3 – Page 170       | WB: Pg 170 Notes, Pg 177 Ex 4  TB: Pg 249 Ex 2 | WB: Pg 178 Q 8-10<br>TB: Pg 253 Q 3, 4                                   |  |

| Jon Cth                                    | Surface Area and Volume of Spheres             | WB: Pg 163 Ex 7   | WB: Pg 164 Q 18-20, Pgs 183-184 Q 1, 2                        |    |
|--|--|---|---|----|
| Jan 6 <sup>th</sup>                        |  | TB: Pg 238 Ex 2, Pg 258 Ex 1, Pg 262 Ex 3                       |   |    |
| Jan 7 <sup>th</sup>                        | Volume of Cones and Pyramids                   | WB: Pg 185 Ex 2, Pg 187 Ex 3, Pg<br>190 Ex 4<br>TB: Pg 259 Ex 2 | WB: Pgs 186-187 Q 3ab, 5, Pgs 188-189 Q<br>6ab, Pg 191 Q 7, 8 |    |
| Jan 8 <sup>th</sup>                        | Surface Area of Cones and<br>Pyramids          | WB: Pg 154 Ex 3, Pg 156 Ex 4, Pg<br>160 Ex 5, Pg 161 Ex 6       | WB: Pgs 155, 158, 161-163 Q 7, 10, 12-16                      |    |
|  | Everyday Volume & Capacity Conversions         | WB: Pg 163 Notes, Pg 164 Ex 3                                   | WB: Pg 165 Q 7, 8   |    |
| Jan 9 <sup>th</sup>                        |  | TB: Pg 177 Ex 1   | TB: Pg 182 Q 1, 4   |    |
| Jan 10 <sup>th</sup>                       | Review of all of the Above<br>Concepts         | All above work!   | Collect Review Sheets from Teacher                            |    |
| Jan 13 <sup>th</sup> /Jan 14 <sup>th</sup> | Test on Conversions, Surface<br>Area, & Volume | NA  | Test!   | NA |